

Flexible Systems Management

Rajneesh Chowdhury

Systems Thinking for Management Consultants

Introducing Holistic Flexibility

Foreword by

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 Springer

Flexible Systems Management

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*Dedicated to
My Parents...
Ranjana and Banajit Chowdhury*

Foreword

Rajneesh Chowdhury's book *Systems Thinking for Management Consultants* is a significant addition to the literature on "systems thinking", particularly because the ideas it espouses are grounded on practical project work. They have emerged as a result of reflection upon 15 years of personal experience undertaking management research and consulting in India and the UK. These engagements have embraced a wide variety of organisations in private industry, public health, professional services and the charitable sector.

Through consideration of a number of extended case studies, Rajneesh arrives at the key concept of "holistic flexibility" which he sees as underpinning effective decision-making in today's complex world. Being "holistic" means developing a systems "state of mind" which enables the practitioner to chart interrelationships, recognise emergence and work with and challenge different mental models reflecting alternative boundary judgements. "Flexibility" in an intervention means staying nimble and adaptive in the face of constant change. A consultant must have the capacity to think flexibly; marshal a range of approaches and tools (e.g. the Viable System Model, Interactive Planning, Soft Systems Methodology); use them in a complementary fashion; and access a variety of resources in support of the intervention. This concept of holistic flexibility is discussed in the context of studies on social impact, organisation development and reputation management.

On the basis of the learning gained from employing holistic flexibility, he develops and advocates the notion of "responsible outcomes" for systems consultants. Such a professional standard requires consultants to ask questions about what are the right things to do in a set of circumstances, as well as what might make an organisation more efficient and effective. Focusing on responsible outcomes adds to the normal duties of consultants the need to pay attention to creating systemic benefits for all stakeholders, foster emancipation and seek sustainable solutions.

He learned his systems thinking at the Centre for Systems Studies, University of Hull, UK, of which I was Founding Director. I am happy to endorse this book as a fine example of the "critical systems thinking" (CST) approach developed at Hull. It asks why certain systems approaches work in some situations and not in others. It encourages the construction of multimethodologies capable of dealing with the

Preface

This book is a narrative of my experiences and experimentations with systems thinking traversed over 15 years between 2003 and 2018.

I read systems thinking at the Centre for Systems Studies, University of Hull, UK, after my higher education in sociology at the Centre for the Study of Social Systems, Jawaharlal Nehru University, India. Looking back, I have always found the use of the term “systems” in the names of both the centres of higher education I went to an uncanny (I am using the word to imply mysterious) coincidence. Sociology and systems thinking was a potent combination for me to appreciate that social structures are the heart of everything we go through as a lived-in experience and that social structures are pinned on inherent seen and unseen interconnections that exist between people, society and the ecosystem that give rise to emergent behaviour of the system itself.

During my postgraduate education between 2000 and 2003, I had picked up several projects that exposed me to complex settings where there were numerous missing links and unexplained observations. My first project was to study the worldviews of underprivileged students in a government primary school in New Delhi, India. This was an on-ground qualitative project where I shared the space with students, their parents and their teachers as part of their everyday engagements—in the classroom, staffroom, playground and morning prayers, and before and after school. The second one was to understand public access and grievance redressal in the Indian Prime Minister’s Office (PMO) in New Delhi. This was a participatory research project where I took the role of a covert participant observer to understand interactions, access and engagements in the natural settings in different offices of the Indian PMO. The third was to understand the state of economic health and business forecasting for the tea industry in Assam (a state in the north-east of India). This involved an analytical approach where I relied on secondary research and applied system dynamics for business forecasting. The final project was a business planning exercise with one of the foremost construction and infrastructure companies in the Yorkshire region in the UK. This was an action research project where I spent time with the senior management of the company and

worked directly on live projects involving planning, forecasting and management reviews with an aim to make a positive contribution to the business.

These projects offered me exposure to a variety of sectors and settings that were quite different from one another in terms of context, complexity, geography and resource availability. As a student, although I had to use a rigorous research methodology and a systematic approach in the problem structuring, I realised that in each of these social settings (I call these institutions—education, business and government—social settings) systemic behaviours were not a summation of merely the evident information collected from the field, but there was more to it! There was an extent to which logic could explain certain decisions and outcomes in the system, but many of the outcomes were unexplained and emergent as if from a “black box”. As a student, I observed patterns that emerged that I could not explain by rational arguments.

For instance, in case of the first project with the government primary school, the institution catered to underprivileged children coming from backgrounds that were financially challenged. When I interviewed the children and their parents together, they would talk about the hardships they faced going through the education process within their resource constraints. However, when I met the children as a group without their parents, the sense I got was more of optimism and positivity. They would talk about their ambitions of entering a professional career and their dreams included thinking of themselves as doctors, engineers, teachers or pilots. The background that the children came from and what they would want to achieve had a gap, but they did believe that their ambitions were possible. The children would not talk of challenges towards achieving their dreams, unless they were with their parents during the interview. The children’s behaviour and responses changed from one setting to the other. Behaviour itself does not form in isolation. It is an outcome of a complex interplay of influences, baggage and meaning. Often these influences change from setting to setting depending on who is or is not present in those settings, as in the case of this research. As a student, this was a fascinating observation to me, which I later understood as vicious cycles and emergent behaviours of a social setting, in anthropological parlance.

The second project with the Indian PMO was an eye-opener to me. From a structure point of view, the institution was extremely well laid out for public access and grievance redressal. However, the on-ground reality presented machinery that was opaque, inaccessible, intimidating and purpose defeating. Numerous people, I interviewed, noted that their plea for help when they were at distress turned out to be more distressful as a result of their interaction with PMO due to the derogatory treatment meted out to them by some of the officials. As part of the thirty in-depth interviews I carried out at that time, I heard stories of people from all parts of India who had approached the public wing of PMO seeking support, but the resolution of issues was a far cry for all. They were trapped in a never-ending web of bureaucracy and red tape with no light at the end of the tunnel. Although the structure of public access and grievance redressal at PMO was created with a certain purpose, the lived-in experience was very different and in fact anecdotal. At the end, it was

not the structure in isolation that created the outcome, but it was the interactions and interconnections in the system that made the difference, to the point where the emergent behaviour of the system itself was self-negating.

The third project on business forecasting in the tea garden setting depended on the simulation software I was using. Business simulation tools have become popular platforms for data crunching and complex analyses. More and more, organisations rely on simulations and big data to make important decisions that touch lives. Business simulations and analytics are common courses in business schools, and so was the case in the school I went to. In my project, the simulations presented several scenarios for the industry and I had to write a recommendation paper with the analyses. However, in spite of using a world-class software platform, this was a completely esoteric exercise for me with no grounding on the actual realities. The people who were involved and affected in the industry were not consulted, and the project missed out fundamental considerations like rights of tea garden workers, land registration issues and cultural norms that had been set over centuries with the aboriginal population associated with the tea plantations. My project was amiss reality and had no life, so to say. This simulation exercise was isolationist and esoteric as it missed out the critical stakeholders that made the system. Although my professors graced me with very good scores, I remember feeling hollow at the end of this project.

The fourth project was with the construction and infrastructure company. The firm had a rich legacy of over one hundred years and is very well established in the Yorkshire region in the UK. As I attended meetings and joined the senior teams for business reviews and planning, I was also given a chance to be part of a committee that had to decide whether the company would pitch for a public-private partnership (PPP) project for construction and maintenance of a large facility in the city of Kingston-upon-Hull. What was fascinating for me at that time was to observe that although all the data indicated that the company should not go ahead with the project, CEO still decided to pitch for the same. It was judgement based on mental models that led to the decision, not just facts. These decisions were made by a mindset that connected the dots, saw hidden dynamics and was able to see a future that logical explanation was not able to show.

These exciting projects during my higher education helped me understand few facts that I found to be fascinating at that time. Here is what I understood in summary—what we see as an output in a social setting is not a summation of what we see as inputs; there is always a “black box” where something gets added, deleted or changed. Structures are only enablers; it is human beings that make or break the deal. Any reality minus human consideration is incomplete. Judgement is not straightforward; it is a web of interconnections—sometimes clear and sometimes unclear.

These were the early seeds of systems thinking that were woven into my thought process through my higher education and experiential projects. And this served as the foundation of whatever I went on to do as a working professional.

After having worked as a researcher in the UK for close to a year, my keen interest in systems thinking paved the way for me to be selected as 1 of the 15 Associates in the Knowledge Transfer Partnership (KTP) programme in the UK in the year 2004, sponsored by the Department of Trade & Industry of the British Government. The KTP programme sought to improve business competitiveness and productivity through the better use of knowledge, technology and skills between academia and the industry. My area of work was to facilitate technology adoption and change management in the National Health Service (NHS) in the East Yorkshire region. NHS is the public sector healthcare provider in the UK. I was part of a complex ecosystem operating with various driving forces such as regulatory bodies, medical experts, administrative personnel, audit committees, patient groups and private technology players, amongst others. For the first few formative years as a working professional, I applied a variety of systems methodologies in various settings for problem structuring, consensus building, change facilitation, professional capacity building and impact assessment. The complexity that NHS presented was a fertile ground for me to apply systems thinking on the ground.

Working extensively with people in change management in the NHS enabled me to make a natural segway into human resource (HR) consulting in India. I received the opportunity to work with leading firms such as PricewaterhouseCoopers and Aon. My focus on people-centricity and strategic alignment led many of my conversations edge on the topic of people and change management, and organisational development (OD). Organisation consulting with a focus on creating effectiveness through people was at the heart of my work for several years. Working in the OD space, it was imperative for me to constantly critique my own boundaries for any client advisory. Initiatives in the space of organisation effectiveness, performance management, leadership development and employee engagement needed connecting the dots, approaching problems creatively and considering people at the centre. It was apt for me to apply systems thinking through several of my projects. During that period, one of my clients happened to be a leading public relations firm called The PRactice that I later ended up joining to give shape to the firm's vision of stakeholder engagements for its clients and the industry. With my experience in consulting across sectors and geographies, I was soon absorbed in working in the space of reputation management and building stakeholder engagement models for clients advisory. This was also the time, I got closely involved in client advisory for social impact projects including those pertaining to development sector institution building, Corporate Social Responsibility (CSR), funding strategies, and not-for-profit branding. Looking at interconnections, thinking holistic, dealing with uncertainty and keeping an eye on emergent behaviour—systems thinking (phew!)—were at the core of all my work in corporate reputation advisory. And so it is as I write this book.

The movements in my career have been by chance and not by design. Systems thinking has been the connecting thread to see me through this journey. Luckily enough, each of the places I have been through during my career offered great opportunities for me to live the discipline in various ways and forms.

As I worked through my various avatars, I realised that systems is a state of mind. The ability to see interconnections and the capacity to constantly critique our own boundaries, as much as it can be facilitated by frameworks and models, is more a function of how we think, perceive and believe. Being a systems thinker is a matter of evolution. What would have confused me during my projects at the time of my higher education seems more clear today than it was at that time. At that time when I tried to look for logical answers in some cases, I failed. When I felt hollow because something was amiss in a project, I now know why. In retrospect, I realise that every social setting is a play of interconnections—some seen, some unseen. It is not the parts of the game that are important, but the interconnections themselves that make the game what it is. Taking an analogy—you may have the turf, the boundaries, the goalposts, the boundary markings and the football, but this does not make the game of football. It is the interaction, the fight, the competitiveness and the spirit—in other words, the interconnection—of the players in that setting that makes the game.

The whole is more than the sum of its parts. This is the idea of holism, which is at the core of systems thinking.

Through training and life experiences, one can be groomed into becoming a systems thinker. Once a systems thinker, is always a systems thinker.

Much later in my career, I was introduced to flexibility as a formal concept. I understand flexibility as the ability to stay nimble and adaptive at the wake of changing situations or being able to reinvest oneself in thought and in action within the same situation. It is the ability to be comfortable with change, to seamlessly think and apply with a great variety, to be agile and to appreciate and absorb unforeseen circumstances without creating shock for the system.

When I started reflecting back on the learnings from systems thinking and application in the light of flexibility, I seem to find great complementarity between the two. It is flexibility of thinking that ignites the curious mind to question boundaries and challenge reductionist thinking. It is flexibility of methods and frameworks that enables a systems interventionist to work with accommodation and ease in complex environments. It is flexibility of resources that empower decision-makers and change agents actually bring about systemic change.

It is this consummate relationship between systems thinking and flexibility that ignited the idea of this book. In all humility, my experience allows me to appreciate the intersections of holism and flexibility within the systemic mindset. My constant deliberations with myself and bouncing off this idea with my colleagues in academia and consulting reinforce my belief that an optimal systemic mindset is at the intersection of holism and flexibility (I use the terms “state of mind” and “mindset” interchangeably). The views in this book follow a practitioner-led first-person narrative based on my experiences and experiments with systems thinking as a management consultant.

A systems mindset is essential for senior management, policymakers and change agents to see through the increasingly complex world we live in. Today, we are at an inflection point where a new world order is emerging. Automation and robotics

is making us think about our future of work. The digital onslaught is compelling us to think about our own identities. Emerging social patterns are reshaping how we imagine our societies and relate with one another. Rapid depletion of the global commons is leading us to think if humanity's rampant pursuit of wealth is even worth it. A rebirth of the far-right is challenging what democracies have sought to achieve in the last half a century. A systems state of mind can provide an invaluable lens to understand and approach this new reality.

This book is divided into three parts with each part having a distinct focus. It is to be noted that systems is an all-encompassing field. This book, however, focuses on systems thinking for management and more specifically informed by my experience in specific areas of consulting. References from other disciplines are made and ideas for application on fields outside management are provided; however, the focus of this book primarily is on enabling management effectiveness and better decision-making.

Part I sets the context by introducing the theories of systems thinking and flexibility. Although this is a practitioner-focused book drawing on my own experience of systems thinking, the basic theoretical concepts are introduced in this section so that coherent linkages can be later drawn between the practical cases and the origins of the interventions that have been used.

This part has three chapters.

Chapter 1, *Systems Thinking*, explains systems thinking and its relevance. Key concepts are introduced, along with a narration on the shift from reductionist thinking to systems thinking. I refer to some seminal work in the field and lead a discussion on the establishment of systems as a discipline.

Chapter 2, *Flexibility*, introduces the concept of flexibility and its relevance in management. It explores what flexibility means in different contexts. Select approaches in flexible systems management are introduced along with a discussion on its application areas.

Chapter 3, *Intersection of Systems Thinking and Flexibility: A Methodological Perspective*, talks about the complementary nature of the two from a methodological standpoint. A systems thinker needs to be flexible and a flexible thinker needs to be systemic, keeping in mind the larger vision of the system. Select frameworks and meta-methodologies are brought to light that brings to light this complementary nature and how the interventionist can optimise this intersection on the ground. This chapter sets the tone for the rest of the book.

Part II draws from my own experience of using systems thinking in practice. This part is application-oriented. Narratives of select cases have been presented, some of which have seen success, some not so much and some that need further deliberation. The cases have been explored from a lens of holism and flexibility.

This part has ten chapters, and I believe this is the most exciting part of this book.

Chapter 4, *Healthcare Knowledge Management and Problem Structuring*, draws from my experience of the application of Viable System Model (VSM) for problem structuring in the context of healthcare knowledge management in the UK National Health Service (NHS). References will be drawn from my journey of the project

initiation and how I built the case for problem structuring, followed by a discussion on the choice of method and its deployment.

Chapter 5, *From Barriers to Boundaries: Learnings from a Healthcare IT Project Failure*, presents a case study that describes my experiences of introducing a multilingual patient information system in a UK Primary Care Trust. I present a number of issues that I encountered in working under the constraints of a large bureaucratic set-up and those related to the design and deployment of the project that I believe resulted in its lack of satisfactory closure. I build an argument to make a mental shift for managers to move from a mindset of barriers to that of boundaries.

Chapter 6, *Strategic Convergence: Overcoming Differences in a Professional Setup*, presents a discussion on the application of two systems methodologies—Soft Systems Methodology (SSM) and Strategic Assumption Surfacing and Testing (SAST)—in practice for the development of a normative approach to healthcare information systems. Experience of using these methodologies is shared to bring about convergence of two kinds of rationalities—procedural and substantive—in a complex professional setting involving clinicians and managers.

Chapter 7, *Building Systemic Capability in an NGO Setting*, presents a case study of a consulting project for a non-government organisation (NGO) at the cusp of growth and transformation. A systems approach called Interactive Planning was used for this specific project to help the organisation articulate the strategic direction for the organisation and work towards a model to make it sustainable and ready for the challenges of the future. This was the first recorded case of the use of Interactive Planning in South Asia.

Chapter 8, *Organisational Collaboration in a Professional Services Firm*, presents a case of the use of multiple methodologies for a consulting intervention in a professional services firm in India. The problem situation presented by the client was lack of an effective organisation structure and fragile internal networks that was affecting the organisational performance. I will talk about how I engaged with the client in an in-depth organisational development and leadership effectiveness intervention informed by the fundamentals of critical systems thinking.

Chapter 9, *From Restructuring to Optimisation: Enabling a Sales and Marketing Function*, shares reflections from a select engagement that I had undertaken for a manufacturing company in India. The engagement focused on aligning its organisation structure and arriving at an optimal workforce mix to enable the organisation to stay competitive in the future. The discussions revolve around the complexities involved in the project and how we managed to change the tone of the engagement from restructuring to optimisation.

Chapter 10, *A Holistic Approach to Employee Engagement*, shares perspectives on how to approach employee engagement in a holistic manner in alignment with the vision of an organisation. I will introduce select models of employee engagement from leading consulting firms globally and delve into a major project I had led in the field for the India business of a global company. The key stages of design, study deployment and action planning will be discussed. I will talk about the

systemic nature of this approach and how flexibility played an enabling role both in the process and for the outcome of the project.

Chapter 11, *Sustainable Urbanisation and Community Engagement*, draws from my experiences of conceptualising and managing a community engagement programme for a leading multinational corporation in India. This programme was designed keeping in mind sustainable urbanisation as the key business imperative for the company. A multi-stakeholder programme was designed and implemented keeping in mind the principles of Social Systems Design. Experiences and learning from this programme are presented along with key takeaways to highlight how citizens' empowerment and community involvement can enable urban planning and implementation.

Chapter 12, *Electronic Public Health and e-Governance*, presents a conceptual model for the development of an electronic public health platform for India to cater to the challenges of linguistic diversity and prevalent illiteracy in the country. This can be considered as a problem structuring method for a complex situation using the postmodernist systems lens.

Chapter 13, *Micro-insurance and Community Engagement*, builds on my previous work on creating a conceptual model for micro-insurance design and implementation, with the objective of enhancing community engagement in micro-insurance projects. A live case study has been explored under the aegis of a leading service provider in India. The lifecycle of a project has been critically evaluated from a community engagement perspective leading to a discussion on how systems approaches can make this more effective. As part of my critique of my previous work, I present some new insights around systems change and policy advisory.

Part III is meant to explore some consulting considerations. It brings together the perspectives, experiences and insights presented through the book and culminates in the idea of "holistic flexibility". It brings forth a discussion on why the systems mindset is important for the new realities that planners, managers, leaders and regulators find themselves in. Pertinent topics for consultants are discussed in the final chapters where holistic flexibility may be applicable; the specific topics have been chosen given my interest and exposure in these areas.

This part has four chapters.

Chapter 14, *Holistic Flexibility*, discusses systems as a state of mind at the intersection of holism and flexibility. I call this "holistic flexibility". I will define what is holistic flexibility and discuss the characteristics required by a consultant to display the same. I will talk extensively about the responsibilities of a consultant to deliver outcomes that create systemic value-add, foster emancipation and drive sustainable solutions.

Chapter 15, *Social Impact*, presents a discussion on some of the key considerations that social impact consultants need to bear in mind. For social impact interventions to yield results, change makers and consultants need to adopt a systemic mindset to navigate through issues that exist and evolve in complex nodes of cross-cutting interactions of subsystems that are seen and many more that may be

unseen. When it comes to social impact consulting, dimensions associated with the same can be endless, interactions within these dimensions can be ambiguous due to the socio-cultural influences, and issues often revolve around addressing basic rights of human beings. I will argue for collaborative dialogue between change agents and cross-pollination of ideas as important elements for successful social impact interventions.

Chapter 16, *Organisational Development*, leads a discussion on the situations and contexts for consultants working in the field of change management and organisation effectiveness interventions. I will focus on alignment of the people function with the overall organisation and business; in this context, I will work towards a reference framework that I call "systemic OD matrix". I will introduce a phenomenon called personas for consultants to understand their client psyche and engage with them more effectively.

Chapter 17, *Corporate Reputation*, draws from my experiences of working in the public relations industry. In the wake of the new reality for organisations in a 24*7 news cycle, citizen journalism, the digital revolution and hypertransparency, public relations firms need to be seen more as custodians of reputation. I argue that stakeholder engagement is the cornerstone to building corporate reputation. I will talk about a revisit of the role of a public relations consultant for the profession to stay relevant in the current market realities.

As I traversed my journey of writing this book, I often got asked the question whether I am a researcher or a consultant. This is a tricky one as there have been some cases I have done consulting work without any research intent, some, where I knew from the beginning that the case would offer an excellent research platform, and still some, where I have realised retrospectively that the case could contribute significantly to the existing body of knowledge. Hence, there is no straightforward answer to the question that I get asked. Research to me is a creative process of engaging with my formal training, academic interests, consulting opportunities and my endeavour to create better solutions or futures. Bell and Thorpe (2013) talk of the ideal type of a "craft researcher" for whom "research is a creative as well as a technical-rational act; an art as well as a science. This requires not only skill and training but also a sense of imagination and the ability to switch perspectives in order to build up a complex picture of management. It can even involve an element of calculated risk, breaking away from established ways of doing things to enhance the possibility of learning something new". I have brought in systems approaches in my deliberations and projects, and have exercised considerable flexibility in experimenting with the same as I have come along, working within ethical boundaries and objectives of project mandates. My work brings together both method and creativity in an experimental platform to come up with my own perspectives and theories in systems thinking. As a craft researcher, learning has been central to my work. And this requires risk-taking, transparency and support from peers and colleagues.

Hope the reader enjoys the perspectives and arguments that I have brought together in the form of this book. I intend to keep the deliberations live on www.holisticflexibility.com. I will be delighted to welcome your thoughts on rajneeshchowdhury@gmail.com.

New Delhi, India
May, 2019

Rajneesh Chowdhury

Reference

Bell E, Thorpe R (2013) *A very short, fairly interesting and reasonably cheap book about management research*. Sage, London.

Acknowledgements

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I have talked about a range of consulting cases in this book. Through the various engagements, I have worked with several colleagues as mentors and team members. I would specifically like to acknowledge the names of (in order of first name) Aditi Paneri, Ajay Soni, Alan Nobbs, Ambrish Rastogi, Ashu Sabharwal, Bharat Kundra, Chandan Shet, David Dror, Deepankar Medhi, Gaurav Markanda, Kate Guthrie, Lokesh Nigam, Miguel Queah, Mike Wistow, Nandita Lakshmanan, Neil Wade, Nihar Jangle, Niharika Ghadiyar, Pia Khanna, Prashant Srivastava, Ruchi Sachdeva, Sameer Rajadnya, Sumit Sethi, Sushant Upadhyay, Sylvia Mason, Tulika Shankar, Vikas Verma, Vivek Rana and Zai Bakshi. Apologies for any names I may have missed out.

Last but not least, my gratitude to my extended family, friends and well-wishers for their support and for bearing with my absence through the time when I was focusing on this book.

Endorsement

Clients

“This book is a unique contribution to systems thinking where Rajneesh Chowdhury presents a wide range of case narratives culminating in his idea of ‘holistic flexibility’. Through the discussions, the author convincingly argues for the case of ‘responsible outcomes’ for management interventions that is much needed for corporations, not-for-profits and governments operating in the current day. Insights presented in this book can have far-reaching impact in the areas presented, and beyond.”

—Zenia Tata, *Chief Impact Officer, XPRIZE Foundation (USA)*

“Rajneesh Chowdhury’s book brings to the forefront some of the most critical aspects required to build organisations that are meaningful, responsible and sustainable. I am convinced of his abilities to navigate complex situations and his capacity of advisory on responsible outcomes for businesses. It is this first-hand experience that Rajneesh leverages that makes his arguments in the book convincing and exciting to read.”

—Dr. P. Mohamed Ali, *Vice-Chairman and Managing Director, GALFAR (Oman)*

“Rajneesh Chowdhury touches upon a range of exciting case studies in the field of organisational development, employee engagement and change management. Particularly exciting is the ‘Systemic OD matrix’ that he arrives at as a result of his experiences and learnings. His insights will be greatly beneficial for consultants and managers working in this field.”

—Sanjay Mitra, *Organisational Development Consultant and Past Global Head of Human Resources, GlobalLogic (India)*

“This book addresses key issues on how organisations can and should operate responsibly to build and safeguard their corporate reputation. Having worked with consultants for several years and having myself provided consulting services extensively, I can say that the ideas proposed in this book will serve as a strong reckoner for the consultancy industry.”

—Pierre Cardinal, *President, Axel Strategies (Canada)*

Industry Experts

“Rajneesh Chowdhury takes the reader through a comprehensive journey of understanding the relevance of systems thinking for consultants and change makers. Rajneesh’s argument on building ‘responsible outcomes’ for change interventions brings in an onus to systems consultants to work towards solutions that are meaningful and sustainable. This is especially so at a time when we are moving to agile methods of driving change. This book is a significant addition in the literature of management consulting, for students and practitioners of this science.”

—Gopal N Sarma, *Partner, Bain & Company (India)*

“In his book, Rajneesh Chowdhury bridges his academic background in systems thinking with his professional career in management consulting. An eye-opening journey through a wide spectrum of cases and systems thinking approaches, finally introducing his own theory. This book is going to change the way we think about improving social structures. A must-read for any management consultant or any change agent.”

—Dr. Nihar Jangle, *Advisor, Climate Risk Insurance, GIZ (Germany)*

“Rajneesh’s perspective as a global executive with a vast background of applied consulting expertise makes this book a must read. His viewpoint on interconnectedness is a reminder that one can’t just solve complex problems using a single blunt instrument or line of thinking. He lays out a practical framework for learning systems thinking and then applying it across different scenarios and industries. Working with Rajneesh over a number of years has given me the chance to apply his leading edge perspective to what I thought were our client’s unique problems. He always has great new ideas and you will get many by following him along his journey of continuous learning.”

—Justin Greeves, *Executive Vice President, Global Research & Services, Porter Novelli, Omnicom Group (USA)*

“Cobra effect alludes to the adverse counter intuitive outcomes of policy decisions adopted in and for societal entities. The latter are characterised by a plethora of inter- and intra-connections that are determinants of the outcome, but are often missed out in the solution design. A perspective that combines systems approach, which mandates holism, and a flexible mind set is, perhaps, the only check against

such contrarian eventuality. Rajneesh, through an eclectic mix of real life assignments, presents such problem situations and solutions developed, with systems perspective. An interesting read for professionals entrusted the task on managing societal entities.”

—Prashun Dutta, *Author and Past Chief Information Officer, Tata Power (India)*

Academia

“In this illuminating book I see the story of an extraordinary journey the author has undertaken. Through a series of case studies enriched by participatory engagement, the central argument the author has made is pretty convincing: ‘systems’ is a ‘state of mind’, and it requires ‘the ability to see interconnections and the capacity to constantly critique our own boundaries’. Here is a book—written with clarity and conviction—that is bound to make the students of management realise the need for cherishing ‘flexibility’ to adapt to the changing reality.”

—Avijit Pathak, *Professor, Centre for the Study of Social Systems, Jawaharlal Nehru University (India)*

“A compelling book on using systems thinking in managing complex problems told through the author’s personal work experiences. Managers in many areas—healthcare, finance, smart cities, community development, and others—should have this information and will be well served by the examples in this book.”

—Piyushimita Thakuriah, *Distinguished Professor, Rutgers University, and Dean, Bloustein School of Planning and Public Policy (USA)*

“In *Systems Thinking for Management Consultants: Introducing Holistic Flexibility*, Chowdhury provides a comprehensive insight into the world of systems thinking. Practitioners will appreciate the accessibility of managerially-relevant ideas with their potential to inform business practice while academics will find this volume very useful in undertaking an initial foray into the world of systems thinking. A welcome addition to the world of systems thinking.”

—Vishal Kashyap, *Professor, School of Business Economics & Social Sciences, University of Graz (Austria)*

“A much needed book that shows a journey in systems thinking and provides lots of practical insights informed by rigorous thinking and methodology in a diverse set of situations. It will appeal do many researchers and consultants in applied systems thinking and all the different areas covered.”

—José-Rodrigo Córdoba-Pachón, *Associate Professor, School of Management, Royal Holloway University of London (UK)*

“This is a valuable practitioner-oriented book pinned on the strong theoretical foundations of systems thinking and flexibility. The author presents highly engaging narratives of his consulting journey by presenting a range of valuable case studies and touching upon pertinent topics. This book is highly recommended for systems thinkers and practitioners.”

—Norma Romm, *Professor, School of Educational Studies, University of South Africa (South Africa)*

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About the Author

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Part I

Theoretical Deliberations

The theoretical deliberations take the reader through the definitions of the fundamental concepts of systems and flexibility and establish the intersection between the two disciplines. Historical roots of the disciplines are discussed, and the key concepts are introduced. This part sets the theoretical grounding for the rest of the book. It is important to note that by no means the deliberations here are indicative of the entire body of work on systems and flexibility; the perspectives have been shared based on their relevance and context for the case narratives and consulting considerations presented in this book.

Essence of Part I

Systems thinking and flexibility are complementary. Awareness of this complementarity and being able to leverage the various facets it offers can enhance the consulting journey.

Chapter 1

Systems Thinking



1.1 Introduction

This book is about systems thinking and insights from my application of the discipline in various sectors such as private industry, public health, professional services, and the charitable sector. Systems thinking is also commonly referred to as holistic thinking. Through the deliberations presented in this book, I will take the reader through a journey covering theory, practice and conceptual models. But what is systems thinking? What are its origins? Is it a discipline? And why is it relevant?

The first chapter of this book will attempt to address some of these questions. I will introduce the background and relevance of systems thinking. I will talk about the origins of systems as a concept and broadly present the progression of thinking and arguments that have brought systems thinking to its current state as a major consideration for policymakers, senior management and change agents. Key concepts are introduced, along with a narration on the shift from reductionist thinking to systems thinking. I refer to some seminal work in the field and lead a discussion on the establishment of systems as a discipline.

This chapter is not intended as the final definition of systems; it only sets the tone. The reader will appreciate systems thinking in greater depth and its finer nuances as they go through the book and the arguments presented here.

1.2 Origin of Systems Thinking

I will attempt to highlight some of the key debates and theories that have shaped systems thinking in the way we understand it today. The discussions here will focus on the origins of systems as a management discipline.

Descending from the Greek verb, *sunistanai*, the word systems originally meant “to cause to stand together” (Senge et al. 1994). Standing together comes from bonding, interconnection and dependency.

To cater to the deliberations in this book, I will refer to the contemporary definitions and discussions of systems thinking in this chapter. However, it is to be noted that the systems idea itself predates formal writings in the area and can be found in ancient traditions, religious texts and tribal beliefs. I quote Reynolds and Holwell (2010):

Systems approaches have a rich historical tradition. Systems thinking in terms of promoting holistic views – particularly emphasising the integral relationship between human and non-human nature – can be traced back to the ancient spiritual traditions of Hinduism (e.g., through ancient texts like the Upanishads and Bhagavad Gita), Buddhism (oral traditions of the Dhama), Taoism (basis of acupuncture and holistic medicine), sufi-Islam (in translations of the Kashf al-Mahjûb of Hujwiri, and the Risâla of Qushayri), ancient Greek philosophy (particularly Hercules and Aristotle), as well as being prevalent through the oral traditions of many indigenous tribal spiritual traditions which have existed for tens of thousands of years (pp. 8–9).

Ludwig von Bertalanffy is often quoted as the father of systems thinking because of his contribution of the General Systems Theory in the 1950s. Bertalanffy approached systems as an integrated discipline that transcends all knowledge dimensions and looks at the interactions between parts of the system that leads to emergent behaviour. It is the network and interaction between the parts (or subsystems) that give rise to the character of the system as a whole. A biologist, Bertalanffy's interest was in understanding creation starting from the cell to organs to individual to society and finally social systems. Each of these progressive stages is complex sets of interactions and cannot be described by simple cause and effect explanations. The parts add up to result in a phenomenon that is qualitatively different from the individual parts themselves. For instance, an individual human being does not behave or operate in the way an individual cell does, yet we are made up of a multitude of such cells. The behaviour of the individual cells, or for that matter organs, cannot be equated with the behaviour of the human being. A complete organ is an amalgamation of individual cells *and something more*; a complete human being is the amalgamation of individual organs *and something more*. These are all examples of systems—cell, organ and the human body. There is a constant flow of energy within and between these systems. Every system seeks to maintain a stable existence that is able to sustain itself by addressing the deviations of energy and taking corrective action. Feedback loops are central to the existence of a system.

The main concepts of the general systems theory are as follows:

- **Open System:** This is the characteristic state that means that the system exchanges energy and matter beyond its boundaries.
- **Homeostasis:** Implies the steady state of an open system due to the constant flow of energy through the system. It can also be looked at as a self-regulating system.
- **Equifinality:** The final state of an open system can be reached by the same initial conditions or different initial conditions.

The above characteristics are in stark contrast with a closed system that exists in a state of equilibrium in itself as per the second law of thermodynamics. A system (read an open system) has a boundary and an environment outside its boundary. There

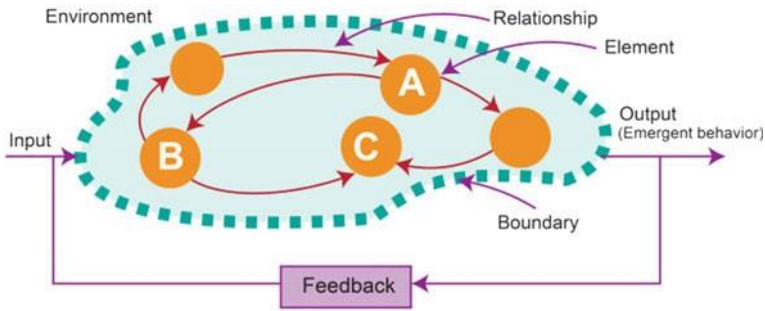


Fig. 1.1 A system

is constant interaction between the elements and other systems within and outside the boundary. The system itself adapts and changes over time due to feedback loops between the parts and the subsystems. This is the characteristic of often referred to as an open system as represented in Fig. 1.1.

There is a constant flow of information or energy or influences within and outside the system whereby the system strives to achieve a state of equilibrium. If a system is broken down to its constituents, the individual parts display their own characteristics and behave in their own distinct ways as subsystems.

It is during the 1940s and 1950s, through the works of scholars such as Bertalanffy, Bernard and Wiener, that systems thinking emerged as a new formal perspective to visualise organisations as goal-directed, purposive, structurally interdependent entities which exist in a “dimensional domain”, yet changing its domain by its action. A system does not exist in isolation from its constituents. Humans bring their own interpretations, feelings and emotions to shape the system, which in turn shape the humans who constitute the system. Boulding’s work is widely recognised as giving further comprehensiveness to general systems theory with his categorisation of systems based on complexity and its relation to various disciplines (Matthews 2004). He builds a hierarchy of levels to explain the complexity that comes in with every progressive system and the relevant disciplines that have emerged to understand each of these levels. Boulding’s categorisation is represented in Table 1.1.

The nine categories represent nine progressive levels of characteristics based on complexity and interrelationships, until we reach the transcendental level of the incomprehensible system. The deliberations in this book will be on organisational management; that will fall in the realm of socio-cultural systems. It is at this level that humans agglomerate for a common objective, be it for wealth creation or social change. An agglomeration of people who are working towards a common objective needs to have common values and norms that bind them together and enable them to work with predictability and constructive communication. This is where a social system comes into form. When people agglomerate there is bound to be emotions, bias and interpretations in the social system.

Table 1.1 Boulding's hierarchy of systems complexity (cited from Matthews 2004; p. 201)

Level	Characteristics	Example	Relevant discipline
1. Structure	<ul style="list-style-type: none"> • Static 	Crystals	Any
2. Clock-works	<ul style="list-style-type: none"> • Predetermined motion 	Machines, solar system	Physics, chemistry
3. Control mechanisms	<ul style="list-style-type: none"> • Closed-loop control 	Thermostats, mechanisms in organisms	Cybernetics, control theory
4. Open systems	<ul style="list-style-type: none"> • Structurally self-maintaining 	Flames, biological cells	Information theory, biology (metabolism)
5. Lower organisms	<ul style="list-style-type: none"> • Organised whole with functional parts • Growth • Reproduction 	Plants	Botany
6. Animals	<ul style="list-style-type: none"> • A brain to guide total behaviour • Ability to learn 	Birds and beasts	Zoology
7. Humans	<ul style="list-style-type: none"> • Self-consciousness • Knowledge • Symbolic language 	Humans	Psychology, human biology
8. Socio-cultural systems	<ul style="list-style-type: none"> • Roles • Communication • Transmission of values 	Families, clubs, organisations, nations	Sociology, anthropology
9. Transcendental systems	<ul style="list-style-type: none"> • Inescapable unknowables 	God	Metaphysics, theology

Before I go deeper into the philosophy of systems thinking, I will discuss the dominant line of thinking prior to the appearance of systems as a formal discipline in management science. This is the reductionist approach.

1.2.1 The Reductionist Approach

Systems thinking is a radically different way of approaching situations as compared to the reductionist standpoint. A reductionist approach was propounded by Descartes (1968) by his Cartesian philosophy of mind and body dualism. This viewpoint looked at the exclusive existence of the mind and the body as distinct. Reductionism seeks to break down a system to constituent parts to comprehend and understand cause and effect as a linear sequence. This is also referred to as the mechanistic approach or as automata, meaning that a system is rather like a machine organised by parts. These parts have predetermined functions that are predictable and changeable. Reductionism is the attempt to break down a system to the minutest possible identifiable unit

and treat it independently with the belief that if every unit is managed, the overall system will automatically get managed. The overall system is considered just an *addition* rather than an *emergence*. To use an analogy, if a reductionist approach says 1 + 1 = 2, a systems approach will say 1 + 1 (unknown) + 3. The systems approach lends a holistic perspective, where

Holism puts the study of the wholes before the parts. It does not try to break down organisations into parts in order to understand them and intervene in them. It concentrates its attention instead at the organisational level and on ensuring that the parts are functioning and are related properly together so that they serve the purpose of the whole (Jackson 2003; p. xv).

Ruse (2005) attempts to simplify reductionism by suggesting a three-part division of the concept. First, ontological reductionism, which is about the perspective of breaking down a substance or phenomenon into smaller identifiable components. An extreme form of ontological reductionism can be seen in dualism, where a dualist would divide everything into two substances—matter and spirit. Dualism negates any interference between matter and spirit thereby treating interpretation as independent from the subject. Second, methodological reductionism, which is an explanation of functions based on parts; this is more application oriented. Sequential treatment and direct cause-effect perspectives are reflections of methodological reductionism. This approach believes in linear, and not lateral, patterns, reducing the scope for an iteration. And third, theoretical reductionism explores the possibility of generalisations based on observable elements of the parts rather than on the whole system itself. Summation of sub-theories to give rise to a bigger theory can be considered as theoretical reductionism. This eliminates the opportunity to understand emergent patterns that can be appreciated with the ability to see interconnections and meanings in the same.

A reductionist mindset is limiting for the complex situations that planners and managers find themselves in. It curtails creativity and thinking outside the box for change makers and interventionists who have to deal with situations in real life that do not offer dualism and sequence, but multiplicity and divergence. The reductionist mindset is also referred to as the mechanistic mindset. In management science, the mechanistic mindset leads the observer or interventionist to view their area of intervention as a machine breaking it up into smaller parts and thereby being unable to appreciate emotions, patterns and unseen connections.

The reductionist or mechanistic mindset has had a significant influence on early management research and thinking. This led to the belief that there is only one right way of approaching organisations. Under the reductionist mindset, managers led organisations in the command and control tradition. The strict sequence of events guided by Standard Operating Procedures (SOPs), a carrot-and-stick administration rewarding performance and penalising failure, and hierarchy-driven chain of communication and supervision dominated management practices for a very long period of time.

To reflect on this influence, I will discuss the works of three classical management thinkers—Weber, Taylor and Fayol—who in their own ways, set the way for modern management as a discipline around the early and mid-1900s.

1.2.1.1 Weber and Bureaucracy

Weber (1947) introduced the term “rational-legal authority” to describe organisations as a manifestation of a well-structured set of hierarchies with normative behaviours and interactions. For him, this is the bureaucratic form of the organisation that is based on “rational grounds—resting on a belief in the “legality” of patterns of normative rules and the right of those elevated to authority under such rules to issue commands (legal authority)” (Weber 1947; p. 328). A bureaucratic organisation defines a clear structure based on the division of duties and responsibilities governed by a strict hierarchy, and formal rules and regulations. Weber goes on to say that bureaucracy is “superior knowledge” and is legitimised by a higher order or technical knowledge and awareness that is based on facts and evidence (Weber 1947).

A bureaucratic organisation defines roles and responsibilities in a very strict manner. Role-holders are guided by directed deliverables; adherence to the same ensures success and any deviation is not encouraged. This leaves no room for spontaneity and creativity. Lateral relationships and going outside the box may not be expected or encouraged. Bureaucracy appeared as the prevailing mode of structuring and operating organisations from the 1930s onwards and rule-governed bureaucratic control began to be adopted by senior management of large organisations across the world (Huczynski and Buchanan 2001). This set the tone for formalism and rigidity.

1.2.1.2 Taylor and Scientific Management

Taylor (1947) built his theory of management around the idea of the “one right way” of handling responsibility, which can be unearthed by meticulous scientific observation and calculations and this he labels as “scientific management”. He was of the opinion that it is the need of both the management and the workers to transform their perspective towards work and embrace scientific modernism, which can be revealed by time-and-motion studies.

Taylor was exceptionally optimistic about the positive results which can be obtained by the application of scientific management, and he believed that all that is needed is a “mental revolution” towards scientific revolution to transform the human outlook. The growth of Fordism in the first half of the 1900s and the fast food service organisation that we see today are fine examples of Taylorism at work. Consider the way a typical fast food services chain operates around the world. There is a near-fixed menu, a fixed delivery time and fixed expectation in terms of quality and quantity that is standard across the world. Order execution and delivery are a predefined process, where every step is identified and measured. This is an example of Taylorism at its best.

1.2.1.3 Fayol's Attempted Departure

Fayol (1949) marked a subtle departure from Weber and Taylor, with his introduction of the human touch in approaching efficiency in management practice. He was of the opinion that the “only outlet” through which managerial functions articulate themselves in an organisation is through people and that there needs to be flexibility and adaptiveness. Fayol developed the “Administrative Management Theory” with 14 principles, which he regards as the “lighthouse” guiding the manager towards success and satisfaction. These principles included were: division of work, authority and responsibility, discipline, unity of command, unity of direction, subordination of individual interest to general interest, remuneration of personnel, centralisation, scalar chain, order, equity, stability of tenure of personnel, initiative and esprit de corps (team spirit). It is in the last principle that marked a departure in Fayol's thinking.

Fayol was of the opinion that management is all about the ability of the manager of perfect administration of “his” subordinates by achieving a unique integration –differentiation model by the aid of the fourteen principles. Leaders have a significant role to play because it is the leader who commands and co-ordinates and evokes the energy of discipline within an organisation. He cited examples from his observations that in France, workers' obedience and loyalty depended upon the ability of the leader (Fayol 1949).

Fayol was writing at a time when the academic climate was biased with the notions of focalised centralisation and managerial superiority. He made a departure in his attempt to look beyond the intellectual walls of his times and analyse what impact can occur in the performance of the workers depending on employee-goodwill. His perspectives on profit sharing, payment in kind, bonus, welfare work, non-financial incentives, and above all, recognising that union is strength and contributes positively to an organisation's effectiveness marked a change in tone. However, where he realigned with the mechanistic view was with his return to symbolic phrases like “a special code” and “serve those who already know the way into port” (indicating a cast-iron view of strategy) indicating that the code of conduct finally rules (Fayol 1949). For him, the manager remains the superior administrator.

Organisations in the 1960s and 1970s started internalising such thought processes and introducing worker welfare programmes towards enhancing teamwork and workers' motivation schemes. These developments began to influence Human Resource policies that integrated concepts like performance-related pay, employee camaraderie activities including entertainment and employee bonding, and making employees owners of the wealth creation and sharing process.

The journey of management thinking starting from the three classics to where it is today has seen a marked shift in how organisational complexity and its management is viewed. The classical thinkers approached organisational efficiency to be dependent upon the management-centric pathway of understanding the work situation and that is independent of the world outside. Weber used the example of the Catholic Church bureaucracy that he considered as “universal” without any consideration to the inherent internal and societal dynamics that the Church exists in.

Taylor's science of shovelling does not touch on the environmental and ecological contingencies that impact productivity and vice versa. Organisations have been portrayed largely as some discrete uni-dimensional structure, which exists out-there constituted of replaceable parts; in other words, not having a life of its own. The arguments built up suggest what can be called the machine model of organisation. Taylor himself strongly developed his theory and spelled out, "mechanism, human mechanism". Weber's model of bureaucracy emphatically suggests a lifeless structure with the keys of operation in the rules and regulations. Fayol attempted to shred this perspective, but only to a certain extent.

1.2.2 Shift to a Systems Approach

Several leading scholars in recent times have challenged the Cartesian view of looking at situations and have argued for a more integrated approach. In the classical view, organisations were seen as a closed system, unaffected by its environment. But with progression of time, it was realised that organisations are actually open systems continually interacting with the contingent environment in a state of dynamic vitality. Organisations do not exist in isolation but within a social, economic and regulatory context. With organisations beginning to work in more integrated ways across national boundaries and across multiple regulatory environments, professionals moving across the world and socio-cultural nuances coming together like a melting-pot, the complexity and dynamism in organisations is becoming more evident. Management now needs a more connected way of thinking and the same began to surface in both real-life interventions and scholarly writings to address the realities on-ground. These developments set the tone for systems thinking in academia and practice.

Pertaining to this reality, specific intellectual debates and academic contributions are highlighted in the rest of this chapter that talk about interconnectedness, complexity and appreciation of emergence. However, it has not been my attempt to consider them as a linear sequence. I have rather discussed them by drawing inspiration from one another and explore how the connections between these developments led to the emergence of systems thinking as a recognised discipline, as we know it today. The emergence of systems thinking therefore is itself beyond boundaries and it spreads across disciplines.

Ecology and the natural habitat offer a good example of a complex system. Ulanowicz (1986) takes inspiration from ecology where the natural habitat is a complex dynamic of several nodes of energy and life intersecting at multitude of points to make the ecosystem what it is. The complexity of the ecosystem cannot be explained by linear cause and effect equations. Ulanowicz's perspectives and models soon began to be used to understand other complex systems beyond ecology. The ecosystem is an open system and so are organisations and other social systems. Ecological systems offer the understanding of the progressive evolution starting from multitudes of hyper-local interactions that lead to emergent behaviours that ultimately manifest themselves in societal patterns in organisations. Non-linear patterns

and self-organisation are central to such progressive behaviours and resultant social systems.

Bateson (1979) takes an anthropological perspective and talks about how human behaviour and cultural norms are shaped by reinforcing behaviour within sets of like-minded or opposing groups that gives rise to group dynamics that he calls “vicious cycle”. Social systems are not a mere addition and deletion of individuals and their thinking, but is an emergent function based on “vicious cycles”. Excessive reinforcement of a particular behaviour can lead to an overpowering of certain characteristics in the system, which is later balanced by a counter behaviour to establish stability and sustenance. He talks about a progressive sequence of how systems shape up from individuals to societies to ecosystems. There are both reinforcing and countering forces in every progressive step enabled by feedback loops in the systems ensuring that there is an overall state of equilibrium. Feedback loops facilitate control and communication as a cybernetic system.

Bateson goes on to say that every system is an interplay of control and communication that keeps building on and finally the state of a supreme cybernetic state is achieved, which he calls “mind”. The same can also be equated with “god” where an ultimate sense of “homeostasis” is achieved.

Senge (1990) directly addressed organisational management, and put forward a compelling argument for what makes a learning organisation. Senge talks about critical inquiry into one’s own belief systems to understand limits to a firm’s ability or inability to adapt to market challenges and stay relevant at times of change. He says that learning organisations are those that are able to stay agile and adaptive with this fuel of inquiry, constantly being able to reinvent themselves when required. This can only be possible if organisations are able to look at the environment as a whole within which it exists, considering all forces and influences. Having an isolationist or static view of individuals, teams and the firm is a recipe for failure.

In his seminal work, *The Fifth Discipline*, Senge articulates five disciplines for creating a learning organisation. These are explained below.

- **Shared Vision:** Understood not as a vision statement that is usual to be seen in organisations, but an actual shared purpose of existence for the firm. This sets the direction where the team has committed to move together towards, and not with divergent individual goals. Authenticity and genuineness in single minded focus of one and all towards a shared vision is the first step.
- **Mental Models:** These are belief systems harboured within the firm that identifies with hierarchy and closeness instead of agility and openness. Senge calls for an alteration of mental models that are open to learning and accommodation that influence a work spirit that is progressive, risk-taking and learning-oriented.
- **Personal Mastery:** Being able to be authentic to oneself in seeing what is important to us, where we want to be and what is the state of current reality. This is fundamental for learning and to be able to be proactive towards positive reinforcing behaviour.
- **Team Learning:** It is about shifting the balance from the individual to the team. It is about shedding one’s ego and be open to learning from one another and believe

that together we learn faster than what we can learn as individuals. Extending this to understand that together we can also achieve better and higher, than what we can as individuals.

- **System Thinking:** The ultimate fifth discipline. This is the ability to connect the dots and see patterns and trends. It is being holistic rather than being reductionist in our approach to management. He famously said in his book that if you have to manage an elephant, you need to manage it as a whole; you cannot split it into two and then manage two smaller elephants. He views the organisation as a living organism that is made of interacting parts and that exists in an environment with multiple variables. Any intervention is only real if it is at the systemic level and not isolationist.

Senge provides a set of systems archetypes that deserve a manager's attention to drive the organisation towards a learning organisation. These make us think in terms of the long-term sustenance of the organisation and the system within which it exists. Managers often face adverse situations that may make them lean towards taking decisions for short-term yields; but this should not be the case. Managers need to think sustenance and holistic rather than incidental and piecemeal. Further, managers are seen to get trapped in solving surface level issues rather than the cause itself. Treating issues at the surface often leads to recurrence of the same in a different form or shape. Managers need to keep the long-term vision of the firm in mind to find solutions that are more long term and sustainable. Senge's archetypes call for challenging mental models that limit thinking and human potential. Senge's perspectives shook some of the fundamentals of erstwhile management thinking that were rooted in prediction and control, hierarchy and chasing results rather than following a vision.

1.2.3 Complexity Theory

Complexity theory came to surface in the 1980s at the Santa Fe Institute in New Mexico (Chan 2001). The deliberations featured Complex Adaptive Systems (CAS) that explored self-organising systems in highly complex environments that give rise to emergent properties. Complexity theorists talk about underlying structures that govern behaviours of systems that are manifested in patterns and trends over time. Order emerges as a result of such underlying structures and need not be imposed by extraneous forces.

In the context of biology and ecology, the concept of progression of species is explained with the concept of coevolution. The ecosystem is like an open system where there is a constant flow of energy and matter leading to unexpected changes to the external observer, but actually are governed by underlying structures that set the system to evolve with the progression of time. Kauffman (1996) talks of "fitness landscapes" whereby systems need to adapt themselves to suit the demands of environmental changes around them, when applied to biological systems lent a

new dimension to the theory of “survival of the fittest” to one where organisms need to exist through a period of coevolution. Provata et al. (2008) talk about patterns and processes that surface in the complex ecosystem, where non-linearity and self-organisation are central characteristics. In their words:

Patterns and processes resulting from interactions between individuals, populations, species and communities in landscapes are the core topic of ecology. Complex natural networks often share common structures such as loops, trees and clusters, which contribute to widespread processes including feedback, non-linear dynamics, criticality and self-organisation (Provata et al., p. 4).

Complexity is a combination of size and/or volume, awareness, variety and disorder. It is an “unknown” mix of these components that make the system complex for the members or observers. A system may have a lot of size or variety but it may not be a complex system. It is when we are unable to comprehend the system or its behaviour and observe disorder, we can counter a complex system. Complex systems present more variety that can themselves be countered by variety.

Volatility and uncertainty of the business environment have paved the way for complexity theory to come into the business and management discourse as a way of understanding patterns and trends. Managing with a complexity mindset also encourages creativity and innovation as it has its premise on understanding interconnections and hidden relationships.

Any research or managerial intervention cannot be esoteric in nature that perceives organisations as stand-alone entities. Organisations are, therefore, in a state of flux in which the interventionist needs to be absorbed from within to make sense of its reality. A discrete objectivistic external perspective does not work. Gergen (1992) suggests the reality of social life is not quite the same as opined by modernist formalistic organisational researchers; it is rather a domain of complexity, flux and transformation, micropower struggle and a discourse of domination and subjugation. The inability of modernist approaches to address these issues gave rise to an intellectual climate where they came to be seen as an “ideological mystification”, and there arose a “yearning for alternatives”.

Organisations of the present day are highly mobile and dynamic, sometimes ad hoc project based, and based on temporary collaboration. Peters (1992) refers to this kind of organisations as “spaghetti organisation”. Networks and companies have started to be formed based on short-term projects and assignments, which Kanter (1994) would call “opportunistic alliance”.

Complexity theory lets us take a step back from the apparent and obvious to deep dive into the unpredictable and uncertain. This greatly helps in understanding how organisations cope with their environments and adapt themselves to ensure their sustainability. A complexity approach to organisational management would mean letting people direct and manage their own work in a self-directed manner. They will operate within their own constraints and optimise resources to align themselves to a shared objective with minimal supervision.

The downside to this in an organisational setting is that complexity theory would assume people to be driven and responsible. However, the reality faced by organisations are often different and require certain degree of control and predictability in

managing them. An overreliance on complexity theory may also lead to a lack of planning and managerial oversight. There needs to be both information and wisdom to make the best use of complexity theory in organisational management.

1.3 The Making of Systems as a Management Discipline

With works of thinkers such as Ulanowicz, Bateson and Senge, management thinking saw significant influence in the understanding of organisations as systems with a purpose. Reed (1992) remarks: "... the starting point for the systems framework is a conception of organisation as a goal-oriented, purposeful system constituted through a set of common underlying abstract variables or dimensions relating to structural properties which are geared to the functional needs of a more inclusive social system" (p. 7). Organisations began to be seen not as esoteric structures that exist in isolation, but as contextual ones that exist in a socio-cultural milieu and have an active interface within and outside itself. Managing organisations is not merely about administration, but is about continually negotiating with stakeholders, and dialoguing between people.

The systems thinker is continually negotiating and renegotiating with boundaries—a process where knowledge not only diverges from the observer, but also culminates in them. Sparrow (1998) advocates that systems thinking is "about boundaries" and that our analysis needs to be directed towards the generative mechanisms of systemic structures that cannot be structurally reduced. The important message it carries is that the boundaries organisations normally create between departments—HR, finance, sales, marketing, production, procurement and so on—are not only based on insufficient and reductionist understanding, but also creates artificial divisions between people. In this regard, Starbuck and Mezias (1996) found in their research that organisations define their responsibilities and their environments "very narrowly" leading to a kind of pathological compartmentalisation; and this has to be overcome to achieve an intra-firm collaborative synergy. Such compartmentalisation is an example of cartesian reductionism that poses limitations rather than opening minds.

Systems thinking provided a viable alternative lens to approach complex management challenges. Complex systems have their own characteristics (Chowdhury 2017a). At the outset, they are difficult to pen-down, or sometimes even difficult to imagine. They start evolving as we get into them. We need to look beyond the surface and dig below what is evident to unearth what is not. Interestingly, different people can have their own narratives of the same problem. Every narrative is valid. While simple systems are often replicable and predictable, complex systems are self-organising and do not follow any given rules. Therefore, simple problems can be solved using a template that can be replicated from one situation to another. However, in the case of complex problems, templatization does not work. Every problem is unique and requires unique approaches and highly situational perspectives.



Fig. 1.2 Bird flock. *Image credit* express.co.uk

Casti (1994) talks of commonly held beliefs or mental models that lead us to think that order can only be created by centralisation, predictability and control. However, several complex phenomena in nature display order without any centralisation; they are rather emergent. A common example is a flock of flying birds (Fig. 1.2).

A bird flock is a fascinating example of that is able to display direction and agility without an identified leader or structured pathway. It is a self-organising complex system that lies outside the realm of organised command and control. This completely overturns beliefs that there needs to be either external or internal control imposed for order and direction (Feltovich et al. 1989; Resnick 1994). A bird flock is an “organised” system that originates spontaneously and pervades and perpetuates purely by virtue of communication and self-directed action without any said rules and regulations. The mindset required to approach complex systems is very different from that required to approach simple structures. These different mindsets build mental models that are based on very different parameters or even value systems.

Jacobson (2000) talks about the difference in belief and mental models that may drive an approach to complex systems effectively or ineffectively. A novice would approach with a “clockwork” set, whereas an expert would approach in a “complex system” set. The latter offers the required lens to appreciate characteristics like emergence, self-organisation or multiple agency. Jacobson elaborated his thinking as represented in Table 1.2.

I often refer to systems thinking as a state of mind. It is a plethora of interconnections and the ability to appreciate “wholes” with a purposefully non-teleological perspective.

Table 1.2 Complex systems mental models framework (cited from Jacobson 2000; p. 17)

Categories of beliefs	Types of component beliefs	
	Clockwork set	Complex systems set
Understanding the phenomena	Reductive (e.g. step-wise sequences, isolated parts)	Non-reductive: whole-is-greater-than-the-parts
Control	Centralised (within system) external agent (external to system)	De-centralised (system interactions)
Causes	Single	Multiple
Agent actions	Completely predictable	Not completely predictable/stochastic/random
Complex actions	From complex rules	From simple rules
Final causes or purposefulness of natural phenomena	Technological	Non-teleological or stochastic
Ontology	Static structures events	Equilibration processes

The growing popularity of systems thinking soon became evident in greater scholarly work and application of the field in various areas ranging from management, development, international relations, government, ecology and sustainability studies. In the following discussion, I will focus on specific developments in systems thinking in the field of business and management with reference to select scholars who have had a profound impact on organisational studies. The contributions are not to be read sequentially and by no means, this is an exhaustive list.

1.3.1 *Katz and Kahn's Organisations as Open Systems*

In organisation studies, early on Katz and Kahn (1966) brought in the appreciation of the organisation as an open system. They talked about ten characteristics to draw this parallel that are highlighted below (Katz and Kahn 1966):

1. Importation of energy from the environment (resources, people, etc.)
2. Throughput (transform resources available to them)
3. Output (export some resources to the environment)
4. Systems as cycles of events
5. Negative entropy (moving towards more order through the input of energy/resources)
6. Information input, negative feedback and a coding process (to maintain steady state)
7. The steady state and dynamic homeostasis (and a tendency towards growth to ensure survival)
8. Differentiation and specialisation

9. Integration and coordination
10. Equifinality (many paths to same end).

The above characteristics can be demonstrative to look at organisations as open systems that enable us to understand employee behaviour, structure and change, and business performance. For managers and consultants, this understanding helps in designing performance metrics, manage conflict and navigate change from a completely new lens and incorporate multiple factors in decision making to work towards the adaptation and evolution of the organisation in the business ecosystem.

1.3.2 Senge and the Fifth Discipline

Senge's model (discussed above) became an instant hit in the management fraternity. The Fifth Discipline became widely accepted across industries for change management and leadership development. Senge went on to author his second best seller, *The Fifth Discipline Fieldbook*, four years later, where he presented actual tools to be applied on the ground by managers to bring his concepts to life through practice. The Fieldbook (Senge et al. 1994), brought to life the ideas in *The Fifth Discipline* with toolkits to describe the managerial approach along with practical tips that can be applied on the ground. It dug deeper into how one can critique one's own values and challenge mental models to achieve personal mastery at the workplace. Several case studies were discussed to present real-life situations in complex organisational environments including family-owned businesses, large corporates, media, hospitals, schools, communities and governments. The *Fieldbook* also presented its own limitations.

1.3.3 Total Quality Management

Another movement that was taking shape during almost the same time was inspired by Deming (1986, 1993) and his work on Total Quality Management (TQM). TQM is a holistic intervention taking the organisation in its entirety to make a qualitative change in the system through continual improvement keeping the final customer in mind. There is no specific toolkit for TQM, but it is about the integration of thinking and connecting the combined efforts of existing improvement initiatives that make this approach systemic in nature.

Deming talks about his theory of continual improvement by the application of four principles that can improve efficiency and effectiveness that he calls the System of Profound Knowledge. The four principles started with the concept of "System", the starting point as the ability to understand organisations as a network of interdependent components that work together towards achieving a common aim of the system. He talks of mutual gains for all parts of the system without harming one part at the

cost of another. The second principle talked about understanding variation in the systems outcomes due to internal or external reasons, and how to address the same. The third principle talked about the theory of knowledge and the importance to move beyond superficial “fixes” in the system. His final principle talked about the knowledge of psychology for managers to take the team forward with them.

Organisations saw significant improvements with the application of Deming’s theories. The Japanese Government honoured Deming with the institution of the Deming Prize in 1951, which became an internationally acclaimed recognition for quality.

1.3.4 Ackoff and Purposeful Systems

Ackoff and Emery (1972) wrote that systems have a purpose and they need to be understood from a standpoint of how the social, cultural and psychological contexts impact them. Organisations are made of individuals who collectively identify their purpose, and therefore purposeful systems lie at the heart of organisation studies. Ackoff said that a purposeful system is always “ideal seeking”. He looked at social systems science as a value-driven activity and that objectivity in social research is a myth as purposeful systems have values inherent in them. Purposeful systems cannot be “value-free”, and therefore objectivity in social systems study is “value-full”.

Ackoff (1999a) spells out five profound ideas in systems thinking for management:

- In most cases, the obvious is normally not right. He says that for most people, the obvious is not what needs no proof, but what one does not want to prove in the first place. He cites specific examples of instances from real-life management and administration to explain himself. The most common being to focus on parts of a system independent from the whole system with the hope that the organisational performance will improve, which he calls a fallacy. This may in fact, destroy an organisation. He further cites the example of problems being perceived as disciplinary in nature that defeats the purpose of meaningful interventions. Research and interventions need to be transdisciplinary and holistic in nature and need to be approached in a systemic manner. Finally, the “best thing” to be done to a problem is not to “solve” it, but to “dissolve” it. Dissolving means to redesign the system so that it can exist as a new system considering internal and external conditions so that the problem is completely eliminated.
- The revelation that organisations tend to misrepresent the objectives they pursue and what is actually pursued is wrong. This may be a result of misplaced vision or restrictive worldview of the business. This leads managers to keep repeating their wrongness rather than being able to focus on the right things. Ackoff believed that it is always better to do the right things wrong than doing the wrong things right.
- Producing order and harmony in an atmosphere of ambiguity and uncertainty. Ackoff focuses on the right acquisition of knowledge and the role of learning. Learning comes from doing mistakes when mistakes are made whilst doing the

right thing. Mistakes can be of two types: commission (doing what should not have been done) and omission (not doing what should have been done). The former is generally a lot more serious than the latter. However, business pressures often lead managers to end up not doing mistakes of commission. If something is never done, there is no learning. Real learning can be enabled by systemic support, where not only “getting it right” is reaffirming but also “getting it wrong” is not penalised.

- Disclosure of what Ackoff calls “intellectual conmen” such as propagators of benchmarking, downsizing, process reengineering and scenario planning. These are rooted in the belief that there are shortcut measures to deal with any problem, may it be the most complex of problems. They tend to approach situations from a reductionist perspective and with a mindset where achieving the perfect state, rather than the learning state, drives all energies of the system.
- Design of organisations that can be free from the “traps” mentioned above. Ackoff cherishes democratic organisations that are multidimensional and transparent, and not driven by hierarchy and short-term goal seeking. Where learning is at the centre of everything. Where there is constant focus on the organisation as an open purpose-seeking entity constituting by people existing in a wider business and environmental ecosystem.

Ackoff’s work has had a significant impact on management science and research. His view of organisations was at a completely different end of the spectrum from those of classical management thinking where organisations were seen as esoteric structures formed to achieve certain material ends. Ackoff argues that organisations are purposeful systems and this purpose has social, business and environmental impact. Hence, decision-making needs to take into consideration the interplay of such disparate and complex aspects. Managers need to play a balancing role to meet organisational vision, business objective, people’s aspirations and work towards environmental sustainability.

Ackoff identified (1999b) identified four different types of system models. “Deterministic” systems that have no purpose and neither do their parts; however, they can serve the purpose of other purposeful systems. “Animated” systems have their own purpose but their parts do not. “Social” systems have a purpose of their own and so do their parts; in addition, they together form parts of larger purposeful systems. “Ecological” systems do not have a purpose of their own but have a plethora of social, organismic and mechanistic systems in interaction and interrelationships between and within themselves. Each of these systems has their own characteristics. The problem is when models appropriate for one system is forced into understanding and/or addressing another system.

Kirby and Rosenhead (2005) call Ackoff’s work a shift in thinking as a shift from the machine age to systems age.

1.3.5 *Capra and Ecological Systems*

Austrian-born American physicist, Capra's work on deep ecology and systems thinking has had a profound impact on modern business and ecological management. Deep ecology refers to the understanding that living beings have inherent worth regardless of their instrumental utility. Capra was heavily influenced by eastern philosophy of looking at the world as a living spiritual being or a "one great harmonious whole". This is what is also called the Gaia hypothesis. Capra draws on several theories and analogies from different disciplines to argue that existence is a set of complex relationships and any explanation by the reductionist route of breaking down into parts misses its real essence. Drawing from biology, Capra (1996) says

The limitations of the reductionist model were shown even more dramatically by the problems of cell development and differentiation. In the very early stages of development of higher organisms, the number of their cells increases from one to two, to four, and so forth, doubling at every step. Since the genetic information is identical in each cell, how can these cells specialise in different ways, becoming muscle cells, blood cells, bone cells, nerve cells, and so on? This basic problem of development, which appears in many variations throughout biology, clearly flies in the face of the mechanistic view of life (p.25).

Capra talks of every situation to be contextual having its own level of complexity. Appreciation of complex situations needs systems thinking, which is at the opposite end of analytical thinking. In his bestseller, *The Web of Life*, Capra (1996) addresses deep ecology and says that living systems are a complex network of relationships where the ecosystem is a network of nodes. Each node, when magnified, itself will appear as a network of further nodes; so on and so forth. Capra (1996) makes an appeal to reconnect with the web of life by nurturing a sustainable relationship between human beings and their ecosystems by learning the basic principles of ecology. This can help in creating a link between ecological communities and human communities. He places great importance on the principle of interdependence between the systems as the nature of all ecological relationships.

Capra's lessons on sustainability and ecological literacy are highly relevant to the current age of the world's material pursuits and conspicuous consumption that we all find ourselves in. He talks of the ecosystem as cyclical, whereas the industrial world is linear, where natural resources are being used endlessly to be converted into consumer goods with no respect to principles of sustainability, and where wastes from such linear processes are fed back into the ecosystem without consideration to further deplete the ecological balance. To address such grave harm, Capra (1996) proposed an ecological tax reform that rewards and penalises nations on the basis of how they handle the ecology.

1.3.6 *Ashby and Cybernetics*

Ashby (1952, 1956) made a big impact in mainstreaming systems thinking with his contribution to cybernetics. Cybernetics is the science of communication and control to define a system. It studies feedback loops within a system in circular patterns of

causal loops. Ashby drew heavily from neurology to understand living systems in the light of cybernetic models of neural processes. In his landmark books, *Design for a Brain* and *An Introduction to Cybernetics*, Ashby talks of self-regulating systems and the law of requisite variety. Self-regulating systems are those that strive towards a state of order and equilibrium from that of tension and disorder. This is enabled by a constant flow of energy and matter in a non-linear nature, which may also pose a challenge to the structure of the system. Changes in the structure of a system will always take place within a variety pool. The ability of the system to sustain will depend on the requisite variety that it is able to demonstrate on the face of this challenge. He thus says that variety absorbs variety. If a system is unable to display at least the same amount of (or more) variety, it is unlikely to be sustainable. The external variety always “amplifies” in different ways for the system, that the system needs to “attenuate” by its own tools and tactics.

Ashby’s theories influenced biologists, mathematicians and engineers to understand the human brain and thereby leading to fascinating developments in the sciences. As Capra (1996) notes, Ashby’s views were “... crucial for the invention of digital computers, and the technological breakthrough in turn provided the conceptual basis for a new approach to the scientific study of mind” (p. 66). Further, “The field of artificial intelligence developed as a direct consequence of his view, and soon the literature was full of outrageous claims about computer ‘intelligence’” (Capra 1996; p. 66).

Further, in management science, Ashby influenced the birth of a new field, management cybernetics, where an organisation came to be described on the basis of the input-transformation-output schema. An organisation’s survival is dependent on its ability to present a requisite variety to the variety challenge posed by its environment. Managers need to constantly learn, adapt and reinvent themselves in order to stay relevant. Beer’s (1972) Viable System Model (VSM) was influenced by management cybernetics where he presented a completely new way of looking at organisations as a system of communication and control within the law of requisite variety so that it can respond to environmental changes. The VSM became extensively used for organisation design and restructuring.

1.3.7 Churchman and Social Systems Design

Churchman is celebrated for his philosophy of working with an objective to improve human lives. Post the Second World War, he worked diligently to apply his philosophy to business and management to understand interconnections and constraints in business. Churchman’s work was inspired by the understanding that we can have a better appreciation of any system when it is viewed from the eyes of another because every individual worldview is restrictive.

He talked about every system having a meaning with five basic considerations (Churchman 1968), which are the following:

- The total system objectives and, more specifically, the performance measures of the whole system.
- The system's environment (the fixed constraints).
- Resources of the system.
- Components of the system, their activities, goals and measures of performance.
- Management of the system.

The above considerations can offer a concept map to understand a system and reveals interconnections between the parts of the open system. Churchman goes on to say that every tool we employ for the inquiry of the system will never be able to give us the complete picture, thereby taking head-on the concept of objectivity. His approach led to the understanding that systems, as they exist, are actually at the behest of the observer and are not independent. He talks of bringing together multiple perspectives and viewpoints, in other words, multiple subjectivities, to overcome the restricted nature of worldviews (Churchman 1971). Further, just as every worldview is restrictive, it is also hesitant of change. However, bringing together multiple worldviews with evidence can serve as a challenge to restrictive worldviews.

Churchman proposes a dialectical approach to an inquiry as there is no expert in the systems world. An individual may have their own understanding biased by their own worldviews and the same is true of another individual. Hence, the world is a play of “thesis” and “antithesis”. Near-objectivity can be reached by the process of “dialectical debate” between “thesis” and “antithesis” that can lead to a “synthesis” based on both worldviews supported by evidence.

Churchman kept improvement as the agenda at the heart of a systemic inquiry. Improvement is a continual learning process that keeps unfolding as the inquiry and/or intervention progresses. A system can be looked at from different perspectives by inquiring into it from the “is” and the “ought” mode that can reveal the objectives and agenda of the systems design and implementation from the planners’ and receivers’ viewpoints. This can help the inquirer understand the real purpose of a system, which may be different from the stated objective.

Churchman’s ideas were a shift from the cybernetic approach or the hard systems paradigm (discussed in detail in Chap. 3) that believes that systems can be studied in terms of nodes of communication and control and are objective in nature. In the words of Jackson (2000):

A model can only capture one possible perception of the nature of the system. Objectivity, therefore, can only rest upon open debate among holders of many different perspectives. And the results of a systems study can only receive their guarantee from the maximum participation of different stakeholders, holding various worldviews, in the design process (p. 224).

This served as an important framework for decision makers to approach planning from a systemic perspective taking into consideration different worldviews. It is important for the managerial and administrative functions to accommodate varying forces in system designs. Plans do not exist in isolation within the business/management entity. They need to be framed in context of several forces

including societal norms, cultural constraints, religious beliefs, ethical considerations and stakeholder interests.

In this section, I covered only select foundational works that have influenced the making of systems as a management discipline. In no way, this discussion should be taken as exhaustive. A complete discussion will itself merit volumes on the topic. A lens of bias is applied in selecting the above works in relation to the case studies which are discussed later. The above works in some way or the other come handy in deliberating on the cases.

1.4 Systems Thinking Today

Systems thinking provided the light at the end of the tunnel to approach the increasing complexity that the world faces. In business and management, prominent scholars and practitioners led deliberations on how to be systemic rather than being systematic to approach real-life situations that firms face in the social, economic and regulatory arena. With the rise of the focus on sustainable management, systems thinking offered the optimal frameworks to connect the dots towards creating a sustainable planet where the triple bottom line can be kept in mind—social, financial and environmental (Elkington 1997).

Soon, systems thinking took centre stage in management dialogue and began to be seen as a viable alternative to approach the dynamic and interconnected nature of everything around us.

1.4.1 *Adoption of Systems as a Discipline*

Several international bodies were formed that brought together systems thinkers and aspirants to create a strong academic and practitioner climate in the world of systems thinking. Notable amongst these are the International Federation for Systems Research, the International Society of Systems Sciences, the Global Society for Flexible Systems Management, the Cybernetics Society, the Operational Research Society and Systems and Cybernetics in Organisation that promote research, communication and engagement amongst systems professionals.

Leading universities around the world today offer specialised research programmes and degrees in systems thinking and management.

Independent international bodies adopted systems as a founding framework for several of their global initiatives and consulting interventions. The World Economic Forum (WEF) formally constituted a Systems Initiatives track to approach the global, regional and industry challenges of the world as systems. The WEF Systems Initiatives track looks at such issues holistically “from global systems that influence the environment and natural resource security, to the economic systems that create inequality, to the regional systems that determine the fortunes of nations, to the

industry systems that determine the effectiveness of supply and demand” (World Economic Forum 2018).

The development sector saw a great influence of systems approaches with human empowerment and sustainable change at its core. Systems began to be applied through design, implementation and impact assessment by multilateral bodies and large consulting firms. FSG, the leading development sector consulting firm, has a specialised track on systems change that touches upon entire project lifecycles. Major foundations like Ford Foundation, Robert Wood Johnson Foundation and the MacArthur Foundation have chosen systems change as their preferred model for their priority setting and vision realignment (Gopal and Kania 2015).

With opportunities come the challenges. Although systems thinking can offer a viable lens to approach the world’s problems, there are also practical challenges to making it happen. I discuss some of this in the next section.

1.4.2 Challenges of a Systems Thinker

Here, I will reflect on some of the challenges of systems thinking. I will also attempt to touch upon some possible ways to address the same and reflect on some of the skills sets required for a systems practitioner (Chowdhury 2017b).

The first challenge for a systems thinker to overcome is that of siloed thinking. Our brains are almost automatically attuned to approach situations by dividing them into individual parts as much as possible and applying a rule book for every part, in the name of efficiency. Time and again, we are told that once an objective is decided, we need to break it down in manageable chunks and conquer the goal step-by-step. This often makes us lose sight of the woods for the trees. The problem is more deep rooted. Look at how Universities are structured by Departments under the overall segments of Arts, Sciences and Commerce/Management, disallowing the power of inter- and transdisciplinary knowledge pollination. This pedagogy creates siloed thinking in a practitioner’s mind and restricts them from approaching situations as a “whole”. There are certainly more dominant pedagogies on “systematic” approach in higher education than a “systemic” approach. To quote Ison and Blackmore (2014): “Thinking systemically or holistically, in comparison to systematically, appears far from the ‘mainstream’ in most western societies” (p. 120).

The way out is to first overhaul the way we are trained to think. Education bodies need to encourage integrated thinking. This is to be facilitated not only in a way in which students have the flexibility to choose subjects from different disciplines, but also at a higher level where the essence of design thinking, problem solving and critical ontology are introduced in the curriculum from an early age. We already see some welcome change with many of the new curricula being designed across Universities to encourage students to work on real-life problem solving with an open mind, rather than sticking to the traditional approaches of textbook learning bound within Departments.

The second challenge is of the education system itself in embracing systems as a focused subject of research and teaching. Many universities teach systems just as an additional subject and not necessarily as a core. Gregory and Miller (2011) in fact talk about the need to establish the credibility of the systems approach in the higher education setup from their own experiences of attempting for a mainstreaming of systems as a formal teaching subject.

However, this challenge can be overcome by bringing in practitioner inputs to talk about actual application cases of systems thinking. A joint effort from faculty, industry, researchers and students is required to create a demand for formal courses in systems as mandated in MBA programmes. This will ease the way to bring systems thinking into mainstream education and may help to overcome the first challenge. Overcoming both these challenges will hopefully trickle down to the rest of the challenges I discuss below as well.

The third challenge is inherent in how we think and the expectations that govern us in designing projects and planning for interventions. Due to resources utilisation and stakeholder expectations, there is increasing pressure in measurement with the focus on quantitative indices to measure successes under time-bound metrics. In such situations, often project managers race to achieve low-hanging fruits and shift success metrics around short-term results rather than aiming for long-term sustainable change. In the development sectors, different corporations and foundations increasingly subject “beneficiaries” to report impact (normally understood in terms of output and outcomes) under a regime of inflexible success measures.

However, a systems intervention needs patience, flexibility and agility. Often the systems need to be allowed to learn through the course of an intervention and course-correct or course-align as it proceeds. The feedback loop needs to be continual for constant adaptation and be able to “change the wheels of the car when it is still being driven”. The need for the project sponsor and the interventionist is to ensure open-ended processes and be able to approach both measurement and impact with flexibility. In the case of development projects, we will need to look at a problem-solving approach, rather than a mere compliance-seeking approach. This means that results can take longer than what we are used to, but they are more meaningful and more sustainable.

The fourth challenge is more implementation-related. Systems thinking calls for the practitioner to be well versed with a range of approaches and methodologies to fully leverage the power of the discipline. Throughout this book itself, I will talk about several popular methodologies and different paradigms, and this is just touching the surface. In addition to these, there are a large number of tools and techniques that the systems world has to offer. This can sometimes lead to confusion and can be intimidating to someone new who may want to start working in this discipline.

It is to be noted that a systems practitioner does not need to be an expert in every approach or methodology. But it is important to be having an overall understanding of what exists so that they can bring in the right kind of expertise for specific situations at hand. There are also frameworks in systems thinking that help in organising different approaches in specific categories corresponding to the complexity of the situation and the nature of participation. This supports the interventionist select the right

methodology in combination for respective issues they are trying to resolve by taking a step-by-step approach. I will discuss this in detail in Chap. 3.

The fifth challenge is that of language as put forward by Cordoba-Pachon (2010).

As systems thinkers and practitioners, we use our own terminologies like “holistic”, “interconnections”, “autopoiesis”, “self-organising”, “recursive”, “boundary critique”, etc. General management terminologies are distinct from these words. And for someone not used to the discipline, systems terminologies can sound alienating.

With the widespread adoption of systems thinking across sectors, more simple words are, however, are being used as systems language. It is also to be noted that when systems thinking is applied, the interventionist does not have to use systems terminologies. They can work with systems frameworks in their minds without disclosing the same. In every case study I have presented in Part-II of this book, I have not disclosed the approach to the participants or in the situations. I always used them as my frame of reference.

Finally, as Cordoba-Pachon (2010) says, the excessive focus of systems practitioners on appreciating the situation and on problem solving may end up being cumbersome and time consuming. In real time, managers and consultants do not have the luxury of time, but are often under pressure to show results.

It is also not necessary to use all systems methodologies in depth and in an exhaustive manner for interventions. Systems methodologies can be approached as reference points rather than fixed in themselves. In my own professional career, I have mostly borrowed pieces of systems thinking from different methodologies to be used within existing client services frameworks or have adapted several methodologies to suit the situation at hand.

1.5 Conclusion

This chapter presented an overview of systems thinking and its emergence as an organised discipline. I started by defining systems thinking and led a discussion on how systems made a marked departure from the reductionist way of thinking. Select classical management thinkers were presented that included Weber, Taylor and Fayol. A gradual shift in deliberation in management thinking was then discussed in light of operating effectively in the complex environment. Works of Ulanowicz, Bateson, Senge and Deming were referred to. The emergence of systems as an organised way of thinking was presented through the works of Ackoff, Capra, Asbhy and Churchman. Finally, we talked about the arrival of systems thinking as a formal discipline seen through its popularity in application in multiple spheres and fields, the establishment of formal associations, and recognised programmes and tracks in leading centres of excellence around the world. Finally, I presented some practical challenges for systems thinkers and practitioners, along with some recommendations of how these can be overcome.

Systems thinking draws from a diverse range of perspectives including those of biology, ecology, anthropology, sociology, chemistry and physics, amongst others.

Being able to transcend these significant bodies of knowledge and comprehend interconnectedness and emergence requires a great deal of flexibility for the systems thinker; in fact, flexibility is a core in systems thinking. Significant academic and practitioner works will be discussed as the book unfolds that brings in this intersection of systems and flexibility. In the next chapter, I will talk about flexibility as a concept in detail.

References

- Ackoff RL, Emery FE (1972) *On purposeful systems: an interdisciplinary analysis of individual and social behavior as a system of purposeful events*. Aldine-Atherton, Chicago
- Ackoff RL (1999a) On passing through 80. In: Conference proceedings: Russell L. Ackoff and the advent of systems thinking. Villanova University, PA, pp 31–36
- Ackoff RL (1999b) *Ackoff's best: his classic writings on management*. Wiley, New York
- Ashby WR (1952) *Design for a brain*. Wiley, New York
- Ashby WR (1956) *An introduction to cybernetics*. Methuen, London
- Bateson G (1979) *Mind and nature: a necessary unity (advances in systems theory, complexity, and the human sciences)*. Hampton Press, New York
- Beer S (1972) *Brain of the firm*. Allen Lane, London
- Capra F (1996) *The web of life: a new scientific understanding of living systems*. Anchor Books, New York
- Casti JL (1994) *Complexity*. Basic Books, New York
- Chan S (2001) *Complex adaptive systems*. Research seminar in engineering systems. <http://web.mit.edu/esd.83/www/notebook/Complex%20Adaptive%20Systems.pdf>. Accessed 05 Jan 2015
- Chowdhury R (2017a) Systems thinking for development. *CSR J*. <http://thecsrjournal.in/systems-thinking-development/>. Visited 21 June, 2018
- Chowdhury R (2017b) Considerations for a systems practitioner. *CSR J*. <http://thecsrjournal.in/considerations-systems-practitioner/>. Visited 21 June 2018
- Churchman CW (1968) *The systems approach*. Delacorte, New York
- Churchman CW (1971) *The design of inquiring systems*. Basic Books, New York
- Cordoba-Pachon JR (2010) *Systems practice in the information society*. Routledge, Oxon and New York
- Deming WE (1986) *Out of the crisis*. MIT Press, Massachusetts
- Deming WE (1993) *The new economics for industry, government, education*. MIT Press, Massachusetts
- Descartes R (1968) *Discourse on method and the mediations (trans: Sutcliffe FE)*. Penguin Classics, Harmondsworth
- Elkington J (1997) *Cannibals with forks: the triple bottom line of 21st century business*. Capstone, Oxford
- Fayol H (1949) *General and industrial management*. Pitman, London
- Feltovich PJ, Spiro RJ, Coulson RL (1989) The nature of conceptual understanding in biomedicine: the deep structure of complex ideas and the development of misconceptions. In: Evans D, Patel V (eds) *The cognitive sciences in medicine*. MIT Press, Cambridge, MA, pp 113–172
- Gergen K (1992) *Organisation theory in postmodern era*. In: Reed M, Hughes K (eds) *Rethinking organisations: new directions in organisation theory and analysis*. Sage, London, pp 209–226
- Gopal S, Kania J (2015) *Fostering systems change: five simple rules for foundations seeking to create lasting social change*. *Stanford Soc Innov Rev*. https://ssir.org/articles/entry/fostering_systems_change. Accessed 12 July 2016

- Gregory A, Miller S (2011) Waving or drowning? Re-evaluating the place of systems thinking in business and management learning and curricula. In: Presented at the organisational learning, knowledge and capabilities conference, Hull, UK
- Huczynski A, Buchanan D (2001) *Organisational behaviour: an introductory text*. Financial Times Prentice Hall, Harlow
- Ison R, Blackmore C (2014) Designing and developing a reflexive learning system for managing systemic change. *Systems* 2:119–136. <https://doi.org/10.3390/systems2020119>
- Jackson MC (2000) *Systems approaches to management*. Wiley, Chichester
- Jackson MC (2003) *Systems thinking: creative holism for managers*. Wiley, Chichester (UK)
- Jacobson MJ (2000) Problem solving about complex systems: differences between experts and novices. In: Fishman B, O'Connor-Divelbiss S (eds) *fourth international conference of the learning sciences*. Erlbaum, Mahwah, NJ, pp 14–21
- Kanter RB (1994) Collaborative advantage: the art of alliances. *Harvard Bus Rev*, 96–108
- Katz D, Kahn RL (1966) *The social psychology of organization*. Willey, New York
- Kauffman S (1996) *At home in the universe: a search for the laws of complexity*. Penguin, London
- Kirby M, Rosenhead J (2005) IFORS operational research hall of fame: Russell L. Ackoff. *Intl Trans Op Res* 12:129–134
- Matthews D (2004) *Rethinking systems thinking: towards a postmodern understanding of the nature of systemic inquiry*. PhD thesis submitted to the University of Adelaide, Adelaide
- Peters T (1992) *Liberation management: necessary disorganisation for the nanosecond nineties*. Pan Books—Macmillan, London
- Provata A, Sokolov IM, Spagnolo B (2008) *Ecological complex systems*. <https://arxiv.org/pdf/0810.1223.pdf>. Accessed 24 Nov 2018
- Reed MI (1992) *The sociology of organisations: themes, perspectives and prospects*. Harvester Wheatsheaf, Hertfordshire
- Resnick M (1994) *Turtles, termites, and traffic jams: explorations in massively parallel microworlds*. MIT Press, Cambridge, MA; Resnick M (1996) Beyond the centralized mindset. *J Learn Sci* 5(1):1–22
- Reynolds M, Holwell S (eds) (2010) *Systems approaches to managing change: a practical guide*, Milton Keynes, The Open University in association with Springer-Verlag London Limited
- Ruse M (2005) Entry for “reductionism”. In: Honderich T (ed) *The oxford companion to philosophy*, 2nd ed. Oxford University Press, Oxford
- Senge PM (1990) *The fifth discipline: the art & practice of a learning organization*. Doubleday, New York
- Senge PM et al (1994) *The fifth discipline fieldbook: strategies and tools for building a learning organisation*. Nicholas Brealey, London
- Sparrow J (1998) *Knowledge in organisations: access to thinking at work*. Sage Publications, London
- Starbuck WH, Mezias JM (1996) Opening Pandora’s box: studying the accuracy of managers’ perceptions. *J Organ Behav* 17(2):99–117
- Taylor FW (1947) *Scientific management*. Harper and Row, London
- Ulanowicz RE (1986) *Growth and development: ecosystems phenomenology*. Springer, New York
- von Bertalanffy L (1950) The theory of open systems in physics and biology. *Science* 3(2872):23–29
- Weber M (1947) *The theory of social and economic organization* (trans: Henderson AM, Parsons T). The Free Press, New York
- World Economic Forum (2018). *Systems initiatives*. <https://www.weforum.org/system-initiatives/>. Accessed 02 Jan 2018

Chapter 2

Flexibility



2.1 Introduction

A sound systems mindset and an effective systems approach need to be flexible and adaptive. The Cambridge dictionary defines flexibility “as the quality of being able to change or be changed easily according to the situation”. Over the years as I worked as a management researcher and consultant with an interest in systems thinking, I realised some important qualities of a systems practitioner—ability to self-critique, nimbleness and agility, ability to adapt methodologies, being able to absorb oneself into the situation, and learnability. These qualities are at the core of flexibility.

It was only in the year-2007 that Professor Michael C Jackson (who has authored the foreword of this book) introduced me to Professor Sushil at the Department of Management Studies, Indian Institute of Technology (IIT) Delhi, that I encountered flexibility as an area of focused research interest. But it was not until 2014 when I met Professor Sushil for the first time and discussed the intersection of systems thinking and flexibility. Our extensive conversations led to my first publication exploring systems and flexibility in the *Global Journal of Flexible Systems Management*. Professor Sushil is the founder of the Global Institute of Flexible Systems Management who served as my mentor to take this contribution forward for me to formally culminate my deliberations in the form of this book. Whilst I will discuss the methodological intersection of the two in Chap. 3, here I will focus on flexibility as a concept in itself with a focus on organisations and management.

The need for flexibility and adaptiveness for an organisation or programme in the current age is not a matter of debate. But what is flexibility? How did flexibility become a recognised management concept? What does being flexible in business really mean? This chapter introduces flexibility as a concept and how this can be applied in business and management. I will discuss what flexibility means in different contexts and how it can manifest itself in different forms. Perspectives and experiences from real life cases and experiences are brought into understand the advantage of being flexible and the opportunity-costs associated with inflexibility. Relevance of flexibility in current times will be addressed as an underlying theme as

we go ahead with the discussions. Select theories and frameworks in flexible system management are discussed. Finally, we discuss the risks of flexibility and if there should be any limits to flexibility that we may want to consider whilst encouraging flexible systems in our enterprises. I manoeuvre the argument to what I call flexibility with authenticity to create enterprises that can strike a prudent balance without being in danger of sliding into the extreme ends of excessive bureaucracy or chaos.

2.2 What Is Flexibility

Flexibility is the ability to stay nimble and adaptive at the wake of changing situations or being able to reinvent oneself in thought and action within the same situation. It is the ability to be comfortable with change, to seamlessly think and apply with great variety, to be agile, and to appreciate and absorb unforeseen circumstances without creating shock for the system. Openness and freedom to choose are aspects that characterise flexibility.

The impact of flexibility in business functions has become more pronounced with organisations finding that a flexible environment contributes positively to financial performance and productivity, thereby leading to increased revenue generation; further it also makes processes more efficient and enhances customer experience (Richman et al. 2011).

The importance of flexibility has been studied in several contexts including government, manufacturing, administration, ecological management and services industries. Sushil (2015a) notes that flexibility in organisations can be enabled by the optimum mix of people and technology because attitudinal change enables technological change and at the same time, technological change might drive attitudinal change. He goes on to say that lot of the lifestyle preferences that people have today demand a break away from rigidity and excessive control. This can be commonly observed in everyday situations—be it consumers asking for more choices in products and services, the zen-x and zen-y lending an alternative eye to their world-views, organisations re-evaluating tradition styles of management, digital technology reshaping national identities and the blockchain set to revolutionise the global transaction infrastructure. Sushil (2015a) goes on to say that flexibility needs to be driven at a systems leadership level so that our adoption to new technology and the new way of life and living is seamless. He also notes that greater flexibility will lead to better performance of the enterprise.

2.2.1 Flexibility and Systems Thinking

In Chap. 1, I talked at length about systems thinking and in this chapter we focus on flexibility. A conceptual understanding of systems is important for us to understand flexibility. Flexibility theory has been greatly inspired by systems theory as

a multidisciplinary subject. Characteristics of openness, self-regulation and empowerment that flexible enterprises display are fundamental to systems theory.

It is not new to say that change is the only constant. However, the rate of change and the fast-moving nature of events in our current times are baffling. This has further amplified the need to be absorb and respond to change with greater veracity and comfort. The relevance of systems thinking to flexibility is especially pronounced with the VUCA environment we find ourselves in today. VUCA has become the commonly accepted acronym for Volatile, Uncertain, Complex and Ambiguous. *Volatility* stems from the rapid and accelerated pace of change that we witness around us. To give an example, it has not been too long in the past that we heard the word blockchain. And today, blockchain-enabled cryptocurrency has already become a reality and the value of the Bitcoin has neared almost USD 8000. The lack of predictability is evident in the world today; *uncertainty* is what we see around us all the time. It has become difficult today to define a specific industry; let alone management strategies. Do you call Airbnb an internet company or real estate company? Do you call Google a search engine or a media company? Do you call Uber a taxi-hailing app or a transportation company? This new reality has made our world and enterprises more *complex* than ever before. Airbnb, Google and Uber have given rise to a situation where legislative boundaries have become fuzzy and where jurisdictions based on nation-states have become irrelevant. This has resulted in increasing *ambiguity* in the world of businesses and jurisdictions. Challenging boundaries and whole systems thinking are necessary approaches to understand how organisations can operate with flexibility in the VUCA environment.

Forsythe et al. (2018), quote the CEO of leading American retail giant, 7-Eleven, Joe DePinto, in his interview where he says: “Disruption is as great as we have ever seen it... We are seeing all aspects of VUCA”. Having interviewed a series of business leaders of some of the world’s top companies, Forsythe et al. (2018) go on to say that to operate successfully in today’s environment, organisations need to build a culture that is agile and responsive. Together with this, the values of integrity, trust, and empowerment will be the cornerstones to see organisations through this age.

Bahrami and Evans (2011) took the argument forward and proposed the concept of super-flexibility. They understand the concept as “strategising by manoeuvring; executing by experimenting, iterating, and recalibrating; organising by federating; leading by aligning; and innovating by recycling (Sushil 2015a, p. 7).

In the context of systems thinking, Sushil (1994) says that classical systems techniques have been developed under strict thought schemas—hard systems thinking focusing on functionalism and optimising, and soft systems thinking focusing on interpretivism and learning. Techniques inspired by hard systems thinking include Linear Programming, Goal Programming, Search Methods, Physical System Theory etc. Techniques inspired by soft systems thinking include Soft Systems Methodology, Interpretive Structural Modelling, Delphi, Scenario Building, Group Problem Solving Techniques etc. Hard systems approaches are inspired by reductionist thinking and relies heavily on cartesian science and exploring case-and-effect relationships. Soft systems approaches, on the other hand, are based on interaction, engagement and

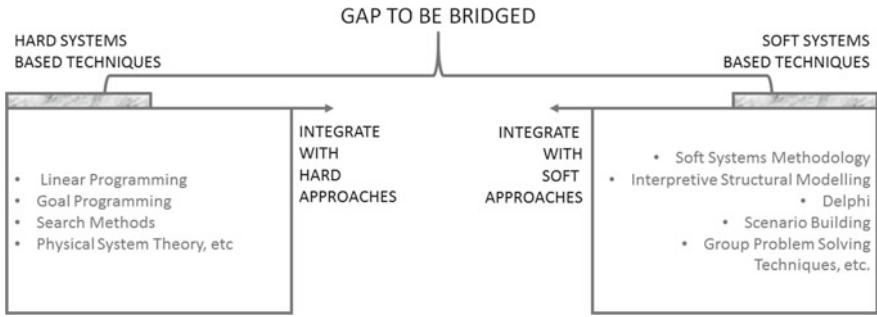


Fig. 2.1 Bridging the gap in systems continuum (cited from Sushil 1994, p. 640)

learning. Different mental models and ways of thinking have over the years inspired different traditions in systems thinking that are often referred to as “paradigms” in the evolution of thought. I discuss this in detail in Chap. 3.

A flexible approach to management problem solving would mean the ability to understand the middle-ground as real life problems exist in the continuum and not in well defined extremes (Sushil 1994). For effective interventions in social systems, the gap between the two extremes need to be bridged, as represented in Fig. 2.1.

Systems thinking and flexibility are complementary and mutually-reinforcing ideas and I will discuss this intersection at length in Chap. 3 from a methodological perspective. However, as we go through this chapter, I will make references to systems concepts and borrow inspiration from systems theorists to build up my arguments.

2.2.2 Flexibility with Authenticity

Display of flexible behaviour should not be at a surface level without believing in it. Therefore, flexibility needs to be authentic. Authentic flexibility comes with the values of integrity, trust and empowerment (identified above by Forsythe et al. 2018). These values need to be balanced towards both the system and the individual. Flexibility cannot be let to override the interest of the system and the system cannot be let to override individual will. I am not referring to methods and technology here as these are only enablers to flexibility. I am rather talking about the cognitive appetite that can direct enterprises to favour or discount flexibility and to what extent. The danger is in the tendency to tilt towards one end of the extreme. Managers need to work towards balancing continuity and change, control and freedom, centralisation and decentralisation, and stability and dynamism to ensure minimum disruption of the system, and empowerment and freedom of its people.

Let’s talk natural science—the system will always have spontaneous reactions and will always have a tendency to move towards disruption and disorder—entropy.

Moving between entropy and homeostasis is a constant phenomenon and every time the system evolves towards a new state of being that is qualitatively different from where it started. Enterprises need to understand and absorb this reality with a high level of maturity to display characteristics of what I call flexibility with authenticity.

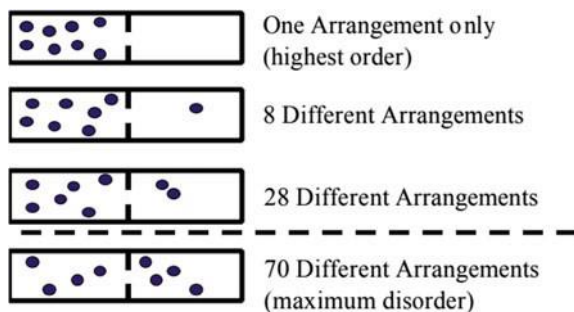
This concept is borrowed from thermodynamics. A system encounters entropy when disorder overtakes order and seeks out for stabilising forces that brings it back to a state of stability or equilibrium—homeostasis. The second law of thermodynamics states that when a spontaneous or unexpected reaction occurs in a system, it moves towards a state of disorderliness—entropy—until it eventually moves towards a state of equilibrium.

To understand why a system always has a tendency for spontaneous reactions and move towards non-equilibrium, Boltzmann came up with an ingenious thought experiment that has been quoted by Capra (1996). Take a box and imagine it is divided into two equal halves by an imaginary line. If there are eight molecules in the box, imagine how many ways they can be arranged on the left and right sides of the line (Fig. 2.2).

The first arrangement can be one where all the molecules are on one side of the box. This is the highly organised state where only one arrangement is possible. The second arrangement can be one where seven molecules are on one side of the box and one molecule in the other side. This possibility offers eight different arrangements. This can illustrate that the number of possible arrangements increases minimising the differences between both sides of the box until a state of equilibrium is attained. Ultimately, the system will show a highly disorganised state as the number of possible arrangements reaches seventy. This leads to increasing entropy as the possibility of disorderliness also increases. However, it is interesting to note that in nature, we observe greater complexity and also greater order evolving side-by-side. This observation led to the development of non-equilibrium thermodynamics (Wicken 1979; Brooks and Wiley 1986).

Capra (1996) builds on this understanding to explain how biological organisms are able to self-organise and continue evolving through the theory of dissipative structures. The term dissipative structures was coined by Prigogine to describe a thermodynamically open system that operates in a far-from-equilibrium state with a

Fig. 2.2 Boltzmann's experiment on probability of disorder (cited from Capra 1996, p. 187)



constant exchange of energy and matter with the environment around it. This leads to a state of self-organisation within the system that lets it survive and evolve.

Going back to the point on biological organisms, these are also self-organising dissipative structures. However biological organisms also process information that further enables them to present requisite variety to the system, self-replicate and organise over a period of time (Brooks and Wiley 1986). Biological organisms are a perfect showcase of dissipative structures that are always able to move up the value-chain through their ability to counter variety in the environment with more variety and reorganisation. An extinction can occur when the organism is unable to reorganise itself around the information and become disjointed.

Capra (1996) resorts to non-linear dynamics to address the cause of what leads highly organised systems to become disjointed because of informational disorganisation. As non-linear systems emerge, reinforcing feedback loops appear. These feedback loops are capable of amplifying even minute new information in a multi-fold manner leading to uncontrolled chaos. This chaotic behaviour can lead to the emergence of new states of order through informational bifurcations (Fig. 2.3).

Figure 2.3 is a diagrammatic representation of how informational bifurcations can give rise to new states of order that are highly unpredictable. These new states are also irreversible and extremely sensitive to change (Wicken 1979; Capra 1996). Capra (1996) goes on to say that at each bifurcation point the system faces two choices—one is the mirror image of the existing state and the other is a new emergent state. The system's ability to exist will depend on the choice it makes and how it interfaces with its environment with that choice, and the spontaneity with which it is able to reorganise itself. This is enabled by a reduction of entropy due to the branching out from its previous state. The nature of dissipative structures is such that the combined entropy is equal to or higher than the previous branch and hence is aligned to the second law of thermodynamics (Wiley and Brooks 1988).

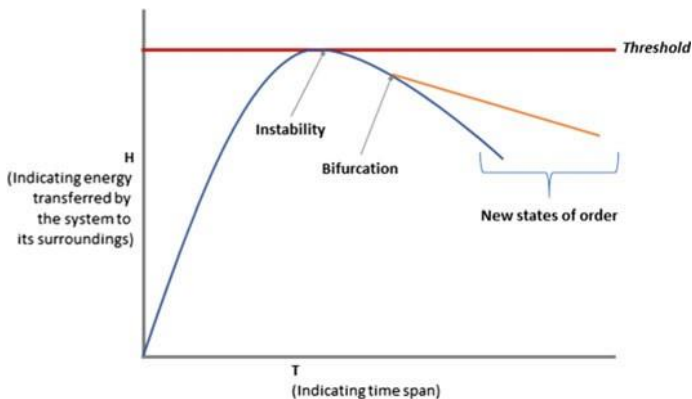


Fig. 2.3 Representation of informational bifurcation and emergence of new states of order

I went into this discussion because thermodynamics is not just about physics. It is the way energy works and touches every aspect of life including businesses and enterprises that managers find themselves in. Keeping in mind the theory of dissipative structures, it is evident that spontaneous reactions and transformations are unavoidable in enterprises. Enterprises are after all a dynamic amalgamation of energy and communication through a passage of time. Since this is the reality of life, managers need to recognise and accept this as inherent. Leading on from this, flexibility is a prerequisite for managing effectively if managers want the organisation to survive through the thresholds of instability as it transforms itself into new forms over time. Enterprises, departments, teams and individuals are all prone to such transformations. When we talk of the VUCA environment of the current times, it is not to say that change and uncertainty did not exist earlier. But in current times, the speed at which change occurs and the rapidness in which newer forms arise in the business world is unprecedented. We highlighted some cases like Bitcoin, Airbnb and Uber.

This simply means that managers not only need to be open to uncertainty and volatility, but also be comfortable with the same. This calls for a great degree of authenticity of flexibility in thinking and action to create organisations that are resilient and sustainable. Invariably, here also comes the ability to recognise inter-connections, requisite variety and emergent structures that are central to systems thinking. A systemic mindset can enable better flexibility with balance and prudence.

2.3 The Flexibility Discourse

Sushil (2015b) says that the concept of flexibility is based on the concept of continuum between two opposite ends. He refers to the Chinese philosophy of Yin and Yang that represents itself in all forms of duality—viz. positive-negative, good-bad, day-night, bright-dark, so on and so forth—that emanates out of a constant chaos of material energy in the universe. The philosophy says that the duality of the opposing forces self-contains the other extremes when one of the two forces reaches the other extreme. In that sense the opposing forces are interconnected, complementary and self-perpetuating; one cannot live without the other. This integration results in a dynamic force that is greater than the summative forces of both the opponents. Depending on the situation and the observer, one force will always be more prominent and/or dominant than the other.

Capra (1976) takes the argument forward to say that this oscillating movement unites the opposing ends in a circular motion. This circular integration can only be appreciated if the observer has the view of the continuum rather than of distinction or reduction. Whereas a systems observer will always look at the integration and continuum, the reductionist observer will always look at the divisions and breaks. But in reality, just as in philosophy, complex systems demonstrate qualities of continuum and coevolution.

Sushil (2015b) takes inspiration from Indian philosophy where he refers to enlightenment as transcending pairs of opposites and looking beyond them. He talks of the focus on unity and integration in Indian philosophy which is also the essence of integration (Sushil 2015b). Thesis and antithesis form a focal point in Sushil (2015b) where he refers to the works of Ackoff, Toffler, Jauch and Glueck, and Pascal and Bahrami. The central argument of such works is that in management we always need to strive towards a focused synthesis between opposing forces of perceptions, decisions and mindsets. Preferring one end of the spectrum always leads to the danger of completely ignoring the benefits of the other end. An ideal way is to have an integrative mindset where managers are able to see a continuum between opposing end and are able to create a synthesis of the best from each end of the spectrum.

Sushil (1997) talks of flexibility as the:

exercise of free will or freedom of choice on the continuum to synthesise the dynamic interplay of thesis and antithesis in a iterative and innovative manner, capturing the ambiguity in systems and expanding the continuum with minimum time and efforts (p. 263).

With this orientation of the philosophy of flexibility, I will now discuss how flexibility can be understood in select areas of application. The following discussion is meant to serve as examples of theoretical and practical deliberations of flexibility.

2.3.1 Flexibility and Manufacturing

The origins of an identified discussion on flexibility can be traced back to the 1960s when an increased degree of automation made its foray into manufacturing. Computer programming and robotics introduced a new way of approaching manufacturing that completely redefined production systems (Toni and Tonchia 1998). The business climate in parallel witnessed heightened competition and cost optimisation, production speed and customer satisfaction were key focus areas for the manufacturing industry. In the middle of the 1960s, market competition became more intense. Flexibility came in as an important component in the manufacturing process to cater to different customer categories satisfactorily.

Flexibility in manufacturing can itself be of different types that was articulated by Browne et al. (1984) that formed the basis for most of the subsequent research. These types are machine flexibility, process flexibility, product flexibility, routing flexibility, volume flexibility, expansion flexibility, operation flexibility and production flexibility.

Nilchiani and Hastings (2007) define flexibility in the context of systems engineering as the system's capacity to respond to change—both internal and external—with minimal impact to time, cost and quality. Flexibility can enable a system with adaptiveness to unplanned events and interferences from the ecosystem it exists in.

Gorod et al. (2008) cite several other examples where flexibility has been explored in management and engineering. They say:

“... de Groote defined flexibility as a hedge against the diversity of the environment; de Groote proposed that a certain technology could be said to be more flexible than another if an increase in the diversity of the environment yielded a more desirable change in performance than the change that would be obtained with the other technology under the same conditions; Golden and Powell described flexibility as the capacity to adapt; Chowdary characterised flexibility of a manufacturing system as its ability to respond to changes either in the environment or in the system itself; Wadhwa and Rao stated that flexibility is viewed as the proactive capability of a system to manage change in its environment in an effective and efficient manner; and Upton defined flexibility as the ability to change with little penalty in time, effort, cost or performance” (p. 30).

Flexibility has been described and defined in different ways by different scholars, but the essence remains the same that I have attempted to encapsulate in the beginning of this chapter—the ability to stay nimble and adaptive. To be flexible, one needs to think and act flexibly with the freedom to choose.

Originating in manufacturing (or so believed to be), the flexibility debate took over other disciplines rapidly, and we delve deeper into related discussions in the following sections.

2.3.2 *Flexibility and Management*

The study of flexibility soon permeated to different fields and areas of application. The rapidly transitioning business landscape through the 1970s and 1980s demanded managers to take prompt decisions, be comfortable with ambiguity, and see through the opaque in the macro-economic scenario impacting global and national economies. Gupta and Nagpal (2015) examine the components of flexibility in key business excellence models globally for their preparedness for the “next-generation”. They discuss eight fundamental concepts, borrowed from the European Foundation for Quality Management. These are discussed below (Gupta and Nagpal 2015).

- **Flexibility in Leadership:** Involves developing a shared leadership culture and challenging the status-quo. Leaders need to constantly review, adopt and realign the organisation’s direction as per emerging business realities. Responsiveness to changing market needs and adaptiveness to new environment is key. Communication within the organisation needs to be open and transparent that promotes empowerment, involvement and ownership. Leaders need to demonstrate openness to take constructive feedback and opinions from their juniors. They need to be able to shed ego and embrace reverse inputs.
- **Flexibility in Strategy:** Strategic alignment has to bring together both stability and change. This involves recognition and acceptance of emergent factors even when they are not evident. Scenario planning and being prepared for risks become important. Strategy therefore need to be broad based that is malleable and adaptable when factors outside the boundaries of the organisation call for the same. Risk planning and preparedness is crucial. Although this is at a strategic level, systems and processes need to be established so that all kinds of risks

—social, economic, technological, regulatory—are regularly understood and assessed. Review mechanisms with defined metrics need to be institutionalised so that management has oversight of the environmental realities.

- **Flexibility in People:** Learning needs to be integrated within the organisation and this needs to be driven by the leadership as a priority. Employees need to be given the flexibility and time to invest in their learning. Together with learning, also important is unlearning. This can happen by challenging pre-existing mental models, and by encouraging critical thinking and innovation. This eventually will create a learning organisation. Bringing in orientation to change and adapt to teams and individuals within an organisation is important. The organisation structure and performance review mechanisms need to enable the same. Structures and frameworks can be brought to life with the right attitude, mindset and skill of people. HR needs to play an important facilitator role in putting in place policies that foster a healthy workplace with work-life balance and flexible working arrangements so that employees can bring their best selves to their workplace. Goals need to be stretched that offer both challenge and excitement. This needs to be supported by employee engagement and continuous improvements in work practices.
- **Flexibility in Partnerships and Resources:** Recognising stakeholders in the wider system of the organisation is important that considers suppliers, collaborators, influencers, government, regulatory bodies, citizens' groups and other members of the wider ecosystem. Regular communication channels need to be established to enable transparency and a genuine exchange of information. IT systems and supporting resources need to be optimised so that strategies and policies can be adequately supported. Resource management needs to be made more efficient with a focus on utilisation rather than ownership of resources.
- **Flexibility in Products, Processes and Services:** Emphasis needs to be directed to lean production design keeping the end customer requirement in mind. Redesign of products, processes and offerings to cater to constantly changing customer requirement need to be inculcated. This can be brought about with modularity and platform concept in product design. Application of creativity and design thinking in developing new products and services is an important contributor. Processes and technologies with the end customer in mind need to be set up. Processes need to support delightful customer experience needs with regular monitoring and review of customer feedback and suggestions.
- **Flexibility in Customer Results:** Endeavour to reduce cost and lead time and be more responsive to customer needs. With changing customer maturity and perceptions, their needs and demands are also changing. The organisation needs to be capable of pre-empting future customer demands and needs, and tailor solutions to cater to the same. Speed is of the essence. The customer of the day is restless. Digital technology and new age companies leveraging the same with live chats and virtual complaints resolution mechanisms has made the race even more competitive. Organisations need to think, respond and act real-time.
- **Flexibility in People Results:** This is a wide term that can touch upon both process and concept innovation. However, it is important to note that for the customer, innovation is what they can benefit or experience from as an offering. This may be

about new products and solutions launched, or an enhanced experience in using a service, or the reduction in price-point for the customer. For employees, this is about the challenge and newness in their everyday work experience with the organisation and how the organisation facilitates them to live and work without monotony and repetition. Engagement can be brought about by a number of factors like working hours, pay and benefits packages, career options, performance measurement, diversity and quality of work.

- **Flexibility in Society Results:** Enabled through a focus on sustainability. Sustainability is meeting the needs of the present without compromising on the needs of future generations. Sustainability in societal results can be achieved through a consciousness of responsible usage of natural resources, waste disposal, less environmental interference and negation of negative impact on the society. A whole systems approach on considering the benefits of all stakeholders involved in and affected by the organisation is required. Satisfaction and positive impact on all stakeholders need to be considered by the management.

Gupta and Nagpal (2015) say that considering the above key concepts for next generation business excellence, the organisation must also be flexible towards its key results in terms of financial flexibility, risk mitigation and balance value for all key stakeholders. They call the first set of flexibilities as enablers (leadership, people, strategy, and partnerships and resources) and the latter set as results (people results, customer results and society results, leading to key results). Learning, creativity and innovation flow through the system for a flexible organisation (Gupta and Nagpal 2015). By bringing together enablers and results in the continuum, Gupta and Nagpal's work attempts a systemic appreciation of organisational effectiveness. Both the aspects bring together a range of highly pertinent parameters that are relevant for managers in the VUCA environment.

The key results align with the argument of flexibility and authenticity that I introduced earlier in this chapter. Such flexibilities in key results need a high level of maturity of the management and that can only be possible if managers are authentic about the flexibilities they are embracing and/or promoting.

2.3.3 *Flexibility and Organisation Design*

Organisation design involves bringing together the right capacities and infrastructure to effectively operate an organisation towards achieving its objective. It is the process of creation and implementation of optimal organisation structures and processes considering economic factors, business environment and internal capabilities with the adequate combination of differentiation and integration. It normally involves creating functions (or departments), defining roles and responsibilities and articulating enablers to align the organisation to deliver to its goals. Effective organisation management is imperative to the firm to withstand changing business needs and in staying relevant at the time of uncertainty and varying customer expectations.

As the concept of flexibility gained grounds, creating and enabling flexible organisation management systems has gained popularity amongst management consultants and administrators engaged in Organisational Development. Operating in the VUCA environment, businesses today need a holistic perspective, greater appetite to work with uncertainty and consider dynamic integration along the value-creation process. In such a situation, organisational complexity and flexibility are seen as important competencies for firms to stay competitive (Dove 2001).

An effective organisation design brings in the right mix of adaptation and flexibility in the system. For the sake of greater clarity, whereas, adaptation is an evolutionary process of the organisation’s ability to “fit into the mould” of the contingent environment, flexibility is more about the here-and-now of an organisation to manage the changes posed upon it. The adaptation-flexibility mix can again be seen as a continuum where the system needs to reach a point of optimal mix. At either end of the continuum, the organisation can fall into the trap of rigidity or disarray and disorganisation. No one end is recommended. The continuum is about leveraging alternatives and navigate through paradoxical situations displaying prompt and ease. Gorod et al. (2008) represent this continuum in the form of a transition from rigidity to planned to flexibility to chaos, which is represented in Fig. 2.4.

Gorod et al. (2008) explains the transition of organisations across the adaptability-flexibility matrix in the following forms.

- **Rigid organisation:** Adaptability and flexibility is very low. Choices are limited as such organisations tend to be very rigid. Processes are well laid down and predictable. Ways of working are defined with no scope for creativity. The environment is of command and control. The level of bureaucracy is high. The structure

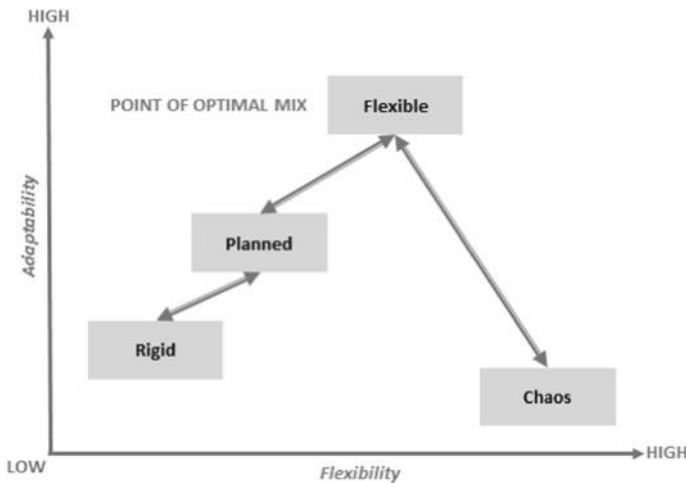


Fig. 2.4 Organisation forms in the adaptability-flexibility axes; adapted from Gorod et al. (2008)

is impermeable. Mental models harboured are influenced by cartesian science and reductionism. Such organisations lie at one extreme end of the spectrum.

- **Planned organisation:** Flexibility is limited but offers some degree of choices. Processes and metrics are well laid out but the system may offer some flexibility to function within the laid out parameters. Control is still high as such organisations work on well-planned roadmaps and scenario assessments. Innovation and creativity may be encouraged but this also happens within set parameters. Mental models harboured are based on limited openness and cautious creativity.
- **Flexible organisation:** The organisation appreciates flexibility and is open to a malleable structure that is capable of responding to internal and external needs of the wider system. It is capable of adapting itself to the environment without losing its distinctiveness. Such organisations are able to constantly innovate in their services and products, delivery mechanisms and are able to recreate customer needs from time to time. Mental models harboured are based on freedom and autonomy.
- **Chaotic Organisation:** This is when flexibility overrides the strategic intent, driving the organisation into disarray. There is no common ground of decision making, and leaders and teams operate in their own direction; so do individuals. The level of “entropy” is beyond apprehension and takes the organisation by shock. Such an organisation treads a path towards a misguided direction, and eventual failure. Chaotic organisations are at the other end of the spectrum from rigid organisations. Mental models harboured lack strategic intent.

In today’s business environment, organisations are constantly exposed to new customer preferences, pressing supplier demands, sustainability commitments, regulatory frameworks and competition surprises, let alone market volatility. Management needs to handle the complexity our surroundings pose by presenting requisite variety, but with a fair and balanced approach. Volatility may not call for adhocism, rather there needs to be a method to how we approach the environment. I refer back to the point of authentic flexibility here where managers need to take prudent and mature choices about how much flexibility and how much control need to be exercised depending on context, environment and people, where there is no prescriptive rulebook.

The flexibility-adaptability mix need to be informed with adequate data foresight and aptitude for today’s managers to remain relevant for the tomorrow’s situations. Letting it go will lead to a chaotic situation. I explore an example of an optimal adaptability-flexibility mix in the case below.

2.3.3.1 Exploring an Example of an Optimal Adaptability-Flexibility Mix

Consider Ikea, the world’s largest furniture brand. Tracing its origins to a sleepy Swedish village, Ikea was founded by a legendary entrepreneur, Ingvar Kamprad, who had a vision to make stylish living accessible to one and all, and not necessarily the wealthy. Kamprad expanded his business from strength to strength to bring the

company to a stage where today Ikea has over 425 stores in over 50 countries. Ikea's entry into every country and its management of country-specific situations are perfect examples of adaptability and flexibility at its optimal mix. The company has never stopped reinventing itself in its products, designs and offerings, and has thought anew for every geography it has its foot in. Ikea's entry to every country is not only backed by intricate research into the lives and culture in the specific context, but also sensitivities to the people and ecosystem it has set out to do business with.

Ikea pioneered the DIY (Do It Yourself) concept that engaged the user with the product by involving them in assembling furniture at home with minimal effort. This brought the customer closer to their own furniture and created an affinity. The flat-pack concept completely changed the way the industry looked at packaging and transportation from one that was bulky and inconvenient to one that is easy and environmentally friendly. Customers were able to buy, carry and assemble with relative ease. This catered to an increasingly new breed of users who were looking at low cost yet stylish homes to cater to their mobile and changing lifestyles.

Each of Ikea's product team has an engineer attached to it so that end-to-end technical benefits can be incorporated right from research to concept to design to production to transportation to assembly. Consider Ikea's entry in India. Ikea invested close to five years in understanding the Indian market and consumer before they finally launched their first store in the country in 2018. Ikea's research showed that the sofa played a central role in the lives of Indians where families and friends sit around and spend quality time, as opposed to many European countries where people would prefer to socialise outside their homes (Gupta 2018). The role of the sofa in India gets extended as the "space" where children would do their homework and teenagers who lie down to talk on the phone. In some families, people would also sleep off in their sofas. Gupta (2018) goes on to say that the way Ikea approached the sofa for India was to rethink their classic Scandinavian design sofas into couches that are adjustable and expandable that will serve different purposes for the Indian market, including accommodating large number of people to be seated on weekends. Further, Ikea decided to stay away from using leather in India in respect of religious sentiments.

I had the opportunity to meet Patrik Antoni, the then Deputy Country Manager for Ikea India in 2017, the year prior to the company's launch of its first store in the country. When asked about his vision for Ikea in India, he talked about Ikea stores as a space that would welcome all kinds of people to "come and spend time". The stores were to be designed as welcoming public spaces where people would want to explore and feel entertained in a warm and friendly environment. He envisioned families coming with their children and relatives to spend the day, where children can be entertained in the play area and people can enjoy the tasty food. Patrik made Ikea sound more like a destination rather than a store.

Similar was the case before Ikea opened its first store in Korea in 2017. As part of its market entry research, Ikea dived deep in the life at home of Koreans interviewing around 900 people and visiting homes. The company understood the importance of the living room in the lives of Koreans. For the first taste of Ikea for the Korean customer, the company created showrooms themed around Korean homes catering

to the needs and lifestyles of the locals. The first store offered a nursery to make children comfortable in the store along with a cafe that sells both Swedish and Korean foods (Soo-hyang 2017).

Ikea has evolved with the changing market environment adapting its own business models and bringing about both incremental and radical changes in its value chain to stay relevant and profitable over the years. During the global recession that hit in 2008 that directly impacted new home-owners and middle-class consumers, Ikea devised new strategies to further reduce costs and pass on the benefits to its customers. Caglar et al. (2012) note:

It [Ikea] accomplished this through the simplest of methods: focusing relentlessly on separating “good costs” (productive investments) from “bad costs” (unnecessary expenses). The company then invested 100 percent of its net savings on building up the essential qualities of its business or lowering the price of its products. (At other companies, even 25 percent reinvestment is considered remarkable.) The results to date have been impressive: about 10 percent annual top-line growth and stable margins, despite the ongoing price reductions and economic pressure of the past few years.

Ikea always keeps constant improvement in the way it serves customers that will always in turn help them in acquiring new customers. The company’s flexibility in strategic decisions and adaptability to the macro-economic environment actually led Ikea to improve sales and increase revenue even during the year of a global recession when its customer base was the one that was most hit by the recession.

In an interview to Caglar et al. (2012), Ian Worling, a senior executive at Ikea involved in driving the company’s growth strategy, talks about four areas that the company adopted to navigate through a tough global economic climate.

- Focusing on how to lower operational costs especially hidden costs.
- Keep getting better on volume business.
- Creating efficiencies in supply chain by constantly reviewing and adapting it.
- Keeping members of the Ikea family—its employees—at the heart of everything.

Ikea continues to adapt to its customers and emerging requirements. Taking feedback and customer insights, Ikea acquired a company called TaskRabbit in 2017 that supports assembly of furniture at home. In addition, it is also exploring opening smaller stores that will enable enhanced customer experience and a more personal interface (Stewart and O’Connell 2018).

The changes and adaptations Ikea has made along the way to become the largest furniture company in the world has been based on the twin foundations of empathy and emotion (Stewart and O’Connell 2018). The entire team across the world buys into it making it the shared vision that binds one and all associated with the company. In a way, the shared vision itself works as the operating framework for the company.

2.4 Dangers of Inflexibility

If organisations are unable to display flexibility and adapt to changing times or unable to counter variety in their environment, they stand the danger of becoming irrelevant and may struggle to exist in the long run. It is not enough to just sense the market, but organisations need to work as complex adaptive systems (borrowing from complexity theory) where they are able to adapt their processes and offerings for the market. Organisation structure and culture play the role of enablers in doing so. Closed inflexible structures and bureaucracy will always pose a challenge for entities to stay relevant. Messiness and nonlinearity lie at the nature of our existence and management needs to appreciate and learn to operate within the same, rather than rejecting and trying to “fix” it. In the words of Le (2018):

The universe is messy, nonlinear, turbulent, and dynamic. It spends its time in transient behaviour on its way to somewhere else, not in mathematically neat equilibria. It self-organises and evolves. It creates diversity and uniformity. That’s what makes the world interesting, that’s what makes it beautiful, and that’s what makes it work.

If managers operate with blinkers to natural nonlinearity and transience of events and behaviours, and expect everything around them to “fall in place” as per plans based on external buffering and a false sense of internal knowledge, they are bound to lead organisations to the path of failure. Corporate history has a long sequence to organisational disasters; by way of two examples, I highlight the cases of Detroit and Nokia that fell from a leadership position to a level of disarray.

2.4.1 *Detroit and the Fall of a City*

The fall of Detroit as an industrial hub in the US can be understood from a flexibility (rather the lack of it) perspective. Detroit was the leader in the automobile industry through the first part of the 1950s in the US. But soon the industry spread geographically due to market forces from within and outside the US. The mid-1950s saw the establishment of several automobile and allied companies outside of Detroit. New geographies like Southern parts of the US, Canada and Latin America were countering Detroit with their cost leverage. The cost arbitrage played a significant role for several companies to shift operations to these new places. However, companies are not formed just on infrastructure and operations. Companies are constituted by people and the extended communities that people represent and in turn make. As more and more companies shifted out of Detroit, little attention was being paid to the employees of these companies.

A parallel threat was from the growing power of Japanese automobile manufacturers riding high on production efficiency and superior quality. Techniques like just-in-time and total quality management helped Japanese companies deliver superior customer value at lower costs and shorter lead time. Lean production processes helped companies like Toyota, Nissan and Honda to pre-empt, recognise and respond

to customer requirements very promptly. Flexibility and innovation was at the heart of their production process. American companies like Ford, Chrysler and General Motors were unable to keep pace with the dynamic market realities and the speed at which change was coming in. As large American companies started downsizing and looking for government bailouts, this had a spiralling effect. Numerous auto-component manufacturers and original equipment manufacturers (OEMs) had to shut shop or file for bankruptcy owing to a complete wipe-out of their business in Detroit.

As the core automobile and auto-components business was hit, the entire economy of the city faced a literal shut down as all other industries were peripheral or support businesses. These included entertainment, retail, education and so on. The woes of Detroit went from bad to worse and the city was itself caught up in its own whirlpool sucking it deep down. Over the years, Detroit witnessed worsening community order, rise in the case of mental and physical health of residents, increasing crime rates and a city dropping down the ladder in all indices of living and liveability. Detroit filed for the largest municipal bankruptcy case in US history in 2013 (Davey and Walsh 2013).

Detroit's story is that of a city that was caught unprepared by the change in the economic environment and business realities. A city that was over-dependent on one industry and where everything else revolved around the same—negation of the classic adage of “don't keep all your eggs in one basket”! The industry itself was unable to adapt to the new realities and was not flexible enough in terms of strategy, people, resourcefulness and customer results to navigate the situation. This added up to the same syndrome for the city. Had the city kept adaptiveness, diversity and flexibility at its core and built successes for other industries with its core competence on automobiles, the story could have been something else. Had the automobile industry in Detroit kept themselves open to newer ways of manufacturing and constant process improvements, it could have been able to pose a competition to international companies and other regions within the US. Detroit's downfall was a classic case of lack of openness and inability to adapt.

2.4.2 Nokia and the Fall of a Pathmaker

Consider another well known case—Nokia. The company was the world leader in mobile technology and handsets. Although today we may not think of Nokia as the first company when we want to buy a smartphone, Nokia was the first to come up with one in 1996 with an internet-enabled touch screen prototype in the mid to late nineties (Surowiecki 2012). However, the company's approach to appreciating the market and catering to a customer need was based on hard engineering without having the focus on the experience that people look for. Surowiecki (2012) says that Nokia's investment in research and development and its application to product development was dominated by hardware engineers without adequate focus to the software element. Lack of diversity in teams made that there were limited ways of looking at solutions and products. He goes on to say that on the other hand,

Apple, during the same time, brought in multidisciplinary teams to work in flexible work environments that helped them to adapt solutions and products to cater to both hardware and software in parallel in a creative and open environment. There were other handset manufacturers who came in with the promise of flexible options with enhanced user experiences. Samsung started investing heavily on developing its mobile handsets to cater to the customer preferences of the time, and adapted with the technological developments to power its handsets.

Companies such as Apple, Samsung and HTC soon took the market by storm and Nokia was unable to cope with the new market realities and shifting consumer demands. The Symbian platform was becoming irrelevant. iOS and Android took control over the market (Chang 2017). At the same time, the smartphones almost hypnotised consumers with its glare and convenience. Users rapidly opted for “mini-computers” instead of “feature phones” with tedious WAP browsers (Chang 2017). Nokia failed to adapt and respond (Chang 2017).

Apple seemed to have got the smartphone just right and catered to the high-end segment of the market. Companies like Samsung and HTC worked ground-up to come up with products that were sleek, smarter and better performing. On the other hand, Nokia was bonded with its own platform, which was a leader in its own segment at that time (Chang 2017). Nokia saw it coming all through, but it was simply unable to adapt and respond although it had the resources to do so. What it may have lacked is the mindset of flexibility and adaptiveness.

From a market share of nearly 50% in 2007, Nokia fell to a market share of just over 43% in subsequent years, then to 41% and eventually 34%. The first half of 2013 saw Nokia’s market share at just 3% (Lee 2013). Nokia eventually sold off its handset division to Microsoft.

Nokia’s fall from the position of a market leader can be understood from a perspective of how it was unable to adapt to a rapidly changing environment. The company was too “attached” with its own success and platforms that made it inflexible to embrace new technologies. The mindset at Nokia was driven by some kind of an “arrogance” of being the market leader that led it to overlook customer preferences. The way the teams functioned and interfaced was like a close-system without adequate interface beyond its own self-created limitations. Cord (2014), author and strategic communications expert, notes that Nokia’s internal bureaucracy was pervasive, which acted as a roadblock in the company’s ability to adapt and take prompt decisions. Internal competition was destructive and teams were all set to prove themselves rather than working for a shared purpose. It failed to respond to the most important stakeholder—the customer.

Cord in an interview to Callaham (2014) says:

The most surprising thing was that Nokia was very rarely caught off-guard. They knew the industry would move towards touchscreens. They knew ecosystems would become all-important and the internet would go mobile. They courted app developers long before Apple or Google. Despite the fact they knew where the industry was going, they were unable to act. Their organisational structure and culture had devolved into this bureaucratic, inward-looking entity. Theirs was not a failure of foresight; it was a failure in execution.

The above perspective throws light on that fact that mere market knowledge is not enough for an organisation. What is important is the ability to adapt to the market and respond with prompt and agility. Flexibility lies at the core if an organisation has to display this kind of behaviour.

2.4.3 Achieving the Right Balance

Achieving the right balance is crucial in leading an organisation to stay relevant and sustainable. Rigidity and red-tape do not serve an organisation to respond and adapt. Planning is important to establish predictability and order, and for judicious allocation of resources for the organisation and its people. Flexibility enables innovation, agility and responsiveness. Hence, a planned organisation needs to be flexible. However, managers need to exhibit authenticity whilst exhibiting flexibility. If flexibility is stretched too far, it leads to chaos that is undesirable. Concepts of either/or are becoming more-and-more irrelevant in current times; what we rather need is “both and conjoint” options and approaches to support systems navigate through the environment (Srivastava and Sushil 2015).

2.5 Flexible Management Practices

I discussed organisation design earlier. This section talks about how organisations can create and implement flexible management practices. The HR function needs to play an important role in enabling flexibility in people policies. Organisations are not esoteric entities. They are “living spaces” thriving with emotions and personalities. Every person is different. Greater openness and accommodation let employees bring their complete selves to their work. People are more engaged and more productive in their natural settings.

The nature of the workforce is also changing in the current times. With millennials in the workplace, their expectations and work styles are very different. For the skilled workforce, there are more career choices available. Our society is today more diverse than ever before due to increasing movement of people across geographies and renewed confidence of individuals in themselves. The underlying fact is that people think differently. HR needs to recognise this, and policies and practices need to accommodate this diversity to make the most out of people so that they can contribute their best for the organisation.

I will discuss two main areas in this section that may form important considerations for flexible organisation practices—diversity of thought and return on flexibility investment.

2.5.1 *Diversity of Thought*

In 1967, Neisser came up with a complex term called “cognitive psychology” to describe the understanding of something seemingly simple—how people think. He described cognition as that involving “all processes by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used. It is concerned with these processes even when they operate in the absence of relevant stimulation, as in images and hallucinations...” (Neisser 1967, p. 4). Thinking varies from individual to individual, shaped by the way they interact with their worlds through their experiences. This is what produces diversity of thought, which in turn leads to diversity of perspectives, leading to diversity in the ways that issues are understood and addressed.

The value that diversity and inclusion bring to business is well established. There is enough research on how diversity—of gender, race, ethnicity, sexual orientation, religion, geography, education, experience, physical ability and more—can lead to enhanced creativity and organisational performance (Chowdhury 2015a).

Organisations across the spectrum have adopted strategies to make their workforce diverse. However, in the face of daily business challenges, we often get trapped in standard ways of doing things and fall back on established systems and processes to approach issues. While this may deliver enhanced control and predictability in the short term, it leaves us exposed to groupthink—to the propagation of standard thought processes and similar ideas. Such an atmosphere can stifle creativity and hinder new ways of looking at issues. Groupthink may also keep us from recognising and preparing for impending challenges, with catastrophic results.

Sallie Krawcheck, the former president of Bank of America’s Global Wealth Management division, attributed the 2008 financial collapse to groupthink. When professionals with similar backgrounds who are conditioned to think in a certain way were thrown together, they failed to spot or acknowledge all the signs of a banking system on the verge of collapse.

Diversity of thought is essential when we are working in an environment marked by new dynamics, fresh challenges and constant change. Each one of us, by virtue of our background, upbringing and experiences, can bring a unique understanding of a complex situation to the table.

Sometimes, we facilitate diversity of thought without explicitly calling it out. Look at how popular the concept of “crowdsourcing” has become. Today, crowdsourcing is commonly used in inviting citizens’ or experts’ solutions for pressing civic problems, public policy or technological advancements. Many of these platforms are complemented by social collaboration tools to facilitate engagement and interaction.

We have also seen the concept of “design thinking” rising in popularity. Design thinking is about taking a creative, yet solution-oriented approach to problem solving by considering both known and unknown parameters of the problem. This is different from the traditional method of problem-solving, which is more structured, systematic

and process-bound. Design thinking draws its uniqueness from being exploratory and iterative, and being open to even redefining the problem itself.

A study by Deloitte (Diaz-Uda et al. 2013) on the subject talks about hiring, managing and promoting strategies to encourage diversity of thought in the workplace. Hiring for diversity needs to move beyond compliance and visible tick boxes. Organisations have to introduce cognitive assessments to gauge the extent to which divergent thought processes are being used in various business situations. Managing for diversity means going beyond regular consensus-seeking approaches to those that encourage task-focused conflict and help to unleash creativity. Promoting for diversity entails recognising that there are different approaches to problem-solving and instituting team-based performance frameworks that foster a culture of inclusion and collaboration.

To quote from the same Deloitte (Diaz-Uda et al. 2013) study:

Each human being has a unique blend of identities, cultures, and experiences that inform how he or she thinks, interprets, negotiates, and accomplishes a task. Diversity of thought goes beyond the affirmation of equality—simply recognising differences and responding to them. Instead, the focus is on realising the full potential of people, and in turn the organisation, by acknowledging and appreciating the potential promise of each person's unique perspective.

To enable organisations steer through the complexities of the current day environment, recognising and providing for diversity of thought through our human capital is essential. The onus for this clearly lies with our business leaders.

Going back to Neisser, the proposition of cognitive psychology has considerable significance on how we choose to manage our organisations by recognising that every individual is unique in the way they interpret and make sense of the world around them.

What is interesting here is that cognition or information processing exists even in the absence of relevant stimuli. In today's environment where there is a high level of overlap between work and personal lives, it is probable that individuals are constantly interpreting information and forming perspectives consciously or unconsciously, with or without stimuli. Organisations need to find ways to take advantage of the diversity and richness that people can contribute just by virtue of being the individuals they are.

2.5.2 Return on Flexibility Investment

Flexibility has its returns. Organisations that incorporate new ways of working and flexible policies can enable employees have a better work-life balance and contribute more productively in their organisations. A flexible workplace stimulates creativity and enhances innovation. Such an atmosphere has direct business outcomes.

Organisations can see three kinds of major benefits from a flexible working environment.

- **Talent:** Flexible work timings and arrangements help attract a variety of people who may want to work in their own styles and timings. In fact, this recognition of their own preferences itself motivates them to work harder and better. HR teams can look at aspects like workforce planning and their diversity and inclusion agenda in a more effective manner meeting the organisation's talent needs. This may serve as an effective model for staffing special projects and assignments that come to the organisation and for which a permanent workforce does not have to be maintained. Flexibility allows employees to pursue their own interests and personal aspirations during the time they have the security of employment. This can also help in reducing stress levels associated with work.

Co-founder of Sony, Akio Morita, was known to introduce several unusual policies to live the Sony spirit. These included bringing in people with non-traditional skills including artists and singers at senior levels, recognising talent and contribution over tenure and age and innovations on workers' accommodation (Quinn 1985). These were flexible practices for approaching and managing talent marking a complete departure from traditional Japanese management.

Companies have started looking at alternative models to enable better talent outcomes. Deloitte's "lattice" model is an example of a flexible career pathway for an employee that adapts to an employee's changing priorities in relation to pace (accelerated to decelerated), workload (reduced to full), location (restricted to unrestricted), and role (leader to individual contributor) (Benko et al. 2011). Cisco's transformation in the early 2000s is credited to the lattice model of talent structuring as its cornerstone that saw the organisation from an individualistic culture to a collaborative culture. Cross-functional councils and boards were executed that brought speed, responsiveness and decentralised decision making to the forefront for Cisco bringing it out of the recession to emerge as one of the foremost American technology organisations (Benko et al. 2011).

- **Business:** Several studies have shown that flexibility leads to greater productivity of the workforce and positive business impact. There are also logistical and administrative savings accrued from flexibility. Kratz (2016) quotes that organisations such as IBM and Sun Microsystems could save USD 50 Million and USD 68 Million respectively in real estate costs with the full-time teleworking model. According to the Global Workforce Analytics, full-time teleworking saves an average of USD 10,000 per employee per year (Kratz 2016).

Pasmore (1994) equates organisational change and human change and considers them as inextricably interlinked. He talks about how this interlinkage can render competitive advantage to a company as it constantly makes it capable of adaptation to the market environment. He quotes examples of companies such as Merck, 3M and Procter and Gamble as ones where flexibility has directly paid off in making them industry leaders.

Akio Morita, co-founder of Sony, had a similar way of approaching flexibility. Having institutionalised several new HR policies, he looked at its correlation to business impact. Sony engineers became more sensitive to aspects like sales practices, product displays and non-quantifiable customer preferences (Quinn 1985).

- **Community:** Flexibility with the workforce can take forward the organisation's commitment to the community at large. Organisations can bring into their fold employees who are less able or retired, who may prefer to work from home or need more flexibility in the way they work. Flexibility of working from home can lead to environmental benefits as well due to reduced emissions as a result of reduced commute to-and-from the workplace.

2.6 Risks of Flexibility

I have discussed various perspectives on flexibility and how it can create positive impact for talent, businesses and the community. However, it is worthy to note that for managers, flexibility comes along with responsibility. Whilst we live in a VUCA environment and the elements of the system, including people, themselves strive towards greater flexibility, managers need to create a fine balance of control and autonomy. The word “control” is not to be taken in an authoritarian way here. It is rather a framework that offers a reference to the norms of work and resource application that aligns with the shared vision of the organisation. A shared vision can itself be the binding force that brings people together.

If the balance between control and autonomy is not achieved, the organisation may fall into the trap of dissonance. For example, an organisation can foster flexible working practices and employees may opt to work from home on certain days of the week. In such cases, employees need to be responsible not to misuse their time in activities other than work. The authenticity with flexibility may be reflected in the work from home policy, but the responsibility of the employees come in committing themselves to actually work for the number of hours being counted as work. The manager needs to display their responsibility by indicating what is expected from the team member in the role in a specified timeline. If this direction and alignment is not present, employee relations in the firm is likely to be at the risk of disarray.

Take another case—precision manufacturing. This is a field that is extremely intricate, highly sensitive and vulnerable to the tiniest variation. Change and adaptation is made after extensive research, trials and analyses. As much as the team working in the process can be open to ideate and deliberate on new ways of manufacturing, once a process is set, this has to be adhered to. Flexibility here may mean tampering with a process and quality of the output. Here, the balance shifts towards rigidity that caters to the objective of the system's purpose. Flexibility poses a risk in this context. There may be several contexts like this—defence, surgical procedures, pharmaceuticals and handling of hazardous chemicals, to name a few.

In the organisation learning context continuous improvement is an accepted good practice. Change and agility is always encouraged. However, it is also to be asked if the change is actually required or a change has been brought about for the sake of it. Authenticity with flexibility is also displayed here on appreciating if a change is required and if so, to what extent. This is particularly relevant in the organisation design context where firms may have the tendency to revisit their structures too

frequently on matters that may not call for a restructuring. What management may need to consider is if they actually need a “change” or an “improvement”. Too much change can also bring in what some call change fatigue in the organisation.

Bryk et al. (2015) highlight the case of a planned major revamp of the US high school system whereby hundreds of high schools were restructured into smaller schools in the hope of greater learnability through decentralisation and management effectiveness. However, the reform completely failed to deliver on its objectives for a qualitative shift in the education system. What was meant to be a panacea to bring about a pedagogical change turned out not to be the case.

2018 was a tumultuous year for the Indian home brewed coffee chain Cafe Coffee Day (CCD). India is traditionally a disparate market for cafes and tea joints. However, with growing disposable income and exposure to western style cafes, the concept of organised coffee chains received a great fillip. CCD was able to sense an unmet market need. Through its aggressive expansion strategy and customised marketing tactics catered to middle-class Indians, the chain emerged as the top organised coffee retail company in the country. The company was flexible to introduce several sweet and savoury items to accompany its hot and cold beverages and soon also ventured into CCD branded mugs and accessories. However, the management went overboard with flexibility and the rapid introduction of newer products were very different from its core offering of coffee. An investigation carried out by The Ken (Shashidhar 2018), revealed that introduction of items such as burgers, biryani (a type of Indian flavoured rice), wraps and rolls, and milkshakes were too rapid and presented a mismatch with coffee. This was taking away the comfort levels of consumers who were getting used to the concept of organised coffee chains.

CCD introduced diversity even in the storefront with four kinds of retail outlets (Shashidhar 2018). First, Coffee Day Express that serves coffee on the go in the kiosk style. Second, Cafe Coffee Day which is the original and larger format store averaging around 1000 square-feet. Third, Coffee Day Lounge which caters to customers looking for a relaxed environment; these are larger averaging around 1250 square-feet. Fourth, Coffee Day Square, which is at the upper end of the value proposition that imitates a fine dining experience and can be around 3500 square-feet.

With a diverse value proposition and offerings, ambitious sales targets were set for store managers that appeared impossible to achieve. Pressures were high and store executive resorted to unethical practices to meet financial targets like fudging bills, overbilling customers and advance billings without actual revenue accrual.

The Ken (Shashidhar 2018) reported a pathological climate within CCD eventually leading to business and employee morale being hit dangerously. CCD’s aggressive approach to the market was still seen with the opening of 135 new stores in 2018, but the less reported fact of the 95 old stores being shut down. Employee engagement was at an all-time low with even a case of an employee suicide who blamed intimidating sales targets set by CCD management.

Flexibility is not free of danger, unless it is managed with informed choices, decision making with foresight and balanced control. What may be often required are minor shifts or improvements under controlled conditions rather than making complete transformations with complete flexibility and/or autonomy in mind.

The danger for the manager may be to get pulled into the two extreme ends of flexibility and rigidity. That is where authenticity in managerial decision making can come to resolve the tension.

Sushil (2017) talks of “focused flexibility” that “necessitates a valuation of flexibility initiatives from a risk management perspective”. He calls for thorough understanding of trade-offs and risk-and-benefits analyses for the introduction of flexible practices in the enterprise. He says that if flexibility is well managed and focused, it can mitigate risks; but if it becomes uncontrolled and defocused, it will only lead to enhancing risks. What is needed is therefore a “healthy mix” of flexibility and stability that is able to align the enterprise to its purposeful goal along with mitigating risks.

2.7 Conclusion

In this chapter, I introduced the concept of flexibility and explored it from a business and management perspective. I set the tone early on that flexibility theory draws heavily from systems thinking and both have a consummate relationship. I drew inspiration from a wide range of subjects and application areas, and offered a generic definition of flexibility as the ability to stay nimble and adaptive at the wake of changing situations or being able to reinvest oneself in thought and action within the same situation. I drew inspiration from thermodynamics to establish the importance of flexibility, openness and adaptiveness for managers. Flexibility initially emerged as a concept in manufacturing but its application spread far and wide. Several examples were highlighted to explain the benefits of flexible thinking in management and the dangers of a rigid mindset. Organisation design plays an important part in enabling flexibility in a firm. To bring focus to this aspect, I dived deeper into how leadership, people management and HR can further the same. Most importantly, I talked about authenticity to bring home the fact that flexibility should not be “pushed” just for the sake of it. Change is inevitable in the VUCA environment we live in. But all decisions, including decisions related to how much flexibility, need to be based on information and sound judgement. Flexibility comes with its own risks. Hence, a balanced approach with integrity, trust and empowerment needs to be adopted.

Having introduced systems thinking and flexibility, I will delve deeper into discussing the methodological intersection of the two in the next chapter.

References

- Bahrami H, Evans S (2011) Super-flexibility for real-time adaptation: perspectives from Silicon Valley. *Calif Manage Rev* 53(3):21–39
- Benko, C, Anderson, M, Vickberg, S (2011) The Corporate Lattice. Deloitte Insights. <https://www2.deloitte.com/insights/us/en/deloitte-review/issue-8/the-corporate-lattice-rethinking-careers-in-the-changing-world-of-work.html>. Accessed: 13-July, 2018.
- Brooks DR, Wiley EO (1986) Evolution as entropy: towards a unified theory of biology. University of Chicago Press, Chicago and London
- Browne J, Dubois D, Rathmill K, Sethi SP, Stecke KE (1984) Classification of flexible manufacturing systems. *FMS Mag* 2(2):114–117
- Bryk AS, Gomez LM, Grunow A, LeMahieu PG (2015) Learning to improve: how America's schools can get better at getting better. Harvard Education Press, Cambridge, MA
- Caglar D, Kesteloo M, Kleiner A (2012) How Ikea reassembled its growth strategy. In: Strategy + Business. <https://www.strategy-business.com/article/00111>. Accessed 13 Aug 2016
- Callahan J (2014) Interview: the decline and fall of Nokia, David Cord tells us more about the Finnish company. Neowin. <https://www.neowin.net/news/interview-the-decline-and-fall-of-nokia-david-cord-tells-us-more-about-the-finnish-company>. Accessed 12 June 2018
- Capra F (1976) Tao of physics: an exploration of the parallels between modern physics and eastern mysticism. Fontana Books, London
- Capra F (1996) The web of life: a new scientific understanding of living systems. Anchor Books, New York
- Chang A (2017) 5 reasons why Nokia lost its handset sales lead and got down-graded to 'Junk'. <https://www.wired.com/2012/04/5-reasons-why-nokia-lost-its-handset-sales-lead-and-got-downgraded-to-junk/>. Accessed 18 May 2018
- Chowdhury R (2015a) Making the most of diversity. The PRACTICE Viewpoint No. 15. <http://the-viewpoint.net/2015/07/05/issue-no-12-making-diversity-count/>. Visited 23 June 2018
- Cord DJ (2014) The decline and fall of Nokia. Schildts & Söderströms, Helsinki
- Dave M, Walsh MW (2013) Billions in debt, Detroit tumbles into insolvency. The New York Times. https://www.nytimes.com/2013/07/19/us/detroit-files-for-bankruptcy.html?pagewanted=all&_r=0. Accessed 19 July 2013
- Diaz-Uda A et al (2013) Diversity's new frontier diversity of thought and the future of the workforce. Deloitte University Press
- Dove R (2001) Response ability: the language, structure, and culture of the agile enterprise. Wiley, Hoboken
- Forsythe G, Kuhla K, Rice D (2018) Understanding the challenges of a VUCA environment. Chief Exec. <https://chiefexecutive.net/understanding-vuca-environment>. Accessed 16 May 2018
- Gorod A, Gandhi SJ, Sauser B, Boardman J (2008) Flexibility of system of systems. *Glob J Flex Syst Manage* 9(4):21–31
- Gupta A (2018) Is India ready for Ikea? Fortune India. <https://www.fortuneindia.com/ideas/is-india-ready-for-ikea-100216>. Accessed 16 Jan 2018
- Gupta RK, Nagpal S (2015) Nest-generation business excellence model: integrating flexibility dimension. In: Sushil, Chroust G (eds) Systemic flexibility and business agility, pp 257–270. Springer, Singapore
- Kratz G (2016) The business case: how work flexibility can help companies save money. <https://www.workflexibility.org/business-case-work-flexibility-can-help-companies-save-money/>. Accessed 15 Aug 2018
- Le J (2018) 15 systems thinking guidelines to live in a world of uncertainty. <https://medium.com/constraint-drives-creativity/15-systems-thinking-guidelines-to-live-in-a-world-of-uncertainty-b07d5a478e6>. Accessed 25 Nov 2018
- Lee D (2013) Nokia: the rise and fall of a mobile giant. BBC News. <http://www.bbc.com/news/technology-23947212>. Accessed 30 May 2018
- Neisser U (1967) Cognitive psychology. Appleton-Century-Crofts, New York

- Nilchiani R, Hastings DE (2007) Measuring the value of flexibility in space systems: a six-element framework. *Syst Eng* 10(1):26–44
- Pasmore WA (1994) *Creating strategic change: designing the flexible high-performing organisation*. Wiley, New York
- Quinn JB (1985) Managing innovation: controlled chaos. *Harv Bus Rev*. <https://hbr.org/1985/05/managing-innovation-controlled-chaos>. Accessed 23 Feb 2017
- Richman A, Johnson A, Noble K (2011) Business impacts of flexibility: an imperative for expansion. *Corporate Voices for Working Families*. https://www.wfd.com/PDFS/BusinessImpactsofFlexibility_March2011.pdf. Accessed 23 July 2018
- Shashidhar KJ (2018) Strange Brew: at cafe coffee day, a brewing problem. *The Ken*. https://the-ken.com/story/cafe-coffee-day-retail-sales/?utm_source=daily_newsletter&utm_medium=email&utm_campaign=daily_story&utm_campaign=The%20Ken&utm_source=Email&utm_medium=Newsletter. Accessed 26 May 2018
- Soo-hyang C (2017) IKEA Korea to launch second store near Seoul in October. *Yonhap News Agency*
- Srivastava A, Sushil (2015) Flexible strategy game-card framework for effective strategy execution. In: Sushil, Chroust G (eds) *Systemic flexibility and business agility*. Springer, Singapore, pp 97–111
- Stewart TA, O’Connell P (2018) The legacy of IKEA founder Ingvar Kamprad. *Strategy+Business*. https://www.strategy-business.com/blog/The-Legacy-of-IKEA-Founder-Ingvar-Kamprad?gko=aca41&utm_source=itw&utm_medium=20180213&utm_campaign=resp. Accessed 21 Dec 2018
- Surowiecki J (2012) Where Nokia went wrong. *New Yorker*. <https://www.newyorker.com/business/currency/where-nokia-went-wrong>. Accessed 13 May 2018
- Sushil (1994) Flexible systems methodology. *Syst Pract*. 7(6):633–652
- Sushil (1997) Flexible systems management: an evolving paradigm. *Syst Res Behav Sci* 14(4):259–275
- Sushil (2015a) Creating flexibility through technological and attitudinal change. *Glob J Flex Syst Manage* 16:309. <https://doi.org/10.1007/s40171-015-0112-2>
- Sushil (2015b) Diverse shades of flexibility and agility in business. In: Sushil, Chroust G (eds) *Systemic flexibility and business agility*. Springer, Singapore, pp 1–19
- Sushil (2017) Does flexibility mitigate or enhance risk? *Glob J Flex Syst Manage* 18:169. <https://doi.org/10.1007/s40171-017-0156-6>
- Toni AD, Tonchia S (1998) Manufacturing flexibility: a literature review. *Int J Prod Res* 36(6):1587–1617
- Wicken JS (1979) The generation of complexity in evolution: a thermodynamic and information-theoretical discussion. *J Theoret Biol* 77:349–365
- Wiley EO, Brooks DR (1988) Victims of history—a non-equilibrium approach to evolution. *Syst Zool* 31(1):1–24

Chapter 3

Intersection of Systems Thinking and Flexibility: A Methodological Perspective



3.1 Introduction

The first two chapters of this book discussed systems thinking and flexibility, and their complementary nature. Managers and consultants who practice systems thinking need to display flexibility in their thinking, approach and resource mobilisation to bring about real impact in application. Systems thinking offers a holistic lens and leverages flexibility in understanding systemic boundaries. On the other hand, flexibility in thought and action needs a systemic approach, particularly in the consultancy business.

This chapter discusses about this intersection between systems thinking and flexibility from a methodological perspective, and understands how this intersection can serve as a valuable reference in management research and application. I will use the term systemic and holistic interchangeably.

I will anchor this discussion on traditions of management science research that have influenced several approaches and methodologies for management and community interventions. I will deliberate on select frameworks that bring the intersection between systems and flexibility to life by providing the desired approach that is required to deal with real-life complexity. This understanding will set the tone for the rest of this book.

3.2 Paradigms in Management Science Research

Kuhn (1970) used the term “paradigm” to describe a well-defined “scientific community” working under a shared understanding of consensus and uncontested agreement during the operation of “normal science”—a paradigm which is closely bound by its strong beliefs and propositions. A particular paradigm renders a particular set of “philosophical assumptions that define the nature of possible research and intervention” (Mingers and Brocklesby 1997).

The work of Burrell and Morgan (1979) has been very influential in the context of social science paradigms. They discuss about four paradigms in approaching the social world. I will touch upon this categorisation in the discussion below.

- **Functionalist paradigm:** This paradigm advocates that all social systems are organised with identifiable parts that fulfil their individual functions, which contribute to the functioning of the whole system. Functionalism lends the understanding that society can be studied and evaluated from an external perspective by a social scientist, just as a bacterium can be externally studied by a biologist. Quantitative understanding and statistical methods are widely used in a typical functionalist research project. This paradigm has dominated social research for a long time in history with tremendous influence (Hanson 1958). It may influence an approach where organisations are pre-designed with fixed purposes, and to where human beings are placed as cogs in the wheel—an approach that supports and perpetuates the existing status-quo (Clarke 2001). The functionalist paradigm influenced systems methodologies that consider problem situations as “out there” and “objective”. Such methodologies assume that the reality is independent of the observer and that different observers using the same methodologies will arrive at the same conclusions. These methodologies are normally deductive and mathematical based, with no room for interpretation. This scheme of systems approaches and methodologies are referred to as hard systems thinking.
- **Interpretive paradigm:** In this paradigm, “soft” issues are understood regarding how the involved human beings interpret the system around them and what meaning they render to it. Drawing heavily from hermeneutics, the interpretive paradigm lends the perspective that human society can only be understood when the researcher can place themselves in the shoes of the people who form the “subject” of social research. However, this knowledge may be used to further regulate existing structures by bringing about consensus through this understanding (Hanson 1958). Hence, research in the interpretive paradigm may be utilised to perpetuate functionalist strategies. The interpretive paradigm influenced a specific strand of systems approaches that encourage subjectivity and dependency on the observer. They allow for bringing together different worldviews to make better sense of the problem situation. This strand of systems thinking is also referred to as soft systems thinking.
- **Radical Structuralist paradigm:** According to this paradigm, human beings can only build models to understand reality as systems of reality have an existence extrinsic to us. This paradigm is driven by the perspective that it is not important to understand human intention to understand the system, but models of human behaviour may be built to understand “causal regularities governing their behaviour” (Jackson 2000; p. 24). This enables understanding of systemic conflicts, which may further enable emancipation (Clarke 2001). This approach may lead to the creation of discrete models that claim to represent systemic behaviour. But these models are merely conceptual understanding and do not represent human behaviour in its actuality and in its inherent dynamism. The Radical Structuralist paradigm influenced the development of systems approaches that encourage

subjectivity and takes this forward by considering value judgements of the participants and multiple variables in the problem situation. This strand of systems thinking is also referred to as emancipatory systems approach.

- **Radical Humanist paradigm:** This paradigm brings human beings to the centre-stage as the creator and interpreter of structural systems of the world. To understand the system, we need to understand the intentions of the people who have created them (Clarke 2001). In order to understand a system, the observer has to immerse themselves into it and have a first-hand experience of the social arrangements, constraints, challenges and enablers within the system. According to Jackson (2000), “this facilitates the emancipation of people from presently existing social structures”. In management science, this paradigm drives the analysis of how organisational structures and network flows may act as limiting mechanisms for people to work, although the organisational members may themselves be responsible for establishing those systems. The Radical Humanist paradigm introduces the continual critique and questioning mode into systems approaches and methodologies. These approaches seek to question established systems where there is a high degree of complexity and coercion present. The methodology can itself be fluid and unpredictable. This strand of systems thinking can also be referred to as postmodern systems thinking.

Classically, the four paradigms are founded on four different ontological bases, with supposedly impermeable walls between them. Thought and perspective from these paradigms have inspired different methodologies and techniques in social science in general, and systems science in particular. These paradigms have the potential to approach the same situation in radically different manners, which brought about a paradigmatic isolationism. In this context, Kuhn (1970) referred to an “intellectual deafness”, where researchers working under one paradigm remain largely and intentionally oblivious to arguments from other paradigms. It is what White and Taket (1994) would compare to how humans construct constellations: a process of demarcation of particular stars and ignoring others, to make some sense. According to them, researchers embark on the same misadventure in their approaches by drawing boundaries around thought processes. A lot of this understanding also stems from the preferences people have for particular ways of working which become “cultural artefacts that are intricately bound up with individuals’ competencies and their self-identities” (Mingers and Brocklesby 1997; p. 498). Hence, the researcher’s beliefs and worldviews get ingrained in their competencies and preferences to conducting research. This gets manifested in the methodologies researchers use and the way they choose to interpret findings. Hence preference and inclination to particular paradigms may define the very *modus operandi* of conducting research, due to which, moving between paradigms may have resonances of “political overtones” (Mingers and Brocklesby 1997).

Conventional paradigms can take the shape of virtual blocks of strictly bounded thought schemas constantly under politico-intellectual surveillance. I am calling this paradigmatic arrest.

3.3 Paradigmatic Accommodation for a Complex World

Social systems research is an inherently complex agenda, and approaching social reality from singular esoteric paradigms is likely to offer an incomplete and partial understanding of any situation. This has led scholars to favour a “dialectic stance”, who advocate that “all paradigms are valuable, but only partial, worldviews” (Teddlie and Tashakkori 2003; p. 18). Every paradigm has the potential to add value to research and understanding. Worldviews from different paradigms need to be appreciated in order to overcome incomplete and partial understanding. Tensions that arise with the application of differing paradigms need to be taken as constructive and contributory for a richer understanding of social systems. Mingers and Brocklesby (1997) note that “to think dialectically means to examine the tensions that emerge from the juxtaposition of these multiple diverse perspectives” (p. 498).

Research into the complexity of human society can only be grasped if there is appropriate recognition of human situation at the levels of objectivity, subjectivity and intersubjectivity. Habermas (1984) talks of three co-existing “worlds”: “The material world” that “we observe”, “My personal world” that “we experience”, and “Our social world” that “we participate in”. The material world is the objective world which is moulded by human agents, yet which controls the agents themselves. This is realised by the actions of the agents. The agent’s personal world is the expression of their subjective world, which appreciates the agent’s personal cognitive processes. This is realised by the emotions of the agents. Finally, there is the social world, in which agents participate intersubjectively. Agents reproduce the social world over time, and it enables and constrains the agents. This world is realised by the common communicative bond of language.

Habermas’ framework offers a useful approach to understand the complexity of systems design and management. This understanding can be at the following three levels:

- What the organisation as a whole designs and implementations (or plans to)—the objective dimension.
- What the organisation’s members perceive, at an entirely personal level about such decisions, in terms of its opportunities and challenges—the subjective dimension.
- How the members relate to the organisation and to one another, operate and shape it, within the constraints that exist in the situation—the intersubjective dimension.

For Habermas, the dialogue is at the core of genuine appreciation between people and institutions. The language itself is a contested domain. Whereas, at one level, it is the common thread that establishes connections and is mutually agreed upon, at another level, every individual also gives their unique subjective interpretation to what they want to communicate. It is this tension that Habermas discusses in his Theory of Communicative Action, and explores for participants how to arrive at a greater mutual understanding with “speech act”. Genuine communication sheds ego and self-benefit, otherwise such “speech” will remain distorted and irrational (Brookfield 2005). For Habermas (1984), the rightness and sincerity or the genuineness in speech

is based on the “validity claims” that an agent makes. Validity claims are the pillars of language, and therefore of truth, as all interactions are essentially the raising and responding of such validity claims. It is a collection of such validity claims that gives meaning to social interaction that shape culture, relationships, organisations and all social systems.

Coming to organisation studies, Habermas provides a holistic lens for managers and planners for creating accommodating and engaging organisations. The organisation cannot be solely understood in terms of its structure and documented processes, but equally in terms of how employees and the wider stakeholders relate to it. Understanding employee-perspective better will enable a better understanding of the effectivity of organisations. In an *objective* view, organisations may be seen to have an independent existence by itself, beyond its members; but they also have a *subjective* element, in terms of how the members experience the organisation (and so do other stakeholders); finally, it also has an *intersubjective* character in terms of how the stakeholders interact within it and how the wider system evolves as a result of this interaction.

Further, this also has implications for the “language” used in organisations. Language that is oriented to solely communication and control remains normative in nature that has the basic characteristic of common understanding. This is what Habermas calls “instrumental action”. The next progression is what Habermas calls “communicative action” where individual ego is shredded and the idea is to reach an understanding through an interpersonal relationship. This is the consensus-seeking language that can have two types of exchange relationships: Economic and Social (Blau 1964). Whereas the former is contractual in nature, the latter is based on a common purpose. Finally, Habermas (1984) talks of “social action”, which is the overarching consolidation of communicative actions that is consensus-oriented. “Language” plays the role of this overarching consensus of meanings in the system of human society and culture.

I used the term language in quotation marks in the above paragraph to reserve the thought that when it comes to organisations, language is not just speech acts, but touches significant aspects like shared vision, organisation design, strategy formulation and corporate governance—the corporate language—let alone employee communication. Habermas argues for the rules of this discourse to be the basis of the democratic practice where “(a) all relevant voices are heard, (b) the best of all available arguments, given the present state of our knowledge are accepted, and (c) only the non-coercive coercion of the better argument determines the affirmations and negations of the participants” (Habermas 1992; p. 260).

Habermas’ theory transcended the paradigm debate in social science and organisation studies. His theories paved the way for greater accommodation, flexibility and empowerment. Authenticity was at the core of his theory of communicative rationality. Flexibility and multimethodology in management systems research have been significantly touched by Habermas’ writings and contributions.

3.3.1 *Flexibility and Multimethodology in Management Systems Research*

Considering the complexity in social systems and organisational settings, the necessity of using a set of different methodologies and approaches in combination cannot be overlooked. Flexibility in applying different approaches in real-life management problems and multimethodology research have grown through the progression of organisation studies. Significant developments during the period of 1970–1990s greatly inspired the realisation of the strength that may be obtained from mixing methods (Mingers and Brocklesby 1997). Some of these events include (Mingers and Brocklesby 1997):

- The rising popularity of qualitative methods and constructivism.
- Paradigm wars were launched based largely on the incompatibility thesis.
- Introduction of mixed methods studies in conjunction with writings on triangulation.
- Appearance of important mixed methods studies and syntheses.

Researchers and practitioners began to recognise the potent perspective that may emerge by synthesising paradigms and methodologies in a complementary fashion, rather than waging unproductive paradigm wars. The wave came to be more in favour of synthesis, flexibility, holism and pluralism.

Mingers (1997) talks about three fundamental criteria why pluralism and working across paradigms are important. First, the messy and multidimensional context of real-life problems can only be partially understood if approached from one paradigm. Second, interventions are not singular and discrete events, but are processed bearing various phases which pose different issues and dilemmas for the participants; these tensions may only be understood with a pluralistic approach—as plural as the tensions themselves. Third, people were already combining different paradigms and methodologies to approach world problems; they may be just not aware of this. Awareness of the exercise of combining methods is likely to result in more effectiveness and professionalism of this practice.

Better understanding of any context will require approaches and perspectives from a multimethodological standpoint, where “multimethodology’s anti-foundationalist antipathy towards orthodoxy is evidenced by its predilection to combine methods from supposedly incommensurable paradigms” (Kuhn 1970; p. 495). The power of anti-foundationalism lends the perspective of understanding situations not in isolation, but in interconnection and with multiple variations.

Having understood the necessity and desirability of multimethodology and flexibility, let us now turn to the debate of its feasibility in the application. Mingers and Brocklesby (1997) talk of the feasibility of multimethodology at three levels. These are discussed below:

- **Philosophical feasibility:** Paradigms are always permeable in their so-called transition zones (Gioia and Pitre 1990). There is always communication and permeability of knowledge between walls of paradigms that may be classically perceived

as rigid and impermeable. Similarly, according to Giddens' (1984) structuration theory, humans define their viewpoints by selectively bracketing the alternate viewpoint and not by completely ignoring it. This carries the message that if a researcher claims to favour working under one specific paradigm, it does not mean that they are oblivious of the perspective from another paradigm.

- **Cultural feasibility:** There is always a process of conscious selection of knowledge that the agent engages in. If certain methods and techniques have been developed under specific paradigms, it is not necessary that they will be used under those respective paradigms. Methodologies developed under one paradigm can be used within another paradigm if the researcher or consultant is open and is influenced by another paradigm. According to Mingers and Brocklesby (1997), the challenge of working across paradigms is more political than operational.
- **Cognitive feasibility:** Human cognition is formed by constant movement in space and time, and a move from one paradigm to another requires assimilation of new propositional knowledge, and learning how to operate effectively in a new paradigm. Hence, the mixing of management science methodologies can only be facilitated by an effective and professional framework.

3.3.2 *Flexibility in Use of Systems Methodology*

Sushil talks about a middle approach to problem-solving that lies between extremes and between paradigmatic extremes (Sushil 1994). He says that there can be multiple ways of reaching a common objective and that the same can also be achieved by a combination of a number of approaches. An optimal combination will depend on the “nature and attributes” of the problem situation. He calls this Flexible Systems Methodology (FSM) which is an integration of “all systems approaches and techniques into a family in which everyone either individually or collectively contributes meaningfully” (Sushil 1994; p. 639). Sushil builds FSM on a “spectral and integrative” paradigm that lies in the continuum between opposing ends of perspectives and paradigms. FSM negates the notion of paradigm incommensurability stating that there are always overlaps and common points between paradigms.

Sushil (1994) challenges the commonly seen tendency of systems methodologies that are normally clustered at the two ends—hard systems that are based on optimisation and soft systems that are based on learning. However, problem situations in real life are not clustered at such well-defined ends, but are rather fuzzy and undefined. The real life lies at the continuum between defined extremes and are unstructured and evolving. Hence, the application of systems methodologies that lie at extreme ends are unsuitable to approach real-life situations. This need can only be met by a pragmatic approach of bringing together the right kinds of methodologies in an optimal mix that are suited for a particular context at a particular point of time. As Sushil (1994) says:

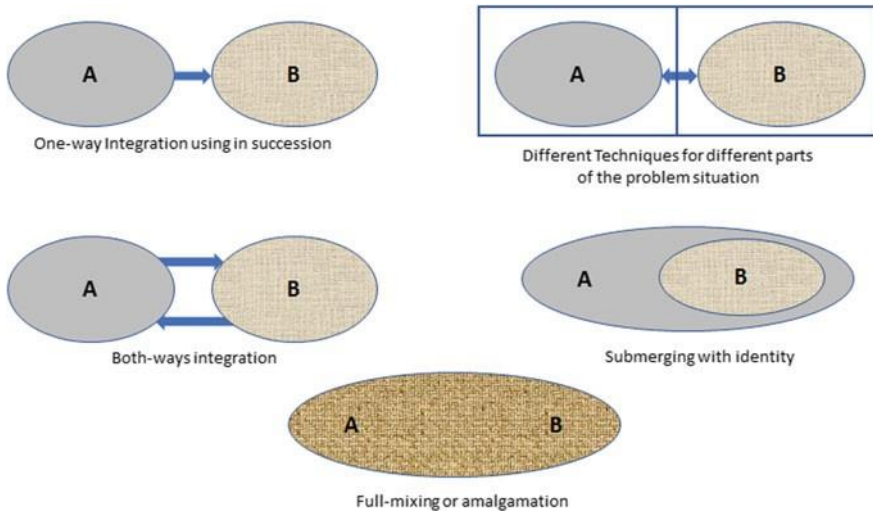


Fig. 3.1 Possible schemes of integration of techniques (cited from Sushil 1994; p. 641)

The hard approaches are to be made comparatively softer by interfacing with softer approaches, and softer approaches are to be made harder by interfacing with harder approaches to make them effectively handle comparatively harder problem situations. This will make a movement from the ends toward the middle and the gap will be filled by suitable integration. However, ample care should be taken when integrating two or more systems-based techniques that the integration should not be superficial; it should be done by matching the philosophical and theoretical foundations of the techniques to be integrated so that deep linkages can be established (p. 641).

There are five different ways by which this integration can be achieved. First, using different methodologies in sequence for the same problem situation. In such a case, the individual identities of the methodologies can be retained. Second, using different techniques for different parts of the problem situation. Here the problem situation can itself be broken down into parts depending on its complexity and scale, and an appropriate methodology can be used for each part. Third, both-ways integration where identities of the methodologies used influence with one another through parts of the problem situation or on the problem situation as a whole. Fourth, when one methodology is completely used within the paradigm of a different methodology and where the former's identity is submerged within the latter's. Finally, where different methodologies are indistinguishable because they are amalgamated completely into one another through the intervention. These five types of integration are represented in Fig. 3.1.

Mixing systems methodologies in a coherent and contextual manner can complement the strength and weaknesses of the techniques (Sushil 1994). A combination of both the qualitative and quantitative techniques can help a more complete picture of the problem situation. This integration can take an interventionist out of the mental models of specific paradigms they may be bound to. It enables flexibility and a

more realistic approach to problem structuring and problem-solving. Mixing methods coherently encourage creativity and innovation in the intervention and encourage learning (Sushil 1994).

3.4 Postmodernism and Its Influence on Management Systems Research

Postmodernism has had an important influence on management systems research. Under postmodernist thinking, methods guided by strict paradigms are seen as grand narratives that are not only restrictive but also with the overt power of suppression and subjugation. Feyerabend (1975) came up with the proposition that “anything goes” when it comes to methods that offered a completely new definition of a method itself. In this section, I will attempt to understand the postmodernist stance in more detail.

3.4.1 *What Is Postmodernism*

Postmodernism is the philosophy of rejecting totalism and methodological monopoly (I borrow the term from Fehr 2004) geared towards finding out rational unchallenged results facilitated by rational unchallenged methodologies that have been the tide of modernism. It is a movement to give voice to the unrecognised and unseen agents in the organisational processes. Postmodernism is a fluid and evolving process which offers the flexibility to change and learn from the actions of the researcher. The postmodern condition allows the move from rigidity to flexibility, from closeness to openness, from linearity to iteration, and from risk-aversion to learning. As Jackson (2003) says: “Postmodernism offers little security. Rather it thrives on instability, disruption, disorder, contingency, paradox and indeterminacy” (p. 256).

Gephart (1996) defines postmodernism in two ways: First, postmodernism as a “cultural form or cultural era that follows modernism” (p. 22). This interpretation conceives postmodernism as a logical consequence of modernism in human history; it is rather like an unavoidable human progression. Second, postmodernism as “an epistemology, a method or style of cultural production” (p. 22) that enables the reconceptualisation and reinterpretation of the worldview that one nurtures. Parker (1992) distinguishes the former from the latter by introducing a hyphen in the term “postmodern”, as opposed to spelling it just “postmodern”, without a hyphen in the latter case. I would like to consider my position as the latter one: postmodernism as a way of thinking that lends flexibility and dynamism to our approach to comprehend the ever-changing and dynamic reality of social life.

Hassard (1996) argues that a postmodern epistemology is always in a state of flux because the realm of postmodernism is the realm of flux. We constantly attempt to understand human discourse with the help of language games, which are different

in every situation, and which give rise to new meanings in distinct situations. The attempt should be in understanding and interpreting the narrative in every distinct situation, but not to create a metanarrative that claims to represent and theorise all language games, because that will be simply impossible. As Jackson (2000) notes:

Postmodernism is also a style of artistic production that reflects this cultural movement, provides an aesthetic reflection on the nature of modernism, and emphasises “an incredulity towards metanarratives”. Postmodernism challenges the very foundations of knowledge, including the teleology of history and the myth that history reflects constant progress (p. 22).

A postmodern mindset represents a break from formalistic, rigid, rule-bound and routine nature of human interpretation to a space where variety is encouraged, dominance is challenged, formalism is eradicated, and there is an attempt to give voice to those subjugated and local meanings that get buried by the dominance and arrogance of established notions and definitions of human prowess. Lyotard and Thébaud (1985) argue that the space of the actor is transformed from that of an *agency* to that of *play* in the postmodern playground. Jameson (1991) describes the postmodern condition as a challenge to the forms of representations and interpretations that the world has itself defined. Representations and interpretations may be further understood in a postmodern sense with the work of Baudrillard (1983) who argues that interpretation is always assumed to be of some reality, but this reality is itself imaginary—a “simulacral entity”. Reality is never a taken-for-granted social fact in the postmodern research, but the reality is itself changing with symbols, artefacts and illusions as forms of representation and interpretation.

3.4.2 *Postmodern Systems Approach*

Postmodernism cast new light in organisation theory enabling us to understand the organisations of the present day that are constantly in a state of flux and transformation. Systems theorists, Taket and White (2000) say that organisational settings are abound with uncertainties due to the changing times we live in. They talk of three main kinds of uncertainties:

- Uncertainties about the working environment (UE)
- Uncertainties about guiding values (UV)
- Uncertainties about related decisions (UR)

Taket and White (2000) say that as a response to deal with UE, more research is required; to deal with UV, clarification needs to be established pertaining to aims of the system/organisation by involving others; and to deal with UR, collaboration with other groups or processes need to be forged.

Taket and White (2000) suggest that in order to deal with the uncertainties of the world, the approach needs to be one that is “cyclical, subjective, embraces uncertainty and works with selectivity” (p. 46). This philosophy inspires a systems interventionist to be open to change, be comfortable with surprises and be flexible with

the approaches they undertake; the process becomes an iterative one. Application of flexible thinking and approaches enriches the appreciation of a system and its intervention. The end product is always more accommodating, representative and liberating if a pluralistic approach is used. In the words of Taket and White (2000), the application of pluralism is “like a spun thread or rope, which gains its strength, not from the continuous strand that runs its entire length, but from the overlapping and entwining of many separate fibres” (p. 70). Taket and White argue that the nature of pluralism they encourage is not the kind where “anything goes”, as suggested by Feyerabend, but “doing what feels good”.

This version of pluralism can be understood in three ways (Taket and White 2000):

- **Pluralism in the nature of the client:** Organisational members are constantly under pressure to perform according to changing priorities in a heterogeneous environment. Employees have to favour organisational policies despite having their own preferences and objectives. This leads to an increasing identity crisis for the members. Two possible situations that can arise out of this are: (a) Everybody favouring their own points of view with their own value and interpretation, where communication may not be possible at all. This is the post-structuralist condition as described by Levi-Strauss. (b) Communication across diverse viewpoints to arrive at an accommodation of interests. Accommodation is favoured rather than consensus. This is because, whereas consensus has the danger of muting the opinions of underdogs, accommodation indicates an inclusion of different interests.

According to Taket and White (2000), while understanding pluralism in the nature of the client, the mnemonic that may be useful is the three Cs: Critical, Consent and Contingent. In a situation of divergent viewpoints, the requirement is to be critical of boundaries that are socio-linguistically constituted. Consent is often not possible; therefore, the strive ought to be towards accommodation of viewpoints. Finally, the agreement is spatially and temporarily contingent; once a decision is taken, uncertainty arises once again.

- **Pluralism in the use of specific methods/techniques:** To approach the complexity of real life, the interventionist needs to use a range of techniques/methodologies, as one particular methodology/technique is liable to offer only a partial picture of the problem situation. Taket and White (2000) argue that most scholars like Mingers and Gill, Jackson, Flood and Room and Flood and Jackson seek to master pluralism by taming it with their grand designs of methodological accommodation. However, what is required is not taming, but encouraging diversity and variety in methodologies/techniques to understand the equally diverse real-world problem situations. They advocate that complex systems methodologies like Critical Systems Heuristics, Soft Systems Methodology and Strategic Assumption Surfacing and Testing may be used in entirety or in part may be used to inform one another, so that the result arrived at is more comprehensive and more representative (I will discuss these methodologies at length later in the book).

According to Taket and White (2000), while understanding pluralism in the use of specific methods/techniques, the mnemonic that can be useful is the 4Ms: Mix, Modify, Multiply and Match. Parts of different methods can be mixed and matched

in the course of engagement. Further, they can be modified to suit a particular context and multiplied to use different methodologies for the same task.

- **Pluralism in the modes of representation employed:** Language and symbols we use for the description of the problem situation are merely representations or copies. As Baudrillard (1990) notes, these can even be a simulacrum, or a copy of a copy. The implication this has for theory building is that any theory that is developed can only be a representation of the real life and cannot be the real life itself. Further, they are of the opinion that representation is dependent on the method that has been used in representing as well; and the moment we use methods to represent reality, we also change the reality itself. Taket and White (2000) borrow the ideas of Hacking (1983), who says that “theories try to say how the world is. Methods change the world” (p. 77). However, Taket and White (2000) are of the opinion that with changing representations, problem owners get an opportunity to learn with the model that is made available with an intervention. The role of the facilitator is to present the expertise to help the problem owners structure their problems and understand them in the form of a model or theory. They borrow a cognitive psychology understanding from Johnson-Laird (1991), who says that there is a link between modelling and learning as people learn from mental models, which in turn shapes the models they harbour. According to Taket and White (2000), whilst understanding pluralism in the modes of representation, the mnemonic that can be useful is the 3Vs: Verbal, Visual and Vital. Representation of the situation in focus can be in the verbal form with words and conceptual statements, or it can be in the form of pictures and maps, in which case it is visual. Vital modes of representation may be in the form of real-life work or observation in participative environment, when representation is real time.
- **Pluralism in the role of the facilitator:** The facilitator plays a significant role in their approach to the problem situation. The dynamism and complexity of the problem situation can be appreciated by the facilitator only if they adopt a role that is capable of appreciating the same; in other words, the facilitator as a catalyst. They borrow from Foucault (1972) to say that the facilitator (or consultant) does not need to play the role of expert or advisor; they simply need to provide the instrument of analysis to the problem owners. This role is to encourage the facilitator to adopt different roles and guises in the process of intervention, and to encourage creative tension. The facilitator needs to mix and match different roles in the intervention process. They borrow from Gregory (1999), the characteristics of an effective facilitator include respect for participants, critical awareness, self-disclosure, self-confidence, a questioning spirit, being observant, being direct and to be confronting rather than confrontational. Depending on the nature of the situation, the facilitator can play an active or a directive role. However, it is important the facilitator is able to be pluralistic in these roles according to the environment. Taket and White (2000) are of the opinion that, “the adoption of different roles can be necessary to maximise participation in the work, as well as to challenge explicitly particular points of views, perhaps most especially when the views of the most powerful groups in the situation seem to be dominating other perspectives” (p. 165).

According to Taket and White (2000), while understanding pluralism in the role of the facilitator, the mnemonic that can be useful is the 4Fs: Flexibility, Forthrightness, Focus and Fairness. The facilitator needs to be flexible and adaptive to feedback and feelings along with keeping their focus to the objective that they want to achieve. They should handle this situation with forthrightness and determination maintaining fairness in the whole process with a critical attitude to the situation.

Taket and White (2000) developed a framework that can enable the systems consultant to apply their thinking on the ground. They called this Participatory Appraisal of Needs and the Development of Action (PANDA). PANDA is guided by three iterative stages: Deliberation, Debate and Decision, leading to Deliberation again. Taket and White (2000) say that these stages may be followed by a second stage of deliberation (Deliberation II), which is concerned with monitoring or evaluating the effects of the actions taken. Specific attention should be paid to how and with what assumptions the evaluation is conducted so that due consideration is given to continued support to the actions adopted. Learning from this stage may inform actions taken and enable the betterment of the system that had been put in place.

The “formalisation” of postmodernism in management systems by Taket and White led the systems interventionist to be comfortable with uncertainty and flexibility, without losing sight of the shared vision. They offered a “framework” for the interventionist to work towards alignment of teams to the core objective with respect for the individual’s worldviews. Each stage of PANDA informs its following one, which in turn, feeds back information to its previous stage. This introduces the learning angle into the framework, which is contingent on uncertainties of the environment, values and related decisions. Their framework is guided with the understanding that there is no certainty in problem situations and results of intervention may be quite different from what had been intended or planned. PANDA evidently was an approach inspired by systems thinking but with flexibility at its methodological core.

Having discussed specific scholarly developments in systems and flexibility research, I will draw the attention of the reader to a specific strand of systems literature that is called Critical Systems Thinking (CST). CST may enable an interventionist to leverage the consummate relationship between systems and flexibility with a fertile framework for ideation, experimentation and application. Much of my education at and association with the Centre for Systems Studies at the University of Hull has been spent in understanding and exploring CST, and its relevance in management science. The same essence is also reflected in my works that I narrate in part-II of this book.

3.5 Critical Systems Thinking (CST)

The roots of Critical Systems Thinking (CST) can be traced to the works of Jackson (1985), Midgley (2000), Mingers (1984) and Ulrich (1983). These scholars recognised the strengths and weaknesses of different schools of thought and understood the

importance of an integrative approach. More importantly, they kept the environment in the context of their work and the models they built. They recognised that not all situations are the same and that there can be a challenge of both scale and complexity when intervening in a problem situation. CST is not only about being critical to the methodologies used, but also being holistic about problem structuring. In the context of social systems, every social setting is an open system and they always exist in the context of their environments.

CST can be understood in terms of three commitments that are discussed below.

- **Critical Awareness:** The first and the most basic commitment is that of questioning oneself by being critically aware. This commitment requires a great degree of openness and humility to admit that mental models that drive our own thinking are limiting, loyalties are restrictive and affiliations can be isolationist. Challenging oneself and asking why we are thinking or doing the way we are is at the foundation of this commitment. At the heart of critical awareness is the concept of “boundary critique”, a term first used by Ulrich (1996) that literally means to question our own boundaries. Boundaries themselves are multivariate—they can be about the ways we want to think about or formulate a problem situation (defined by cognitive boundaries), the ways we want to approach a problem situation (defined by methodological boundaries), or the ways we want to think about the outcome of an intervention (defined by ethical boundaries). Ability to draw boundaries for a systems intervention is a crucial aspect as we define systems by the boundaries we choose to draw around them.

Boundaries are in turn defined by values and hence boundary judgements and value judgements are inherently linked (Midgley 2000). Our values guide us on how we perceive a system, who/what we want to include and who/what we want to exclude. This is also true for the approaches we may choose for an intervention and how we may want to apply any specific methodology. Hence, the ethical practice would entail the pushing out of our own boundaries as far and wide as possible (Midgley 2000) or as Churchman (1968) puts it, “sweeping in” of variables.

Midgley has been particularly interested to explore the tension when two or more groups define their own respective boundaries guided by their own values leading to a situation of conflict. This leads to “marginalisation” of some segments/groups. When the marginalisation is carried forward repeatedly, it gets imposed with near permanency and eventually gets institutionalised.

I borrow from Midgley (2000), and Midgley and Pinzón (2011) to explain some key concepts in this aspect through Fig. 3.2. If there can be one group that makes a narrow boundary judgement (primary boundary) and a second group that makes a wider boundary judgement (secondary boundary), there can be a marginal area between the two boundaries. Both boundaries have their own ethics associated with them. Conflict arises due to the exclusion of people or issues from the primary boundary and their inclusion within the secondary boundary. There is no right or wrong here, as both the boundaries are guided by value systems that are distinct to the agents who are creating these boundaries.

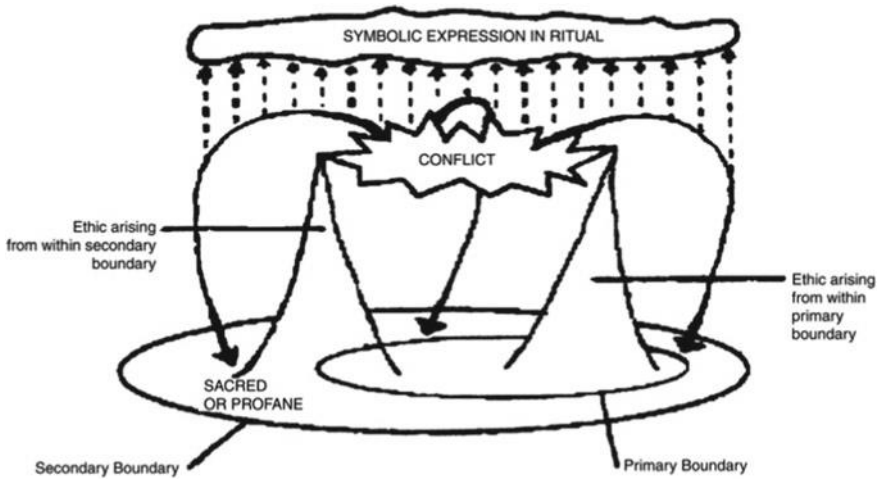


Fig. 3.2 Boundary judgements (cited from Midgley and Pinzón 2011)

Midgley introduces the terms “sacred” and “profane” to identify the marginalised people or issues. These terms are not to be used in the religious sense, but to indicate the valued or devalued status of the marginalised. Midgley says that the sacred or profane status is a neutral language “to reflect the strength of feeling that accompanies the derogation or exaltation of other people on the basis of their status, roles, interests, identities or beliefs” (Midgley 2016; p. 6). When conflict arises, it is unlikely that there will be consensus on the status of the sacred or profane, but social rituals come into play to stabilise the situation with one value system emerging as the more dominant one over the other, which gets institutionalised. In a situation where the profane status is institutionalised for the people or issues, then primary boundary is upheld. And if the sacred status is institutionalised for the people or issues, then the secondary boundary is upheld.

This is significant to understand the concept of critical awareness. We often tend to see conflict and differences between people, groups and larger social systems. At a superficial level, these are seen as difference of opinions—sometimes minor and sometimes major, sometimes academic and sometimes practical, sometimes peaceful and sometimes violent. But what we need to recognise is that such conflicts are inherent because as individuals and social entities, we carry different values and have different ethical considerations. The concept of marginalisation helps us understand the key aspects of inclusions and exclusions, and our mental models that define the way we perceive, intervene and act.

- **Pluralism:** Pluralism is the ability to embrace a variety of ideas and methodologies to approach a problem situation. It can also be referred to as complementarianism. Carrying from the previous section, the fundamental understanding of boundary critique can answer the question of why we may have conflict but the question is if it is really possible to always accord a sacred status to all people or issues, and

Table 3.1 Stages of multimethodology (cited from Mingers and Brocklesby 1997; p. 501)

	Appreciation of	Analysis of	Assessment of	Action to
Social	Social practices, power relations	Distortions, conflicts, interests	Ways of altering existing structures	Generate empowerment and enlightenment
Personal	Individual beliefs, meanings, emotions	Differing perceptions and personal rationality	Alternative conceptualisations and constructions	Generate accommodation and consensus
Material	Physical circumstances	Underlying causal structure	Alternative physical and structural arrangements	Select and implement best alternatives

therefore to what extent the boundary can extend to. Pluralism or complementarism can be a sound concept but it also has the constraints of time, resources and bandwidth. Ulrich says that, therefore, the approach should involve a rational process. Pushing out of the boundary endlessly is not the possible way out; what is, therefore, necessary is a dialogic intervention involving rational arguments enabled through the power of language. The dialogue needs to bring into the fold both the involved and affected parties. This understanding can play an important role in our choice of methods and problem structuring methodologies.

Midgley (2016) talks about two kinds of methodological pluralism. First, is in terms of the autonomy of drawing from different methodologies to build one's own methodology for an intervention. He talks of a dynamic process of methodological evolution on an ongoing basis depending on the context and capability of the interventionist. Second, in terms of mixing methods towards accommodating greater flexibility and responsiveness in the approach.

There can be various frameworks that guide mixing methods. I will talk about Mingers and Brocklesby's (1997) "Multimethodology" as an example of mixing methods. Multimethodology lays out a four-step process for mixing methods as a way of pluralism in systemic approach. There are four iterative phases of appreciation, analysis, assessment and action that require a combination of methodologies as each stage has its own distinct objective. I borrow from Mingers and Brocklesby (1997) to articulate the same in Table 3.1.

Table 3.1 encompasses social, personal and material elements of human activity, which relate to the intersubjective, subjective and objective dimensions of human life, respectively. A holistic understanding of human activity systems can only be enabled when different methodologies are used in a complementary manner to understand these realities. This can further lead the interventionist to engage with the problem situation in a more meaningful manner. My endeavour to bring in Multimethodology within TSI can itself be argued as a case to demonstrate "submerging with identity", and therefore, methodological flexibility!

- **Improvement:** The commitment that an intervention will lead to the overall improvement in the situation, empower participants and enable the realisation of the full potential of individuals and groups, and not serve as instruments of domination and subjugation. This commitment lets the systems practitioner ask themselves the question of why an intervention/project is undertaken, critically examine their own mental models and display openness in their thinking and behaviour so that accommodation, and not compromise, is achieved. At a much grand scale, improvement can also be looked upon as emancipation; Schechter (1991) talks of emancipation as “a commitment to human beings and their potential for full development via free and equal participation in community with others. It is also a commitment to recognising the barriers to human emancipation—unequal power relations and the conceptual traps, which perpetuate them—and incorporating this understanding into systems thinking” (p. 212). In a way, this third commitment embraces the first and the second commitments. In *Systemic Intervention*, Midgley (2016) calls this “added value”.

Critical Systems Thinking (CST) with its first commitment of critical awareness spikes the fundamental question for systems thinkers—what is the boundary? The tension of drawing a boundary itself manifested through Midgley’s work is the tension of defining a system. The definition of an open system which is constantly in exchange of matter and energy with its environment gets manifested in the attempts to include or exclude people, issues and factors within the boundary. Agents in the system will work towards a stability with a rational process of accommodation but that accommodation is itself driven by ethical considerations. The process, however, should take the whole systems approach so that this accommodation is rational for the context it is achieved for. There is a high degree of ethical maturity required at the hands of a systems practitioner to draw such a boundary that can itself be evolving and fluid, as human activity systems are always evolving and fluid. The flexibility of thought enables understanding of the mental models that drive the interventionist to approach boundaries.

Pluralism is all about flexibility. I talked about Midgley’s two strands of methodological pluralism and Mingers and Brocklesby’s multimethodology. These frameworks thrive on Sushil’s idea of mixing of systems methodologies—one-way integration using in succession, different techniques for different parts of the problem situation, both-ways integration, submerging with identity and full-mixing or amalgamation—that we discussed earlier in this chapter. Flexibility is a prerequisite in achieving complementarity in approach.

In Chap. 2, I also talked about flexibility and authenticity. The argument holds good even for CST because if a systems practitioner is not authentic about their application of CST, it is unlikely that they will be able to create any added value for the system. Midgley (2016) says that if boundary critique is practised in isolation, it will certainly offer some great sociological insights and critical reflections, but it will not lead to any change in the problem situation if there is no action-orientation of this knowledge. Similarly, if we want to apply pluralism, we need to start with critical awareness, as otherwise our application will remain superficial. Given that

that boundaries need to be arrived at with a rational process considering constraints, it is only imperative that a systems thinker displays the value of flexibility with authenticity that can lead to improvement.

CST embraces holism and flexibility at a higher cognitive order. It can lead us to approach a situation with a genuine submission to the three commitments. These commitments are especially important in a world plagued by value clashes, protectionist policies, exploitative regimes, pathological opinion shapers and unsustainable practices. CST can help re-evaluate our own perspective of the world and encourage a world order of value accommodation, openness, empowerment, authenticity and sustainable approaches.

Finally, I will spend some time to talk about Total Systems Intervention (TSI), a meta-methodology to bring CST to life. This is particularly important for systems consultants as it offers the framework and guideline for experimentation and flexible application of systems thinking, without which the intervention may face the danger of running into disarray. TSI is a fine example of CST in practice.

3.6 Total Systems Intervention (TSI)

Jackson (2000) calls TSI the “final element in the maturation of critical systems thinking” (p. 368). TSI is a meta-methodology that was the fruition of an intellectual partnership between Flood and Jackson (1991). TSI offers a new approach to problem structuring, strategic planning, design and evaluation by bringing together a range of systems metaphors and approaches in a coherent manner that enables creative problem-solving.

In the words of Jackson (2000), there are seven principles embedded in TSI. These are as following:

- Organisations are too complex to understand using one management model, and their problems are too complex to tackle with quick fixes.
- Organisations, their concerns, issues and problems should be investigated using a range of systems metaphors.
- Organisational issues and problems highlighted by the metaphors can be linked to appropriate systems methodologies to guide intervention.
- Different systems metaphors and methodologies can be used in a complementary way to highlight and address different aspects of organisations and their problems.
- It is possible to appreciate the strengths and weaknesses of different systems methodologies and to relate each to appropriate organisational concerns and problems.
- TSI sets out a systemic cycle with interaction back and forth between the three phases.
- Facilitators and clients are both engaged at all stages of the TSI phase (pp. 366–367).

TSI leverages the three commitments of Critical Systems Thinking (discussed in the previous section) and presents a framework using which practitioners can exercise creativity by thinking and doing in a pluralistic manner. The framework allows for an open mind to ideate between metaphors for problem structuring, the flexibility to choose or mix methods between paradigms, and act with a commitment to bring added value through the intervention. TSI for the first time opened up the space of complementarianism with coherence that was capable of encompassing complexity at the levels of thought, action and impact that is well qualified by Hames' (1994) words that TSI "allows for the examination of every dimension of strategy, the surfacing of all significant issues and the design of appropriate interventions".

TSI has three phases—Creativity, Choice and Implementation—that are discussed below.

- **Creativity:** This is the first phase where the interventionist is encouraged to think of their enterprise in terms of a metaphor and its alternatives. The concept of a metaphor is borrowed from Morgan (1968). Metaphors are implicit images that help us see the enterprise with a creative analogy by means of its understanding and imagination due to certain characteristics they display. Morgan (1968) talks about eight classical organisation metaphors and their characteristics:

(1) *Machines:* efficiency, waste, maintenance, order, clockwork, cogs in a wheel, programmes, inputs and outputs, standardisation, production, measurement and control, design. (2) *Organisms:* living systems, environmental conditions, adaptation, life cycles, recycling, needs, homeostasis, evolution, survival of the fittest, health, illness. (3) *Brains:* learning, parallel information processing, distributed control, mindsets, intelligence, feedback, requisite variety, knowledge, networks. (4) *Cultures:* society, values, beliefs, laws, ideology, rituals, diversity, traditions, history, service, shared vision and mission, understanding, qualities, families. (5) *Political Systems:* interests and rights, power, hidden agendas and backroom deals, authority, alliances, party-line, censorship, gatekeepers, leaders, conflict management. (6) *Psychic Prisons:* conscious and unconscious processes, repression and regression, ego, denial, projection, coping and defence mechanisms, pain and pleasure principle, dysfunction, workaholic. (7) *Flux and Transformation:* constant change, dynamic equilibrium, flow, self-organisation, systemic wisdom, attractors, chaos, complexity, butterfly effect, emergent properties, dialectics, paradox. (8) *Instruments of Domination:* alienation, repression, imposing values, compliance, charisma, maintenance of power, force, exploitation, divide and rule, discrimination, corporate interest.

An enterprise is likely to demonstrate dominant characteristics of any one kind of metaphor. This presents to us the likely issues and concerns that may be associated with that particular metaphor, and in turn leads us to think about the crucial issues and problems for the enterprise. This stage lets imagination take over as a problem structuring method. Various analyses can be applied to understand why the organisation demonstrates the behaviours the way it does and what could be the possible implications of such behaviours.

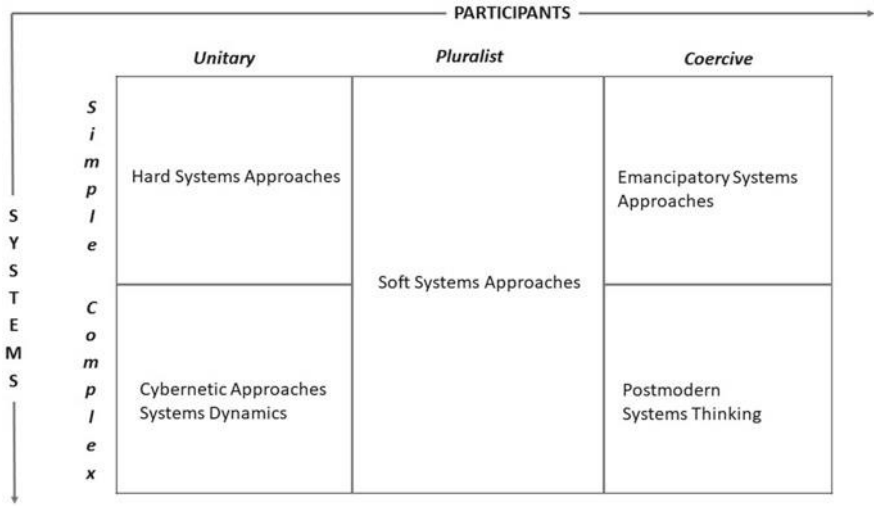


Fig. 3.3 System of systems methodologies (cited from Jackson and Keys 1984)

The Creativity phase sets the prelude to the following two phases of TSI.

- **Choice:** The second phase is to choose a systems methodology or a set of methodologies for a problem situation, depending on the characteristics that the system demonstrates in the first phase. There can be a dominant methodology and a set of secondary methodologies.

A significant intellectual framework referred to here is the System of Systems Methodologies (SOSM) as put forward by Jackson and Keys (1984). SOSM is a matrix that consists of two dimensions—one relating to the nature of the participants and the dynamics within them, and the other relating to the elements of the system or the situation itself, represented in Fig. 3.3.

If the people in the context have shared values and understanding, they can be said to be in a unitary relationship. If they have differences to the extent that they are still able to stand in unison for the system to function as a cohesive entity, they can be considered to be in a pluralist relationship. If participants display divergence that are irreconcilable and power dynamics lead to subjugation and domination of one group at the expense of another, they can be said to be in a coercive relationship. Coming to the systems dimension, if the parts of the system are limited, easily identifiable and has predictable interactions, this can be viewed as a simple system. In case the elements increase multifold and give rise to complex interactions and unpredictable consequences, this can be viewed as a complex system.

Given that different paradigms have influenced different systems methodologies and there was a sense of paradigmatic incommensurability, Flood and Jackson (1991) recommended a menu of systems approaches and methodologies that are appropriate for a specific context depending on where they fall in the SOSM matrix.

- **Implementation:** This final stage is the actual intervention on the ground with a range of systems methodologies identified in the previous stage. Metaphors are to be used creatively as well. If one metaphor has been helpful to identify the organisation, another metaphor can be used for the intervention. Jackson (2000) cites the hypothetical example of explaining an organisational collapse that could be highlighted using the organism or brain metaphor, at the same time, the cultural metaphor can also appear illuminating. The vice versa can also be true. This stage should aim to bring about a coordinated change considering efficient, effective and ethical considerations (Jackson 2000).

The coordinated change outcome can only be possible with a coordinated efforts process where all teams or departments in the organisation work collaboratively within their shared values and objectives in mind. Continual feedback and monitoring can play an important role in identifying gaps and feed learning back to the change process.

TSI was a breakthrough as it was able to bring in systemicity to systems thinking itself. It is a meta-methodology that was able to transcend paradigmatic wars and bring to its fold systemicity in thinking, methodology and application, pinned on the fundamentals of holism. Flexibility is inherent in the framework at a fundamental level. The starting point of using metaphors to instigate thinking is a great example of challenging mental boundaries of formal thinking at the hands of management and opening it up to creativity. Creativity enables the manager to think without limits and imagine with a break from assumptions. Flood (1994) refers to TSI as “an approach to problem-solving in any organisation that stands firm with the original holistic intent of systems thinking”.

The Choice stage guided by the SOSM matrix offers a range of systems methodologies for the practitioner to choose from. A practitioner has the freedom to use different metaphors for different stages of the problem structuring and intervention leaving enough room for them to explore a plethora of systems tools. Sushil (1993) talks of the critical managerial issues in the borderless world: (i) Free flow of Information, (ii) Cybernetic Society, (iii) Globalisation, (iv) Cross-Cultural Management, (v) International transactions, (vi) International Market, (vii) Technological Change, (viii) Organisational Change and (ix) Environmental Conflict. An organisation operating in the borderless world may face a mix of such issues and different metaphors could be handy to understand different aspects of the organisation in its respective context. For example, they can be an organisation that is diversifying into new services and entering a new geography for which its own structure and approach to innovation management may be changing. To understand this, the “organism” metaphor can be leveraged. The same organisation may be consciously looking at a more inclusive approach to diversity and changing its own policies to engage with people from more diverse backgrounds. To understand this, the “culture” metaphor can be leveraged. The choice is about flexibility to bring in the most effective mix of systems methodologies to intervene whilst we find ourselves in the context of these two different metaphors in the same organisation.

Implementation, of course, brings the team back to shared values and a common vision that is at the crux of purposeful systems. Shared values need to be reinforced from time to time to act as the glue to hold the entity together so that change and corrective shifts does not lead the system into disarray.

Jackson (2000) talks about a “recasting” of TSI that incorporates greater flexibility in this landmark systems framework. He talks about being open to other creativity enhancing devices other than metaphors. He talks of letting participants create their own metaphors paying attention to the “ergonomics of reflection”. Jackson (2000) introduces further flexibility by asking the question is SOSM should even remain the primary matrix for the choice of systems methodologies. He goes on to argue that SOSM should provide just the means to arrive at “critical awareness” and that organisations need to be looked at in terms of four key dimensions—process, design, culture and politics. In the words of Jackson (2000), “The freedom to use the variety of methods, models and techniques in a responsive fashion should, in my view, make critical systems practice (or TSI) more attractive to practitioners” (p. 389). The “recast” of TSI automatically brought in greater fluidity of mixing methods. Jackson’s approach to TSI was much influenced by CST that brought in greater accommodation and flexibility to his framework.

TSI does not need to be taken as a framework in itself, but as a way of thinking and approaching everyday managerial situations. This can be referred to as Mode-2 TSI. The power of TSI lies in its transcending characteristic to be able to overcome paradigmatic boundaries in an accommodating and coherent manner. In the context of the increasingly borderless world (introduced above) we live in, enterprises need a prudent perspective mix in systemicity and flexibility that TSI offers.

3.7 Conclusion

This chapter explored the methodological intersection of systems thinking and flexibility through various existing frameworks in management systems. I started with a discussion on paradigms, paradigm incommensurability and overcoming the same to set the tone for flexibility in systems approaches. Habermas’ work was extensively referred to as an understanding for the accommodation of different worldviews that have their own legitimate existence in our world. Developments in management research was highlighted with reference to literature on flexibility, multimethodology and flexible systems management. I talked about emergence of postmodernist thinking that introduced a radical way of problem structuring and change intervention. Postmodernist thought brought about a departure from structure and rules in systems application. The undercurrent of the intersection of holistic thinking and flexibility ran through the entire discussion. Having set this background, I talked about Critical Systems Thinking (CST) and its inspiration towards the development of Total Systems Intervention (TSI) as a fine example of CST. TSI offers a sound framework for systems practitioners to bring together holism and flexibility to address problem situations.

Having set the theoretical base in the first part of this book, the next part will highlight some real-life projects that I have undertaken with systems approaches. Every chapter picks up one unique case; the cases are a mix of on-ground application of systems approaches, retrospective appreciation of past projects, and conceptual frameworks developed.

References

- Baudrillard J (1983) *Simulations*. Semiotexte(e) Inc, New York
- Baudrillard J (1990) *Fatal strategies*. Pluto, London
- Blau, PM, (1964). *Exchange and Power in Social Life*. Wiley, New York
- Brookfield S (2005) *The power of critical theory: liberating adult learning and teaching*. The Jossey-Bass higher and adult education series. Jossey-Bass, San Francisco
- Burrell G, Morgan G (1979) *Sociological paradigms and organisational analysis*. Heinemann, London
- Churchman CW (1968) *The systems approach*. Delacorte, New York
- Clarke S (2001) *Information systems, strategic management: an integrated approach*. Routledge, London
- Fehr C (2004) *Feminism and science: mechanism without reductionism*. *NWSA J* 16(1):136–156
- Feyerabend P (1975) *Against method: outline of an anarchist theory of knowledge*. New Left Books, London
- Flood RL (1994) I keep six honest serving men: they taught me all I knew. *Syst Dyn Rev* 10(2–3):231–243
- Flood RL, Jackson M (1991) *Creative problem solving: total systems intervention*. Wiley, Chichester
- Foucault M (1972) In: Gordon C (ed) *Power/knowledge: selected interviews and other writings 1972–1977*. Pantheon Books, New York
- Gephart RP (1996) *Management, social issues, and the postmodern era*. In: Boje DM, Gephart RP Jr, Thatchenkery TJ (eds) *Postmodern management and organisation theory*. Sage Publications, California
- Giddens A (1984) *The constitution of society*. Polity Press, Cambridge
- Gioia D, Pitre E (1990) *Multiparadigm perspectives on theory building*. *Acad Manag Rev* 15(4):584–602
- Gregory W (1999) *OR practitioners and facilitators—a health case study*. Paper delivered at the AGM of the Operational Research Society Health and Social Services Study Group
- Habermas J (1984) *The theory of communicative action: the reason and the rationalisation of knowledge* (trans: McCarthy T). Heinemann, London
- Habermas J (1992) *Autonomy and solidarity: interviews with Jurgen Habermas*. Verso, London
- Hacking I (1983) *Representing and intervening: introductory topics in the philosophy of natural science*. Cambridge University Press, Massachusetts
- Hanson NR (1958) *Patterns of discovery: an inquiry into the conceptual foundations of science*. Cambridge University Press, Cambridge
- Hames RD (1994) *The management myth*. Professional & Business Publishing, Sydney
- Hassard J (1996) *Exploring the terrain of modernism and postmodernism in organisation theory*. In: Boje DM, Gephart RP Jr, Thatchenkery TJ (eds) *Postmodern management and organisation theory*. Sage Publications, California
- Jackson MC, Keys P (1984) *Towards a system of systems methodologies*. *J Oper Res Soc* 35:473
- Jackson MC (1985) *Social systems theory and practice: the need for a critical approach*. *Int J Gen Syst* 10:135–151
- Jackson MC (2000) *Systems approaches to management*. Wiley, Chichester
- Jackson MC (2003) *Systems thinking: creative holism for managers*. Wiley, Chichester

- Jameson F (1991) *Postmodernism or the cultural logic of late capitalism*. Duke University Press, Durham, NC
- Johnson-Laird PN (with Byrne RMJ) (1991) *Deduction*. Psychology Press, London
- Kuhn TS (1970) *The structure of scientific revolutions*. University of Chicago Press, Chicago
- Lyotard JF, Thébaud JL (1985) *Just gaming*. Manchester University Press, Manchester
- Midgley G (2000) *Systemic intervention: philosophy, methodology and practice*. Kluwer Academic/Plenum, New York
- Midgley G, Pinzón L (2011) The implications of boundary critique for conflict prevention. *J Oper Res Soc* 62:1543–1554
- Midgley G (2016) *Systemic intervention*. Research Memorandum 95, Centre for Systems Studies, Hull University Business School
- Mingers J (1984) Subjectivism and soft systems methodology: a critique. *J Appl Syst Anal* 11:85–113
- Mingers J (1997) Towards critical pluralism. In: Mingers J, Gill A (eds) *Multimethodology: the theory and practice of combining management science methodologies*. Wiley, Chichester
- Mingers J, Brocklesby J (1997) *Multimethodology: towards a framework of mixing methodologies*. *Omega Int J Manag Sci* 25(5):489–509
- Morgan G (1968) *Images of organisation*. Sage, Beverly Hills, CA
- Parker M (1992) Post-modern organisations or postmodern organisation theory? *Organ Stud* 13(1):1–17
- Schechter D (1991) Critical systems thinking in the 1980s: a connective summary. In: Flood RL, Jackson MC (eds) *Critical systems thinking: directed readings*. Wiley, Chichester, pp 213–226
- Sushil (1993) *Flexible systems approach to management in a borderless world*. Indian Institute of Delhi Department of Management Studies, New Delhi. <http://eprint.iitd.ac.in/bitstream/2074/1794/1/sushilfe1993.pdf>. Accessed 30 June 2018
- Sushil (1994) *Flexible systems methodology*. *Syst Pract* 7(6):633–652
- Taket AR, White LA (2000) *Partnership and participation: decision-making in the multiagency setting*. Wiley, Chichester
- Teddle C, Tashakkori A (2003) Major issues and controversies in the use of mixed methods in the social and behavioural sciences. In: Teddle C, Tashakkori A (eds) *Handbook of mixed methods in social and behavioural research*. Sage Publications, California
- Ulrich W (1983) *Critical heuristics of social planning: a new approach to practical philosophy*. Haupt, Berne
- Ulrich W (1996) *Critical systems thinking for citizens: a research proposal*. Centre for Systems Studies Research Memorandum #10. Centre for Systems Studies, Hull
- White LA, Taket AR (1994) The death of the expert. *J Oper Res* 45(7):733–748

Part II

Case Narratives

A wide range of case narratives are discussed drawing on the author's own experience of applying systems thinking. These cases are based on private industry, public health, professional services and the charitable sector. The discussions feature the author's journey, as a consultant, of problem-structuring or problem-solving for his client. Aspects of holistic thinking and flexibility are surfaced, interpreted and critiqued. The cases are about project successes, limitations and conceptual model building. Being a practitioner-centred book, the ten case studies form the hallmark of this book.

Essence of Part II

Systems consulting is not about the use of systems-branded methodologies; it is rather the systemic state of mind that is able to approach problem situations holistically, and remain flexible and adaptive through the journey.

Chapter 4

Healthcare Knowledge Management and Problem Structuring



4.1 Introduction

Technology can be of tremendous aid in the capture, recording and retrieval of information. This can lead to direct benefits for improvement in the quality of care, clinical audit, performance management and above all, knowledge management. This chapter shares my experience of application of systems thinking in a mega knowledge management project in the National Health Service (NHS) in the UK. This experience was spread through a period of three years and I applied various problem structuring methods during this tenure. The context was the sensitisation and implementation of a knowledge management strategy in the NHS within the ambit of a large healthcare Information Technology (IT) programme. Out of a range of problem structuring methods used in several instances, I will talk about the application of Viable Systems Model (VSM) for an organisational intervention I was part of. My approach to VSM was influenced by critical thinking that drove me to use several qualitative tools to aid in my understanding of the problem situation. The arguments presented here showcase the importance of bringing together the human and the technical aspects as interrelated within the larger system, and not to be regarded as two disparate dimensions.

4.2 Healthcare Knowledge Management (HKM)

Knowledge management is the process of capturing, organising and leveraging both tacit and explicit knowledge for various purposes. It can also be used for problem solving in business cases, intellectual challenges or for the stimulation of innovative

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R. Chowdhury, *Systems Thinking for Management Consultants*,
Flexible Systems Management, https://doi.org/10.1007/978-981-13-8530-8_4

thought. By the very nature of the discipline, knowledge management is an interdisciplinary subject that encompasses IT management, philosophy, cognitive science, and organisation studies (El Morr and Subercaze 2010).

Liebowitz (2004, 2006) suggests that organisations are usually observed to undertake knowledge management initiatives for the following broad reasons of enhancing adaptability, furthering creativity, establishing institutionalising knowledge, building internal competency and enhancing external competency.

Healthcare Knowledge Management (HKM), as the name suggests, is knowledge management in the healthcare setting.

Frize et al. (2007) identify the following four steps in HKM:

- **Access to clinical data:** This is the first step where patient information needs to be identified, captured and stored in a retrievable manner. Patient consent and security of personal information need to be kept in mind whilst capturing personal data. It is important to note that consent also does not mean a blanket consent. A consent for recording data does not necessarily imply a consent for sharing data. Also, if there is consent for sharing, we need to understand sharing with who. Security of the information systems is of equal importance to ensure that only authorised personnel are able to access the same. Further, it is often observed that patient data is stored in multiple locations and multiple systems depending on where the patient is accessing healthcare service. Data is best leveraged if it is centrally stored in interoperable systems so that patients can avail of effective medical services irrespective of where they are at any point of time, without having to carry their records physically. Regular audits of clinical data ensure data integrity and authenticity. Audits should also include levels of data access and data security.
- **Knowledge discovery:** This is where we move beyond data and apply intelligence to understand trends and patterns. Software and Artificial Intelligence (AI) tools can be used for complex data crunching and for predictive analysis of how the data behaves in the context of the socio-economic environment. This stage is a qualitative move from “recording” to “discovery”.
- **Knowledge translation:** This is the translation of outputs from knowledge discovery tools to information that clinicians can use. For example, Graphical User Interfaces can be used to make outputs intuitive, comparative and user friendly. With the use of Clinical Decision Support tools, knowledge translation can help clinicians pre-empt situations and take predictive action.
- **Knowledge integration and sharing:** Information from knowledge translation can be stored and used in an integrated manner by clinicians and caregivers for holistic and complete care of the patient. This can be shared with the right agents and institutions so that there is consistent knowledge about the patient and they receive the best possible care at all points of time. Technology can enable the recording, sharing and access of such knowledge.

The argument for technology enablement for knowledge management, in general, and HKM, in particular, has dominated management discourse over the last decade-and-half given the multitude of complex information clinical records hold and the need for its availability beyond geographical constraints. This chapter discusses my

personal experience in problem structuring in such an environment. In the following section, I would like to present the case for systems thinking in HKM.

4.2.1 HKM and Systems Thinking

Healthcare management at the present time is a complex interplay of medical, social, political, organisational and ethical issues, and HKM exists within this context. HKM cannot be thought of in isolation from healthcare itself. Technology plays an important role in capturing disparate information, analysing complex data points and bringing in coherence in broad situations that may otherwise appear disconnected. These aspects are critical contributing factors to knowledge management in the healthcare setting where interpretation requires intelligent analysis, accuracy is non-negotiable and errors are unfathomable.

However, in the healthcare context, there are a host of complex factors that interact with one another in this situation that touch all the realms of objectivity, subjectivity and intersubjectivity. As discussed by Meyer and Collins (1976), healthcare services exist at a complex intersection of a plethora of dimensions in the realm of both objective and subjectivity assessments, and both self and external influences. The assessments cover beliefs, stigmas, fears, perceptions and feelings. Influences cover experiences and biases. Discrete and isolative thinking for HKM design and implementation is ineffective and inefficient. What is required is an approach infused with criticality, holism and flexibility.

When there seems to be an emphasis on IT in the context of HKM, a systems perspective can help understand that providing an efficient IT infrastructure may serve as only one element, albeit important. IT can largely facilitate information management, which is the preceding stage to knowledge management. The ability to capture relevant understanding pertaining to HKM demands transcendence from information management to knowledge management. This is an interplay of both objective and subjective dimensions, which is beyond the provision of just an IT infrastructure. Objective dimensions would include consideration of the hardware and software elements for the recording, storage and retrieval of information; and the subjective dimensions would include stakeholder participation, co-generative learning and the ability to devise a strategy of how healthcare service providers can best make use of available information. Knowledge management is not just about the availability and accessibility of information through IT, but also how to harness the power of creative action that organisational members can engage in as a result of this availability and accessibility, and its interpretation. Holistic approaches, facilitated by systems thinking, help link the human and technical aspects in HKM.

The analysis and understanding of the human element is of utmost importance in considering the successful introduction of new IT/communication systems. Whereas a reductionist approach may consider human and technical aspects in isolation, a systems approach will consider both the human and technical aspects as interconnected dimensions within one larger system. During (and before) the introduction

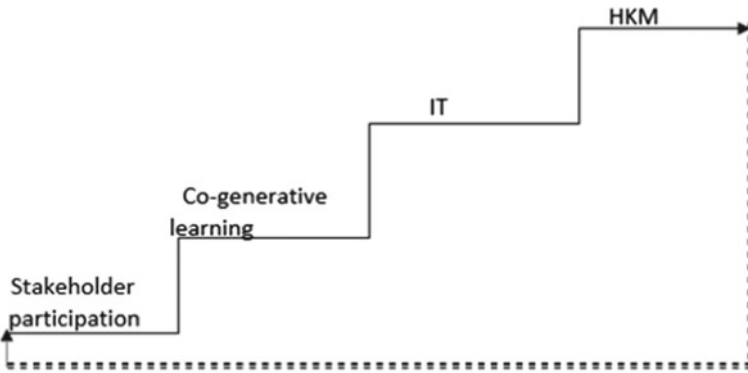


Fig. 4.1 The route for healthcare knowledge management (Chowdhury 2007; p. 45)

of IT to facilitate knowledge management, it has to be recognised that technology is delivered to suit the users, and the users are adept in the usage of the technology. Rather than users exist for technology to work efficiently, technology ought to exist for users to work effectively.

Understanding of the socio-political and cultural dimensions for the design of an information systems project may not be treated as an isolated one-off event, but as an iterative and ongoing process, so that the complexity in this context may be captured. The project may be designed to begin with stakeholder participation, leading on to co-generative learning from experiences. Only after the identification of needs after these, should investments be made to devise IT systems suited to stakeholder needs. Only this may lead to an effective strategy for HKM. However, once this stage is reached, the process should not to come to an end. As Davenport (1996) said, “one reason that Knowledge Management never ends is that the categories of required knowledge are always changing”. Thus, the route towards an effective HKM ought to be an iterative process. This idea has been conceptualised in steps in Fig. 4.1.

I developed the above model during my problem structuring exercise carried out in 2005 (that I will discuss in detail later in this chapter). The idea is not to present the above figure as a recipe for HKM, but rather as a conceptual model which appreciates the iterative criticality of HKM. Systems approaches, in general, and Critical Systems Thinking (CST) in particular, may greatly aid planners and designers to be critical of boundaries, and to be accommodative of stakeholder ideas whilst devising information systems strategy for HKM.

A critical awareness is vital for HKM because, as has been addressed above, KM may be in danger of slipping into mere information management (Chowdhury 2005). Moreover, a boundary critique and re-examination of taken for granted assumptions will facilitate comprehending sub-systems as part of a whole, rather than individual parts in itself. This helps understanding the interlinkages between systems, and how the system evolves as a result of this interaction.

4.2.2 The Situation Under Consideration

During 2003–2006, I had the opportunity to work with the NHS in the UK. The NHS is the health and social care administrative and delivery arm of the Department of Health (DoH) of the British Government. My association with the NHS involved facilitation of change management and evangelising research-based best practices on HKM with the understanding that this will lead to a better adoption of technology with clinicians and administrators. I was responsible for a specific Primary Care Trust (PCT), the Ferens PCT (pseudonym used for the sake of anonymity), based in the city of Ferensway (pseudonym used for the sake of anonymity). PCTs were the health services and social care delivery arms of the NHS that were responsible for specific geographical areas; they played the role of the last-mile delivery agents. Ferensway is a city in Yorkshire, England (UK).

When I started my association with the NHS, I realised that concepts of HKM were not entirely new in the context. Documents produced by the UK DoH such as *The New NHS—Modern, Dependable* (1998), *Our Information Age* (1998), *Information For Health* (1998), *An Organisation with a Memory* (2000), amongst others, specifically strategised the management of knowledge in a learning environment. The NHS also established the NKS, where the ‘K’, stood for Knowledge. Its purpose was to seek to “meet the needs of professionals, patients and the public for up-to-date, cross-referenced, evidence-based information by fully integrating the development of NHS knowledge systems” (Learning from Bristol 2002).

The NHS had sanctioned over GBP 6.2 Billion during the early 2000s to put in place the Connecting for Health (CfH) programme, which was expected to electronically deliver all management services like patient booking, service provider choice, prescription, and information sharing between the primary, secondary and tertiary sectors. The centrally management electronic records were expected to connect around 30,000 healthcare practitioners and over 300 hospitals. CfH was by far the most ambitious project of the NHS in the field of information systems and HKM at that time globally. When I started my project, the CfH was in its implementation stage. The Department of Health (DOH) had given considerable autonomy to local Trusts to adopt and implement the above stages according to their local requirements and needs.

4.3 The Context for Problem Structuring

When I started off with my project, I observed that there were multitude of stakeholders at play at Ferens PCT. Structures and roles were not very straightforward. I sensed symptoms of duplication, repetition and lack of clarity on various fronts. More importantly, I sensed that there were several forces that would resist the smooth implementation of CfH. Various teams and panels were instituted at the behest of the DoH, the regional authorities and the Ferens PCT. Several projects were parallelly

being initiated that did not necessarily talk to each other. In some cases the problem situation was not well defined. There were interpersonal dynamics and difference of opinions resulting in conflict.

The NHS was (and is) a large public sector set-up that was founded on the principle of providing comprehensive, universal and free service at the point of delivery to residents in the UK. With the scale of operations, sensitivity of the healthcare sector and multiple specialist skillsets brought in under one roof to manage scale and quality, the NHS had (and has) all the qualities of a complex system. Change initiatives directed towards greater efficiency, cost reduction and higher quality were common in the NHS. The management attempted to run the organisation like a corporate enterprise to enable predictability and greater effectiveness. Over time, the management attempted to bring in best practices and work processes from private enterprises, sometimes successfully and sometimes unsuccessfully. These included vision and strategy articulation, organisation design and structuring, benchmarks and targets, goal setting and performance measurement, process redesign and technology enablement, and stakeholder management and patient engagement. The NHS employed leading international consultants to design and implement several strategic initiatives alongside employing a large number of managerial and administrative staff members in-house to manage change and ensure smooth functioning of the enterprise.

I found myself in an “interesting” situation at Ferens PCT. My role as a change facilitator was not straightforward as it was scripted to be. The first few weeks made me realise how remote and esoteric my job-description was. I had to take the plunge and question several of the Key Result Areas (KRAs) defined in my project charter. Rather than jumping in and “ticking the boxes” of my deliverables against timelines, my project sponsors at the NHS allowed me to get into a problem structuring exercise to delve into the situation. I had to assume for the first few months that my role was “discovery” that would lead to problem structuring-led intervention process.

As part of my initial days at Ferens PCT, I invested significant time in understanding the on-ground reality and also took the guidance from existing literature in HKM and problem structuring methods. Part of the problem definition was also working with my team to understand difference of opinion between key internal stakeholders and reach an agreement on certain key principles regarding the vision of my project. This was also to eliminate any overlaps with existing roles. This was important because I realised that there was lack of clarity on why I was brought in and how I would support existing initiatives.

I identified an unclear flow of communication and control within Ferens PCT as the main problem (Chowdhury 2006); in other words, lack of clarity in the organisation structure. The size and scale of the NHS under the Department of Health (DoH) meant that it was a complex bureaucratic structure. Roles and responsibilities overlapped, objectives between the departments often clashed and success metrics were not clear. First, I had to be clear about where the Ferens PCT stood in this web and how it was able to accommodate stakeholder participation.

An additional element in the problem structuring that identified was to understand stakeholder engagement in the system. Previous reports and my induction with senior

leaders indicated that not all critical stakeholders were invited to be part of the CfH design and implementation. There were missed opportunities, ego issues and genuine unaddressed concerns. I had to understand this deeper in order to engage further with them.

My approach, in systems parlance, was problem structuring. Rosenhead (1989) used the term Problem Structuring Methods (PSM) to refer to approaches that bring together a range of systems methodologies and tools to understand complex situations that have a variety of intervening elements and intentions—both overt and covert—that demand immersive investigation, flexibility and iteration. PSMs come to serve when the intent of a discovery exercise is not just for understanding but also a change intervention. The problem was not well defined as we saw in my understanding of the different personalities present in the situation.

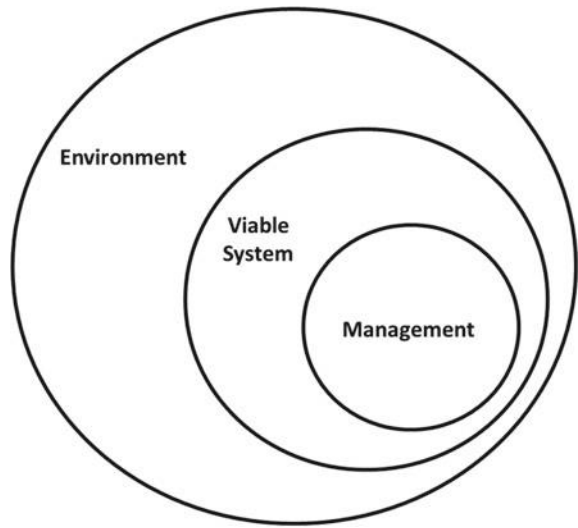
I resorted to systems inspired PSM to take each point above. In the following discussion, I will share my experience of using Viable System Model (VSM) to understand structure of the delivery function for CfH in the Ferens PCT context. VSM is a sound methodology to understand the organisation as-in if the context falls in the simple-unitary section of the System Of Systems Methodology (SOSM) matrix (discussed in Chap. 3). As my intent was to analyse the structure in how it stands in its “true state”, VSM would allow me an X-ray of the reality. I also used several tools and techniques outside a conventional VSM to make the process more comprehensive and so that my initiatives served the purpose I had set out to. Understanding stakeholder participation runs through my entire effort of the PSM exercise as I see this as inherent for the success of any knowledge management project.

4.4 Viable System Model (VSM)

Pioneered by Beer (1972), and inspired by neurocybernetics, VSM is a structural analysis of any organisation in the state of a “known-to-be viable state” to reveal its constituent parts and study how they interact with one another. VSM was designed by Beer as a generic model which can be applied to any organisation across sectors and stages of evolution. This model sets out to explain how systems are capable of independent existence due to the prevalence of fundamental laws of viability. The VSM is a structuralist endeavour to study not the system per se, but the relationship between the constituent systems.

I talked about cybernetics in Chap. 1 as the science of communication and control to define a system. It studies feedback loops within a system in circular patterns of causal loops. Cybernetics helps us fathom with complexity by facing the variety in the system by presenting back requisite variety. The coherent channelling of this variety of the system requires a form that can be offered by an adequate structure that defines the flow of communication and control. The external environment always presents greater complexity and variety than the internal environment of the organisation. The complexity may come in different forms such as product/service changes, financial

Fig. 4.2 A viable system
(adapted from Espejo 2003)



market developments, evolving customer needs, natural disasters and other shocks that threaten the stability of the system. An organisation needs the capacity to respond to such complexities or variety of the environment with the variety it poses back. Applying a cybernetic model for organisation helps enabling preparedness for the organisation to create greater variety through communication and control to counter externalities. The management takes on the role of assessing threats and preparing the system to respond to the environment. Variety is always amplified as one moves from the environment to the viable system to the management as the intensity of interaction decreases. The management therefore needs to put in place systems and processes to attenuate the variety and control the same to create a sustainable system. A typical viable system is represented in Fig. 4.2.

A system to be viable requires three kinds of activities—primary, regulatory and policy (Espejo 2003). Primary activities relate to implementation and everyday operations that involve the system carry out functions for which it exists. Regulatory activities are enablers for the primary activities. In a system, there are several subsystems and their functioning require alignment to the overall vision of the organisation. Subsystems operating independently may end up serving their own purpose and not that of the overall system. Hence, there needs to be functions within the organisation that connects the dots, carries out reviews, brings in learning and enforces corrective action; regulatory functions carry out precisely this kind of functions. As enablers, they also keep an eye on internal and external developments so that not only external variety is addressed, internal variety is also taken care of. It is a judicious complementarianism of both primary and regulatory activities that create viable systems. I say “judicious” because an overemphasis on any one kind of activity may lead to undesirable consequences. An overemphasis on primary activities without adequate regulation may end up creating disconnected subsystems focused on implementation

that will eventually lead the overall system to demise. An overemphasis on regulatory functions will interfere with the autonomous functioning and freedom of the subsystems. This may create a “suffocating” situation for the subsystems that hamper creativity and autonomy that will end up creating a sub-optimal system. Policy related activities exist at the highest level that set the tone for the system. Policy defines why the organisation exists at the first place and the meaning it seeks to create. This is the thinking level and all other activities and functions need to align with the policy direction.

Together with this is to be understood the concept of recursivity that is fundamental to VSM. Recursivity simply means the ability of the system to replicate itself into subsystems with similar functionalities, of course with differing levels of complexity. These subsystems are self-regulating and capable of autonomous existence by themselves. Each of these subsystems similarly need to display requisite variety to remain viable. VSM puts in place adequate channels that ensure communication between the systems so that the larger system can work towards the overall objective or the shared vision it exists for at the first place. Primary and regulatory functions are recursive within each subsystem. This ensures subsystem autonomy and freedom. The complexity of activities increases as one moves from the subsystems to the larger systems.

Leonard (1999) talks about two relationships that a VSM seeks address. First is the horizontal relationship that is depicted between the parts of the system or the subsystem and its adjacent environment or area of operation, represented by horizontal connections of information exchange. Second is the vertical relationship that connects the top management with the rest of the organisation, represented by a vertical nature of information exchange and control.

VSM can be a powerful method (rather than a methodology) to dissect an organisation to understand how information and communication flows within the system. As a Problem Structuring Method, VSM offers the flexibility for the interventionist to critique organisation structures in terms of what is meant to be and what is. It is understood that for effective countering of local variety, each sub-system needs to be given relative autonomy as it understands its own context the best and is able to respond to the environment with requisite variety. At the same time, it can inform creation of adequate vertical communication flows to ensure that all efforts contribute towards the strategic intent of the larger system.

4.5 VSM of Ferens PCT

VSM is a method, rather than a methodology, which can be used both in a prescriptive and diagnostic sense. In a prescriptive sense, it can be used in the design of new organisational systems that can be both effective and efficient. In a diagnostic sense, it can be used to analyse an already existing system against a benchmark of effective organisation set out by the VSM itself. I used VSM as a diagnostic sense to “X-ray” the Ferens PCT for its structure and organisational communication patterns.

A VSM exercise follows two distinct, yet inter-linked, phases: System Identification and System Diagnosis. I will discuss these below in context of my PSM intervention with Ferens PCT.

4.5.1 System Identification

System Identification is the primary stage which identifies where the system-in-focus is positioned and how the viable parts of the system are arranged.

I employed both secondary research and primary techniques for the system identification of Ferens PCT. Secondary techniques involved study of the organisation structure documents and Ferens PCT management charter that I obtained from the Trust. Primary techniques involved a series of focus group discussions (FGDs) with various teams of the Trust. By virtue of being employed by the organisation and having the opportunity of being able to experience the system from within, I leveraged my day-to-day interactions, management reviews and analyses work to inform the PSM as a participant observer.

The focus was to identify the system-in-focus, Ferens PCT in this case, and work out three levels of recursion of VSM (three levels of recursion is recommended). Following a conventional style of recursion analysis, I located Ferens PCT in recursion level-1. Recursion level-0 is the wider context of the NHS, which consisted of the regional structure in this case. Recursion level-2 is the detailed stage of the exercise in which the system-in-focus in recursion level-1 is understood in terms of its purpose, its wider environment and subsystems. Refer to Fig. 4.3.

Recursion level-0 was at the level of Strategic Health Authority (SHA). The SHAs were instituted by the NHS to serve as a bridge between the DoH and the local service delivery level agencies like the PCTs and other Trusts. They were responsible for regional level planning, resource allocation, capacity building, and supervision and performance monitoring. I started at the level of the respective SHA, under which Ferens PCT was geographically located. Recursion level-2 consisted of the primary activities that were performed within Ferens PCT.

4.5.2 System Diagnosis

System Diagnosis is the second stage where an elaborate exercise is carried out to understand the system-in-focus in great depth alongside its adjacent environment, operations and localised management of the viable parts. In this stage, cooperation and conflict patterns within the subsystems are comprehensively analysed. It lists all activities of the subsystems and seeks to understand the purpose that the system is seeking to achieve. This is built towards a higher level of understanding of what the organisation as a whole wants to achieve out of its very existence and its ethos.

VSM studies organisations in terms of five subsystems:

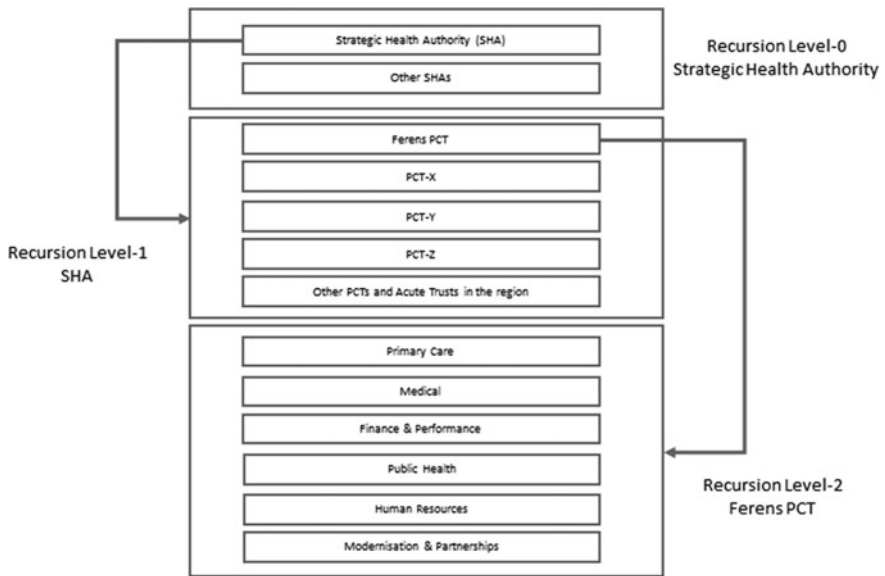


Fig. 4.3 Recursion analysis of Ferens PCT

- **System-1** is the *implementation* system where the actual operation of the organisation takes place. Therefore, there may be several systems-1. Each system-1 has its own localised management and deals with its own local environment or the area of responsibility. Its tenets are around execution excellence, processes adherence, documentation and efficiency.
- **System-2** is the *coordination* system, which is responsible for maintaining a harmonious balance of functions between each system-1. This system is like the bond that connects the parts and introduces coherence between functioning of the various systems-1. Its tenets are around information sharing, resources allocation and reallocation, crisis mitigation and management, and providing recommendations around course-correction and alignment recommendations.
- **System-3** is the *control* system which ensures the optimal materialisation of policies and goals in the sub-systems of the larger organisation. It plays a supervisory role. Tenets include review sessions, monitoring meetings, target setting and tracking, and feedback and prioritisation. There is also a system-3* which gives system-3 direct access to the operational level through the audit channel. This ensures transparency in systems and processes, and establishes a sense of “immediacy” in activities.
- **System-4** is the *development* system, which Beer calls the “biggest ‘switch’” in the organisation. This system is responsible for information passage between system-5 and the other sub-systems, as well as for gathering information from the contingent environment. This system is outward focused and is constantly in the look-out for new developments in the social, economic and regulatory environment. It collects,

analyses and passes on this information back into the system for better informed decision making. Tenets of this system include, environment scanning, research and insights generation.

- **System-5** is the *policy* making and executive unit of the VSM, which Beer calls the “multinode”, an elaborate and interactive integration for managers. This is the highest system that steers the organisation forward in a strategic manner and has a long-term view of the enterprise viability. Policies are formed with consideration to the successful sustenance of the organisation through the period of time. Based on the urgency and necessity, system-2 will filter information before passing it from system-3 to system-1. This link is called the “Algedonic Link”. The “Algedonic Link” becomes active in case of crisis.

These five Systems follow the law of recursion throughout the sub-systems, which imply that all the five systems exist and operate within each system and consequent subsystems. As Beer advocates, VSM is a generic model in the sense that if an organisation is comprised of only one person, that single person will play the role of all the five systems.

I undertook an organisational understanding for Ferens PCT with the support of a Performance Analyst. Performance Analyst was a specialist appointment at the Ferens PCT to facilitate performance effectiveness in service delivery. Driven by the tenets of Critical Systems Thinking, my objective to understand how the position of the PCT within the NHS structure facilitated or placed constraints in its ability to take into consideration user opinion and perspective in implementing new IT strategies, which thereby impinged upon the effectiveness of the HKM agenda.

According to the DoH strategy, CfH was designed to be implemented in five waves, as below:

<i>WAVE-1:</i>	<i>General Practice</i>
<i>WAVE-2:</i>	<i>PCT, Community, District Nursing, etc.</i>
<i>WAVE-3 and 4:</i>	<i>Acute/Maternity</i>
<i>Wave-5:</i>	<i>Ambulance</i>

I started my study at recursion level-0 at a high level and went deeper into recursion level-1 in a more detailed level. Recursion level-0 was too wide a system for me to consider.

Here, the choice of how I drew my boundary is up for scrutiny. This was a combination of factors including relevance, priority and limitations. Relevance to the overall problem structuring; priority for the objectives of my project; and limitations of my own reach to information and insights beyond the Ferens PCT. As an interventionist, I allowed myself the flexibility to create my own system based on informed judgement.

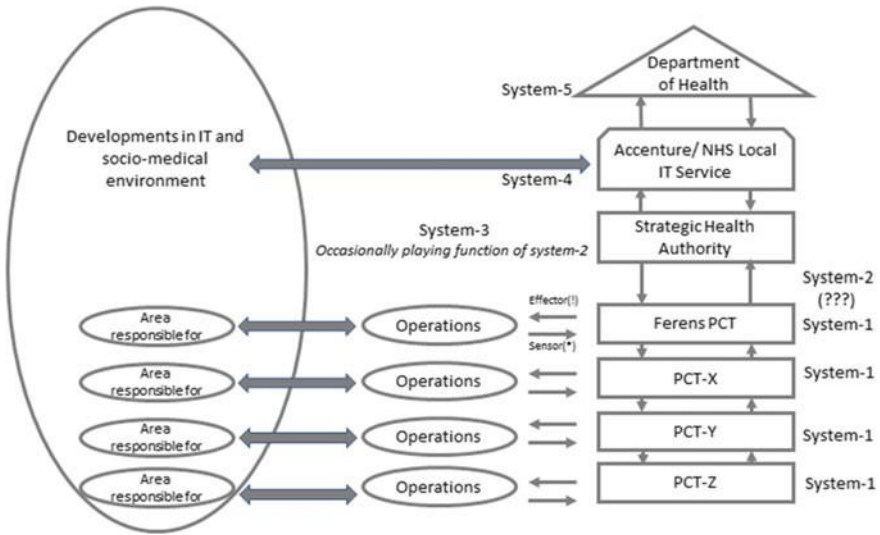


Fig. 4.4 VSM For Ferens PCT at recursion level-0 (Chowdhury 2007; p. 49)

4.5.2.1 VSM of Ferens PCT at RecursionLevel-0

I carried out the first VSM for Ferens PCT at the recursion level-0 to have a sense of the wider system. For this I identified the following structure:

- System 1: Ferens PCT and other local PCTs
- System 2: Non existent; was occasionally fulfilled by system-3
- System 3: Strategic Health Authority (SHA)
- System 4: Accenture/NHS local IT service
- System 5: Department of Health (DoH)

Refer to the VSM of Ferens PCT at recursion level-0 in Fig. 4.4.

I present here an analysis of the organisation at the recursion level-0 at a high level and I will go in-depth into the analysis at recursion level-1. I did not carry out an analysis of recursion level-2.

System-1

The four PCTs in the area—Ferens PCT, PCT-X, PCT-Y and PCT-Z—were identified to be the systems-1. I found that responsibility for CfH implementation lied at the PCT level, where the PCT had considerable autonomy over how they choose to deliver to the goals of the DoH.

System-2

The coordination system, system-2, seemed to be a grey area, the reason being the absence of any formal body to coordinate between the four PCTs. Coordination occurred at an ad hoc level and there was no formal practise of inter-PCT linkage in this regard, apart from the fact that the Workforce Development team from the PCTs met in the SHA once every eight weeks. The PCTs reported to the SHA, but there was no formalised body for coordination between them. They may have shared interests, but overall they were autonomous bodies. I concluded that there was no formalised system-2, but the SHA occasionally played this role.

System-3

The SHA played this role mainly from a monitoring perspective. It allocated specific budgets amongst the PCTs, set targets and oversaw their work. However, the SHA did not hold any decision-making power over the PCTs. The SHA could only ask, and not demand.

System-4

Dealing specifically with the CfH implementation, it was agreed that the service provider for the region, Accenture, would be the intelligence and insights system as all. Accenture was expected to bring in the best environment knowledge, set benchmarks and accordingly define best practices. Along with Accenture, the local Health Informatics Service (HIS), the local IT body of the NHS, also had a joint interest in the development function for CfH. Accenture and HIS had direct communication with the PCTs.

System-5

The department of Health (DoH) was (and still is) the highest level policy-making body. This function was fulfilled in the ministerial level at the DoH. The DoH commissioned the services and indicated the specifications, with some degree of flexibility, within which the services were to be delivered. DoH priorities were set alongside the national priorities and global standards.

The VSM of Ferens PCT at recursion level-0 was a high-level exercise to help me understand the overall regional structure. I got into an in-depth analysis at recursion level-1 of the system-in-focus, this being the primary focus of intervention for my project. I will have a detailed discussion about the functioning at the recursion-1 level below, as this is where I worked towards a thorough problem structuring of the situation.

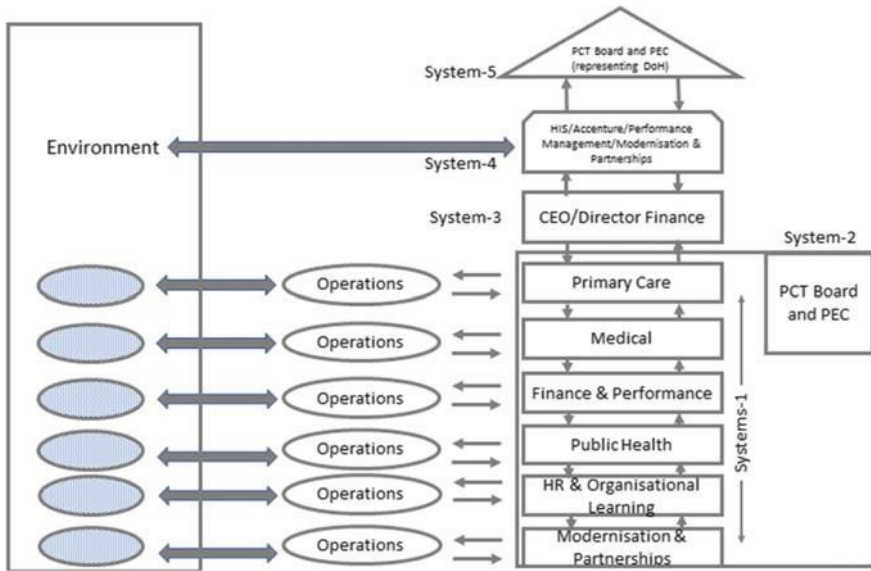


Fig. 4.5 VSM of Ferens PCT at recursion level-1

4.5.2.2 VSM of Ferens PCT at Recursion Level-1

The VSM of Ferens PCT at recursion level-1 is presented in Fig. 4.5.

Here I will present a detailed discussion of the exercise.

System-1

Ferens PCT had six directorates that I identified as systems-1. They were Primary Care, Medical, Finance and Performance, Public Health, Human Resources and Organisational Learning, and Modernisation and Partnerships. I talk about the functions of each directorate below.

- **Primary Care:** Responsible for prescriptions, primary care development, community nursing, clinical governance, sexual and reproductive health, substance misuse, non-traditional care pathways and mental health. This was the principal directorate of the PCT, which encompassed all the major functions that the PCT existed to deliver.
- **Medical:** Relatively small directorate managing General Practitioners (GPs) and medical governance. Medical Governance related to continual accountability for high standards of care for the population that the PCT served. This directorate was also responsible to take the opinion and involvement of clinicians on board in the implementation of CfH. It strived to achieve this goal by obtaining opinions from

clinicians and by organising awareness sessions. It could be regarded as playing an important function of stakeholder participation and involvement for CfH.

- **Finance & Performance:** This directorate was the central point of financial control, monitoring and advice. However, individual managers were still the budget holders. This was in line with the VSM design, which advises the system-1 to be given as much autonomy as possible. This directorate had a specific interest in CfH delivery, and was also responsible to ensure user involvement through the functionality of its Performance Management Unit. It had a stake in the IT services in terms of the provision of training and development for change management. I found that the CfH deployment served as an avenue for this directorate to enable greater cooperation between peers to share best practice with the realisation that no one can operate as an island. My interviews with the PCT staff gave the impression that the provisions of CfH gave an opportunity to the General Practices and the PCT to work more as partners, rather than the PCT giving the “big brother” impression. These initiatives followed the VSM model of systems within the organisation to work as partners instead of following a hierarchical model.
- **Public Health:** This was a shared department between Ferens PCT and PCT-X. This directorate was responsible for services like health promotion, smoking cessation, teenage pregnancy, etc.
- **Human Resources & Organisational Learning:** Responsible for the person- nel functions within the PCT, including recruitment and retention. It was also responsible for skills update amongst clinicians by the provision of periodic training courses. It was commented that this directorate kept the clinical registrations “alive”, by which it meant placements of clinicians who had been through the professional training schemes. It also managed the finances for external training.
- **Modernisation & Partnerships:** This directorate fulfilled the commissioning role within the PCT. This included purchase of services from external service providers. It was responsible for patient choice at the point of referral, management of the Local Improvement Finance Trust (LIFT) project, and management of the Local Delivery Plan (LDP) encompassing the improvements in all the major care-pathways for patients.

I found that there was no specific directorate or team that was deemed responsible for CfH deployment. The Performance Management team had a stake in it, but was not accountable for the same. Hence, in “pure” terms system-1 implementation for CfH was missing in Ferens PCT.

System-2

The coordination function between the six directorates and the other systems was performed by the Ferens PCT Board and its Professional Executive Committee (PEC). The PCT Board included the Chief Executive Officer (CEO), the Non-Executive Directors, a GP member, a Nurse member, Directors of Finance, Public Health, Primary HealthCare Services, and the Directors of the six Ferens PCT directorates

as co-opted members. The PEC was a representative bodies of front-line service providers who were involved in the Trust's strategy and planning, and also played the role of providing advice on performance excellence. The Trust's Board meetings were public sessions with attendance from the City Council, the Patient and Public Involvement Forum, local project development teams and members of the general public. The PEC had representation from all the six directorates of Ferens PCT, apart from representation from pharmacy, dentistry, allied health professionals, and the Chief Executive Officer of the PCT. They held joint meetings between the directorates and the other systems in regular intervals. In a way, the six directorates reported to the Board and the PEC.

CfH implementation was a systemic change and impinged upon work across all departments. Considering this, I investigated the minutes of the PEC meetings from September-2005 to February-2006, to explore how and in what context the implementation of CfH had been considered and discussed. There was no distinct item in the minutes to discuss the management of the CfH roll-out. Out of the six PEC meetings I studied, aspects of CfH were discussed, in one way or the other, in four of them in very mechanical and functional terms. Implementation of the systems in discrete settings had been mentioned as success stories. Where aspects of CfH were still in the planning phase there were references to how implementation strategies would be deployed in principle. Similarly booking services were discussed regarding how it could be deployed in principle.

My observation was that since there was representation from all the directorates of Ferens PCT in the PEC and considering the systemic changes that CfH was set out to deliver, CfH strategies were not considered in the PEC in a rigorous and systemic manner. This was a major drawback.

I also investigated the minutes of seven Ferens PCT Board public sessions from June-2005 to January-2006. Specific to issues of information management and technology, it was noted in all the minutes that minutes of the "Information Management and Technology Committee" meetings were circulated to all attendees prior to the PCT Board Public Sessions. However, issues specific to CfH were surfaced in only two meetings out of the seven. In the public session in September-2005, there was a proposal for the creation of a Programme Management Board to oversee the CfH deployment. The Board was proposed to have the following responsibility:

1. The co-ordination of individual projects in line with the PCT's corporate strategy
2. The consequent modernisation of service delivery (i.e. benefits realisation).

The Programme Board was expected to assist the Trust CEO in the CfH implementation.

Consideration and discussions on CfH were again taken up in discrete individual project settings like deployment of the system in particular GP sites or project initiation for community nursing.

Although these were public sessions with participation from a wide variety of stakeholders, no comments of opportunities or challenges were surfaced from any of them. All comments regarding CfH were management-led and purely presented

from a management perspective. The comments mainly surfaced “success stories” and instances of “continued development” from a management point of view.

The regular meetings with this system-2 functionality did facilitate communication between the directorates in a formalised manner. However, with specific attention to CfH, no fixed item was found in the minutes consistently. This implied that attention to CfH was given only when there was something specific that has to be reported or discussed. This indicated that coordination of CfH strategies between departments was not achieved in a manner that could have been desired for a programme at that level.

Efforts of the PCT for integrated thinking of CfH were isolated initiatives and were not surfaced in the coordination meetings. Individual initiatives like the above had a real potential to make a positive difference in planning a systemic architecture for Ferens PCT for CfH design and implementation. However, these initiatives and discussions around such issues were lacking in the meetings of the various coordination teams and hence were ignored as cases for a robust and systemic implementation of the technology systems.

Playing the function of system-2, the PCT Board and the PEC ideally had to coordinate the progress of the different directorates. I examined six PCT Board minutes from June-2005 to January-2006. There was no specific section or slot allocated to the discussion for CfH. However, it was stated in every meeting that minutes of the Information Management and Technology Committee (IM&T Committee) meeting were circulated to the Board members prior to the meetings. This led me to investigate the minutes of the IM&T Committee from November 2005-to May-2006. The members of the IM&T Committee included senior members of the Trust, along with representation of GP Practices, and the local Health Informatics Service. This committee was mainly responsible to oversee the implementation of CfH. The problem of duplication of efforts needs to be noted here as the Ferens PCT established the CfH Programme Board for the same purpose to oversee the CfH implementation. This issue was recognised in the IM&T Committee meeting in November-2005 when the role of the committee was discussed. Issues around linkages between the CfH Programme Board and the IM&T Committee were claimed to be established. However, it was suggested that the issue of reassuring the PCT about the IM&T agenda needed reconsidering, should the committee be disbanded. However, in December-2005, it was stated that the IM&T committee would soon fit into the a newly formed merged entity between the departments of Risk and Clinical Governance. It was resolved that the IM&T Committee would continue to support CfH. However, this may be treated as an indication of further duplication of efforts and extending bureaucracy. Because a real difference of purpose between the IM&T Committee and the CfH Programme Board could not be identified.

CfH was a systemic change and Ferens PCT could not have operated in isolation for its deployment, especially when for the system to work, all Trusts including the acute Trust would have had to work together. Considering this, it was clear that any coordination efforts needed representation from other Trusts, at least the local ones, to discuss experiences, opportunities and challenges. However, minutes of the PCT Board, CfH Programme Board, PEC, and the IM&T Committee and my interactions

with officials in the Trust indicated that there was no representation from other local bodies and Trusts outside the Ferens PCTs.

System-3

The control function was performed by the CEO and the Finance Director, who controlled and monitored the functioning of the directorates. The six directors reported to the CEO. It is to be noted that the CEO's office was also the policy making body of the PCT. As the ultimate authority in the PCT, the CEO was nominally responsible for implementing the CfH programme on target time and within specifications. The CEO's office getting involved in direct control was an indication of a level that time was "pulled down" by two levels for significant duration of time. In an ideal situation, the Finance and Performance directorate should have taken control of the entire initiative.

Countering fraud and related investigation is an important control function. In this regard, the Finance and Performance directorate administered an anti-fraud function, with assistance from a dedicated anti-fraud team of the NHS. This function was specific to Information Management and Technology (IM&T) fraud and abuse. My analysis of the minutes of the IM&T Committee meetings from November-2005 to May-2006 suggested that the committee took up issues of IM&T fraud in Ferens PCT. The PCT also devised an Electronic Communications and Internet Policy to counter internet and ICT abuse. The IM&T Committee emphasised on making the policy mandatory for all users of PCT equipments. The PCT also had a Local Counter Fraud Specialist team that monitored ICT abuse in within its geography.

The Audit function (3*) was addressed by the Finance and Performance directorate with the help of external auditors. However, as I discussed above, the Performance Management team (in the Finance and Performance directorate) conducted periodic audits and evaluation on the state of IT infrastructure and its development. Management audit relating to this including collation of information pertaining to performance management was also conducted by the Performance Management team.

Although it was seen that the PCT Board, the PEC, the IM&T Committee and the Performance Management unit played the control function in different ways, the system was not organised in a way that could allow direct control and audit of CfH delivery. As a result of this, the control function was largely ad hoc and disengaged. DoH had an anticipated time-frame for the desired implementation of CfH, within the constraints of time and resources. It was advocated by the Performance Analysts that in this first wave of CfH delivery, user-opinion was not given due attention, which bred scepticism of the new system, and clinicians' possessiveness of their old systems. In its first wave, the DoH seemed to totally perceive the system in terms of IT, and overlooked the socio-political and human dimensions of change and work culture. Therefore, the second wave characterised "community focus groups", in which individual local environments of the respective PCTs were taken into account, enabling Accenture understand the complexity of the situation. A critical benefit from this was to illustrate and reinforce the very localised and specific ways

healthcare is provided to a target population. However, although the concepts of localised management, stakeholder participation and user involvement were reinforced, there was no evidence that there was any control over how these concepts were being delivered in real life by the systems in the implementation level.

System-4

This is the development and intelligence function. Considering the design and implementation of CfH, the intelligence function was played by the local Health Informatics Service and Accenture. The local Health Informatics Service was the local NHS IT service support network and worked closely with Accenture for intelligence gathering from the environment. Accenture was the Local Service Provider (LSP) for the region, and was therefore responsible for gathering intelligence in the field of information systems from the wider environment, including challenges and opportunities encountered by other LSPs in delivering the CfH programme in other regions. It also communicated with the directorates within Ferens PCT which had a stake/interest in the CfH implementation.

As it was mentioned above, the Performance Management unit also had an interest in the development function, and it informed the PCT on management tools to be adopted. For example, the PCT had adopted the management tool as per the recommendation from this unit. It also informed on software and tools of support, along with identifying resources to deliver on them.

As far as intelligence is concerned, the Modernisation and Partnerships directorate played a crucial role in gathering information from the area it served and from the DoH, with which it had a direct interaction. These functions may not necessarily be directly linked to IT, but also included general business processes of the PCT.

System-5

The PCT Board and the Professional Executive Committee (PEC) was responsible for the policy making function, which was the system-5. However, the CfH Programme Management Board (that I discussed as part of system-2) was also established to offer a strategic approach to the programme. I infer from the minutes that the Board meetings were a forum to discuss technical successes and challenges regarding CfH deployment and they also served as a forum for resolution of management issues. Discussions and actions were mainly around “how” things should be done, rather than “what” or “why”.

Although the participants in the VSM exercise indicated to the CfH Programme Management Board as the policy making system in the CfH implementation, this message clearly did not come across in the minutes that I examined. The Board discussed implementation of policies that had already been made. Therefore, policy was, in a way, passed on to the Board a priori, and the Board was only a planning agency for CfH deployment and for progress monitoring. This was perhaps because

the Board had no control over the CfH policies, which came directly from the DoH. Hence, the Board was really a monitoring system and not really a policy system.

It may be noted that in the VSM exercise, the participants also had a debate regarding who the final decision-making authority within the PCT was at a policy level—whether it was the CEO or the Directors, or the PEC or the PCT Board, of which the CEO, the Finance Director and the Chair were members. There was a debate in favour of an absolute authority of the Directors because every directorate had its own budget and a say over its investments. This debate was pertinent for implications of strategies in the PCT, and it suggested a situation where clear demarcation of authority and proper allocation of responsibility was lacking.

4.6 Discussion

The VSM diagnosis of Ferens PCT revealed the structural nuances in the Trust pertaining to the planning and delivery of CfH and its related implications for the Trust's vision of institutionalising a knowledge management system. Although I have used the term “X-ray” for the organisation using VSM, we cannot overlook the “soft” aspects of the structural nuances and intricacies that are inherent to any organisation. These are influenced by values and deep-seated impressions created over a long period of time. This in turn shapes relationships and attitudes in the system. I have discussed several of these nuances in great detail in Chaps. 5 and 6. The important point here is that the organisational analysis carried out need to be considered within a cultural context and not as a stand-alone esoteric diagnostic.

Key gaps were identified in the system applying the VSM as a diagnostic tool that I have attempted to summarise below:

- **Lack of implementation accountability:** Amongst the six directorates in Ferens PCT, no directorate was found to hold direct responsibility over the delivery of CfH apart from the fact that the Performance Management team had a stake in it. Accenture was mandated to implement the CfH programme in the frontline and was a signatory to the implementation programmes that were agreed for each sub-project. Due to a lack of clearly defined chain of control, there was complete confusion on who defined strategies, who was in control and where the buck stopped. It was observed in several levels that officials who were supposed to hold positions of a “higher” level had to pull themselves down to fulfil a gap. This kind of a situation results in suboptimal use of resources.

Ferens PCT had agreed to be an early adopter in the implementation of the programme. This was a great risk, but also at the same time, there was a tremendous opportunity. There was a good amount of investment which went into Ferens PCT from the Department of Health (DoH) for agreeing to be an early adopter. The consequence was an influx of more resources, high risk and significant learning. Along with risks and newness, came the confusions associated with being the first mover and the same was observed clearly through the system diagnosis.

- **Coordination breakdown:** I found the breakdown of coordination at several levels of the system diagnosis as pointed out in the sections above. Taking this even further, it was striking to note that there was no mention of the Regional Implementation Director (RID) in this exercise in the context of leading the CfH deployment work in the region. The RID was appointed by the DoH directly and was responsible for managing the interdepartmental relationships, support teams, coordination amongst deployment units and overseeing supplier functionalities. The RID, therefore, was meant to play a very significant role in the CfH implementation regionally. The complete ignorance of the RID through my interviews and document analyses throughout the system diagnosis showed a lack of knowledge or avoidance of acknowledgement in part of the participants. To interpret otherwise, this depicted a breakdown of the coordination mechanism in the system, where members were not aware of who did what and if, and why certain functions existed in the system.

A breakdown of effective coordination meant that the system was at the mercy of incoherent efforts, divergent initiatives and duplication and/or replication of functions. This was a drain in terms of organisational resources and professional bandwidth.

- **Missed opportunity with knowledge sharing:** The PCTs had their own CfH targets and delivery of these targets was PCT based, not Strategic Health Authority (SHA) based. The DoH only issued the directives of what was to be delivered and the PCTs made their own decision on how these were to be delivered. For instance, the creation of a central electronic staff record was a DoH directive. To meet demands of such directives and improve IT literacy, the Ferens PCT had invested on a hi-tech training centre. But due to the isolated way of functioning of the PCTs, the neighbouring PCTs in the same city were not being able to make use of this facility.

There were several other instances I noted where the opportunity for other Trusts in the city and other bodies were ignored or avoided; this could be either knowingly or unknowingly. Learnings across institutions were not shared due to the lack of a proper coordination function. There were also professional differences that I came across that could have interfered with such knowledge sharing; I discuss this more in the next point.

- **Lack of stakeholder involvement:** It was the responsibility of Ferens PCT to devise an effective strategy for stakeholder involvement and participation through the implementation of the new system. However, my observations revealed that there was no evident practise of stakeholder engagement being undertaken in the first wave. Community-wide knowledge sharing was a miss.

The DoH had an anticipated time-frame for the desired implementation of CfH, within the constraints of time and resources. In this first wave/stage, user-opinion was not given due attention, which bred scepticism of the new system, and clinicians' possessiveness of their old systems. In this stage, the DoH seemed to totally perceive the new system in terms of IT and overlooked the socio-political and human dimensions of change and work culture. Therefore, the second wave characterised "community focus groups", in which individual local environments

of the respective PCTs were taken into account enabling Accenture understand the complexity of the situation. A critical benefit from this was to illustrate and reinforce the very localised and specific ways healthcare was provided to a target population. Whilst in overview services were similar, their delivery differed markedly between PCTs and their recipient public. It was believed that the CfH solution would introduce uniformity without removing the flexibility with which services were being tailored to their local communities. The community was itself a complex phenomenon and it differed from PCT to PCT. Local factors and services of each PCT were different. Issues around social services and child welfare and their relation to civil society were not yet been addressed. This was a messy area and full of complex issues that needed clarification. It would be easier to indicate that many PCTs hosted services such as Sexual and Reproductive Health, Dentistry and Prison Health, etc. some of which may have been included in the initial CfH provision, however some population segments/areas were kept out of scope of the CfH programme; example the armed forces.

Technology adoption and capacity building of clinicians was fundamental for the success of CfH. Doctors, patient care and quality of service delivery were the prime drivers—needless to say that technology adoption and capacity would finally lead to such outcomes. But I noticed prominent tension within internal stakeholders due to the short-term goals that the administration was driving at the hands of the managers. Lack of effective engagement of key stakeholders was a major reason of such tension. Due to the transformation the organisation was going through, managers were accorded with significant power that was alienating for the clinicians. This tension was quite overt on several occasions beyond even the CfH programme. Managers who had a clinical qualification (like doctors and nurses) would have a better buy-in than their counterparts who would come in from a general management background without any clinical qualification.

Managers were entrusted to drive performance and accountability of doctors. These were closely linked to targets and efficiency measures that had a certain assumption value of the application of the technology solutions and platforms that were still in the pilot stage across the NHS. Managers would develop frameworks and guidelines for doctors to adhere to and deliver within set benchmarks. Periodic meetings and feedback protocols were put in place for managers to assess clinical performance. Doctors on the other hand would always work better if “left alone” without much interference. Measures undertaken to create accountability for clinicians often began to be looked on as interfering mechanisms that hampered service delivery and patient care.

The tense interpersonal relationships between clinicians and managers was a significant impediment in the CfH implementation.

- **System mis-alignment:** Finally, on system viability, it was evident that the alignment within the organisation was completely amiss with a confusing division of roles and responsibilities demarcated for the various functions. At the highest level, the policy system was isolated and distant from the realities on ground. It was unable to absorb the variety in the system due to lack of effective control and coordination mechanisms, and a fundamental confusion of implementation

accountability. The variety posed by the system internally was high enough for the NHS to respond adequately to the absorb the same. Variety was sequentially building up as one moved ground up from system-1 with progressive systems either being absent or ineffective. The build-up of this unaddressed variety is what is termed as “residual variety” to the subsequent level that kept on getting amplified to reach a stage that was unmanageable at the very top. Gaps in stakeholder engagement resulted in greater complexity being added within the system.

The result was a situation where policy decisions were being taken far away from ground realities and without appreciating the complexity of the system. Control and coordination at the higher regional and national levels were chasing the ineffective alignment parameters and imposing corrective actions that were further “amplifying” variety rather than “attenuating” the same.

It is important to note here that although VSM is considered a functionalist model, a viable system is what its people make of it finally. Hence the system also takes shape from context to context as people who form the contexts bring their own meanings and interpretations to the system (Espejo 2003). Deploying the VSM here was purely from a problem structuring perspective. However, my interactive research with participants brought to light several endemic issues that existed due to the healthcare context itself. One prominent issue was the power-dynamics between clinicians and managers that resulted in further amplification of the complexity. I have made a reference to this challenge in this chapter, but I will discuss this in detail in Chap. 6 where I share my experience of bringing about what I call “strategic convergence” in this context.

4.6.1 Implications for HKM

CfH had its roadmap set for a great platform for Healthcare Knowledge Management (HKM) through the stages that I highlighted in the beginning of this chapter—access to clinical data, knowledge discovery, knowledge translation, and knowledge integration and sharing (Frize et al. 2007). However, there were several gaps at the implementation level when it came to the allocation of responsibilities with individual Trusts and how coordination and control would span out. There were also mixed messages about the level of consistency and standardisation of the implementation of CfH. The technical and human dimensions were treated as entirely disparate with the assumption that once a technology strategy was imposed, people would automatically adapt to it. Also, although the DoH appeared to grant flexibility to the PCTs for the manner in which they chose to implement CfH in terms of local needs and user perspective, this was just pseudo-flexibility as the DoH had already had an established model of a high-tech information systems project, which it aspired to put in place. This had resulted in the end users in Ferens PCT being left isolated and feeling imposed by the grand plans of the DoH.

HKM is a collaborative process and as I have discussed earlier; it starts with involving stakeholders. There needs to be constant learning and knowledge sharing

where both insiders and outsiders of the system are able to transcend their positions of comfort and add value in the process, that Elden and Levin (1991) calls cogenerative learning. Technology systems need to be introduced at that stage that can enable this buoyant understanding to be leveraged and given form for application purposes. The outcome is a framework for HKM that I presented earlier. This essence was completely missing in CfH.

As a final stage of the problem structuring method (PSM), I consolidated the findings from the VSM analysis and organised an action planning session with the Ferens PCT Management. This was attended by all the directorates and key agencies involved in driving the CfH programme. The parameters I covered for the action planning included key aspects around the structure, roles and responsibilities, integration efforts, stakeholder involvement and impact measurement. The outcome of this exercise was an agreement on priorities, responsibilities, timelines and measurement. Responsibilities were selectively divided between various agencies and the function I was leading to enable HKM in the Trust. Not all areas could be comprehensively covered due to constraints of time, resources and autonomy of the Trust and also my own function within the system.

In 2007, Edward Leigh, Chairman of the Public Accounts Committee of the British House of Commons had famously claimed: “This is the biggest IT project in the world and it is turning into the biggest disaster.” The CfH programme was scrapped in 2013 due to several concerns that included a lack of proper project scoping, data security risk, inadequate technology solutions, lack of stakeholder engagement, clinical resistance and mismanagement. Reports claimed that at the time of its discontinuation, CfH had already spent over three times of its estimate.

4.7 Reflections

As we reach the final part of this chapter, I would like to share some of my reflection in undertaking this problem structuring exercise.

At a personal level, my decision of undertaking a problem structuring approach within the first three months of my starting a new job came with a lot of risk and dependence on chance. In an ideal situation, I would have gone ahead to do exactly what was stated in my job description in terms of introducing systems and processes, enabling templates and facilitating orientation sessions through a three-year period, and tick all the boxes of my Key Result Area (KRA) sheet. However, a critical mindset pushed me to question the existing situation and challenge my KRAs themselves. This required self-belief and flexibility in the way I thought and in the way in which I envisioned the overall programme itself. I had to convince my project sponsor, the Ferens PCT management, to accept the fact that problem structuring was the prelude to the problem solving, for which I was brought in; in a way I challenged the judgement of my project sponsor. The management team at Ferens PCT was itself flexible in allowing me for this “experimentation”. My exposure in systems thinking allowed me to understand the problem situation better in terms of the complexity of

the system and the human dynamics that existed in it. This in turn informed me to select the right methods and tools to undertake this exercise.

There was flexibility throughout the exercise as I had to adapt my approach through the different stages to help me arrive at the right outcomes that I was aiming for. I brought in a range of tools like literature research, interviews, FGDs, participant observation and investigation of minutes of meetings to arrive at an as complete a picture that was possible for the Ferens PCT within the constraints I was operating under. The final action planning ensured that problem structuring was not an end-in-itself, but a means to an end.

I received full support from my project sponsors in terms of resources (both financial and infrastructural) whenever required so that the problem structuring exercise was carried out in an in-depth manner. They allowed me to question boundaries, challenge pre-set assumptions and have access to documents and internal meetings, whenever I requested for. Ferens PCT demonstrated adaptiveness through the process, not just in rescoping the KRAs of my role, but also with the resources that was made available to me so that I could carry out my intervention as flexibly as possible.

Systems thinking brought in a completely new perspective to the situation not just for me, but also for the Ferens PCT management. The comparative understanding of the structure and recursion levels in its “pure” form and in its “investigative” form (as brought about by the VSM) presented powerful insights to the management to rethink its actions on technology implementation, stakeholder engagement and programme design.

The articulation of my “route” to healthcare knowledge management was well accepted by the Ferens PCT management and the SHA. However, the bureaucracy in the DoH a mega organisation restricted adoption of several of the recommendations that came out of the action planning. This was the rigid structure at the DoH level that not only interfered with the HKM initiatives at Ferens PCT, but also across the entire system. Absence of systemic planning, lack of human involvement and demonstration of inflexibility at the DoH level were some of the prime reasons for the CfH programme to reach its final stage of being called off after a huge dent on public resources.

I would also like to highlight that although the “act” of conducting the VSM was purely functionalist, it brought out significant interpretive insights in the system. This demonstrated flexibility in my part as a researcher to delve deeper into “softer” dimensions and value-systems whilst understanding some “hard” structural diagnoses of a system.

4.8 Conclusion

In this Chapter 1 discussed a Problem Structuring Method (PSM) in the context of Healthcare Knowledge Management (HKM) in the UK NHS. The method used was Viable System Model (VSM) with the integration of several qualitative techniques to enhance the effectiveness of the insights.

I began by defining HKM, then went on to discuss the problem context (Ferens PCT) and how this led to the choice of my approach. I identified lack of clarity in the organisation structure as the primary problem situation for me to start my journey with. Additionally, I understood that aspects of stakeholder engagement must be given a high priority. This chapter talked about my approach in PSM centering around these aspects. I described VSM and its various stages in detail in context of the Ferens PCT. I led a detailed discussion on the problem situation from a VSM perspective and focused on both the structural and human elements in the system. I identified key areas of improvement and made adequate recommendations. I finally reflected on my own experience of going through this PSM exercise.

The problems identified in this chapter pertaining to design and deployment of technology projects were endemic in the NHS. My next chapter brings this to light by way of another case study set in the Ferens PCT.

References

- An Organisation with a Memory (2000) Department of Health, London
- Beer S (1972) *Brain of the firm*. Allen Lane, London
- Chowdhury R (2005) The politics of information integration: investigating the UK National Health Service. In: Kotsis G, Taniar D, Bressan S, Ibrahim IK, Mokhtar S (eds) *Proceedings of the seventh international conference on information integration and web-based application & services*. Austrian Computing Society, Vienna, pp 1171–1179
- Chowdhury R (2006) *The information Messiah: issues and debates within the NHS*. Working papers in social sciences and policy, No. 15. University of Hull, Hull
- Chowdhury R (2007) Healthcare knowledge management and information technology: a systems understanding. In: Bali RK, Dwivedi AN (eds) *Healthcare knowledge management: issues, advances and successes*. Springer, New York, pp 41–54
- Davenport TH (1996) Some principles of knowledge management. *Strategy+business*. <https://www.strategy-business.com/article/8776?gko=f91a7>. Accessed 31 Aug 2001
- Elden M, Levin M (1991) *Cogenerative learning: bring participation into action research*. In: Whyte WF (ed) *Participatory action research*. Sage Publications, Newbury Park, California
- El Morr C, Subercaze J (2010) Knowledge management in healthcare. In: Cruz-Cunha MM (ed) *Handbook of research on developments in E-health and telemedicine: technological and social perspectives*. IGI Publishing, Hershey, pp 490–510
- Espejo R (2003) The viable system model: a briefing about organisational structure. *Syst Pract Action Res* 3(3):219–221. <https://doi.org/10.1007/BF01062728>
- Frize M, Walker RC, Catley C (2007) Healthcare knowledge management: knowledge management in the perinatal care environment. In: Bali RK, Dwivedi AN (eds) *Healthcare knowledge management: issues, advances and successes*. Springer, New York, pp 232–259
- Information for Health (1998) Department of Health, London
- Learning from Bristol (2002) Department of Health, London
- Liebowitz J (2004) *Addressing the human capital crisis in the Federal Government: a knowledge management perspective*. Elsevier/Butterworth-Heinemann, Oxford
- Liebowitz J (2006) *Business intelligence, competitive intelligence and knowledge management*. Auerbach Publishing, Florida
- Leonard A (1999) A viable system model: consideration of knowledge management. *J Knowl Manag Pract* https://perso.liris.cnrs.fr/alain.mille/enseignements/Ecole_Centrale/Consideration_of_knowledge_management.pdf. Accessed 13 Aug 2015

- Meyer R, Collins M (1976) Systems approach to studying community health. In: Werley HH et al (eds) Health research: the systems approach. Springer, New York
- Our Information Age (1998) Department of Health, London
- Rosenhead J (ed) (1989) Rational analysis for a problematic world. Wiley, Chichester
- The New NHS—Modern, Dependable (1998) Department of Health, London

Chapter 5

From Barriers to Boundaries: Learnings from a Healthcare IT Project Failure



5.1 Introduction

In this chapter, I present a case study that describes my experiences of introducing a multilingual patient information system in a UK Primary Care Trust (defined in the previous chapter), the first of its kind in its region of the UK. This technology-based project, commissioned as a pilot for the establishment of an information system to cater to the needs of ethnic minority languages failed to make progress despite its great potential and the user acceptance that it offered. I present a number of issues that I encountered in working under the constraints of a large bureaucratic setup and those related to the design and deployment of the project that I believe resulted in its lack of satisfactory closure. The findings from this case analysis suggest the failure as a direct result of the constraints the system posed resulting in the project to find itself in a state of inflexibility and lack of adaptiveness. I argue that the sub-systems in the overall system in focus were treated as opaque setups with artificial barriers around them. Barriers restrict interaction and creativity. I build a case for managers to identify with boundaries, rather than with barriers to overcome such limitations.

I will talk about the difference between a barrier-mentality as opposed to a boundary-mentality. Whereas barriers are prohibitive, boundaries are protective.

5.2 Organisation Background

This case is based on my experience of leading a multilingual health informatics pilot programme in the UK in the year 2005. In the UK, responsibility for health and social services provision rests with the National Health Service (NHS). At the time

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during which this case is based, at the local level of service delivery, the NHS was divided into Primary Care Trusts, Secondary Care Trusts, and Tertiary Care Centres. Primary Care Trusts (PCT) provided the first point of contact for patients for a specific geographical area. Secondary Care Trusts delivered specialised and hospital care. Tertiary Care Centres delivered highly acute medical services for complex and long-term cases and illnesses. The organisation on which this case is based was Ferens Primary Care Trust (PCT) (a pseudonym used for the sake of anonymity) in the North of England, that delivered primary care and commissioned secondary care services. There were 303 PCTs in England, controlling about 80% of NHS budget (Department of Health 2006). PCTs were responsible for (Department of Health 2006):

- Developing programmes dedicated to improving the health of the local community.
- Deciding what health services the local population needed and ensuring they were provided and were as accessible as possible. This included hospital care, mental health services, GPs (General Practices), screening programmes, patient transport, NHS dentists, pharmacies and opticians.
- Bringing together health and social care, so that NHS organisations worked with local authorities, social services and voluntary organisations.
- Ensuring the development of staff skills, capital investment in buildings, equipment and technology, so that the NHS locally was improved and modernised and could continually deliver better services.

Ferens PCT was situated in the city of Ferensway (pseudonym used). The PCT was formed in 2001 and it served a total population of 163,000. Its mission was to “improve the health, well-being, and the quality of healthcare services of the people of Ferensway”.

Ferens PCT directly employed 500 staff members in professions such as district nursing, school nursing, family planning and health visiting. It had 27 General Practices, plus pharmacies, dentists and opticians. Apart from this, it also owned and managed a range of specialist health centres and clinics. PCTs in the UK were assessed by the Healthcare Commission, which also awarded annual performance ratings for NHS organisations. The Healthcare Commission awarded Ferens PCT a “two-star” rating for the periods 2004–2005 and 2003–2004, the highest star ratings being three stars and the lowest being zero. Star ratings were awarded on the basis of a Trust’s performance level, the Trust’s performance value, the thresholds used in calculating performance against individual indicators and the percentage of all trusts achieving the key target (Healthcare Commission 2005). A star rating of two was described as: “Trust is performing well overall, but has not quite reached the same consistently high standards”. The budget of Ferens PCT for the financial year 2005–2006 was over GBP 180 million, to provide services directly and for commissioning services from other public and private care providers.

5.3 Setting the Stage

Before I come to the specific case study, I would like to spend some time on discussing the context of information technology (IT) project transformation and the challenges associated with the same. I will also take up the unique place of healthcare in the IT transformation context. This is important for a retrospective understanding of the case when we analyse the factors that contributed to its failure.

5.3.1 IT Projects and Related Challenges

A global study by the Project Management Institute (2017) found that 14% of IT projects totally failed, 31% did not meet their intended goals, 43% exceeded their initial budgets and almost 50% were behind delivery schedule. Drawing from the same study, causes attributed by the Institute were following (Greene 2018):

- **Inaccurate requirements:** In large organisations, there can be several teams across departments working on project specifications. It is easy in such situation to lose sight of where the actual requirement came from. Often the requirement may come out of a business unit but the IT team may be involved in writing the specifications where both the teams have not interfaced. All stakeholders need to be involved from the very outset so that there are no misses in clearly articulating both business and technical specifications. Requirements to do with the user interface are equally important, for which the user perspective needs to be considered with equal weightage.
- **Uninvolved project sponsors:** The project sponsor is usually a senior official in an organisation. He or she, by virtue of their role, may juggle various responsibilities and the IT project can be just of them. If the sponsor loses sight of the project and is unable to give it the due time or attention, the project can soon find itself without a face. This lack of identity and sense of insecurity may interfere with the seriousness with which the project is being considered by the other team members. The project sponsor and the business representative must be present throughout the lifecycle of the project.
- **Shifting project objectives:** IT projects are endemic to creeps in timeline, scope and budgets. Several approaches have evolved to control such eventualities such as the Waterfall approach (to manage time and scope) and Agile approach (to manage time and budgets). However, it is to be noted that the three aspects of timeline, scope and budgets are also evolving as the project progresses. If learning and course-correction are not employed, IT projects can be archaic even before they are launched. The Scrum framework is popular in IT project management, where teams work in an iterative fashion for capsuled time durations. The plan cannot change during an iteration, but each iteration can offer a new opportunity to be explored in the following one. This is how the impact of changing requirements can be addressed to a large extent.

- **Inaccurate estimates:** This is related to the previous point. As the project progresses and evolves in terms of what is expected out of it by stakeholders, initial resource estimates can often go for a toss. In organisations, this commonly results in conflict between project sponsors, business units and finance teams. A thorough cost–benefit analysis needs to be conducted prior to the approval of such changing estimates. Another way to address this is to look at projects from a phase-wise perspective and defer certain expectations for a later phase to optimally spread out investments.
- **Unexpected risks:** Greene (2018) quotes Rumsfeld to highlight three types of risks—“known knowns” are risks that you are aware of and can create mitigation plans around it; “known unknowns” are issues that you are aware of but are not currently risks, however, they have the potential to become risks; finally, “unknown unknowns” are risks that are complete surprises for which you are not prepared. The project needs to account for all such kinds of risks and make adequate estimations.
- **Dependency delays:** This is common for large projects where there are several moving parts. Different teams—hardware, software, integrator, etc.—may be working on a virtual supply chain, where delays in one team can lead to delays in other teams and eventual ripple effects. These are mostly “known unknowns” and can be mitigated with diligent planning and keeping adequate buffer. Penalties can be introduced for delivery teams in such cases as well to account for greater accountability.
- **Inadequate resources:** Resources can be of several kinds—people, budgets and infrastructure. Resources are planned for at the beginning of the project, but due to various constraints and scope-creep it is often seen that resources become scarce as the project progresses. Flexibility in terms of resources planning and allocation needs to be demonstrated so that this does not come as a roadblock to project success.
- **Poor project management:** As the project progresses, due to changing expectations and increasing complexity, project management itself can become a daunting task. Challenges can appear at three different levels. First, being able to bring all stakeholders together to a common ground of what needs to be done due to differing priorities. Second, being able to manage divergent expectations of stakeholders impacting resources and plans. And third, the basic cadence of review and monitoring process can itself go out of control due to the requirement of different people at a common time (and place, even if virtual). A very strong project management team needs to be put in place to manage complex projects. The project manager should themselves have a strong point of view so that divergence can be converged at the right time and resources optimised through the project.
- **Team member procrastination:** This is unfortunate, yet true. In large projects, it is easy to lose visibility of which team or team member is responsible for what part of the deliverable and they can often delay outputs or not deliver as per specifications. The project manager role becomes crucial to recognise such dangers and to take adequate action when it is required.

I have borrowed the above insights from Greene (2018) and the study referred to above is from 2017. Little seems to have changed over a decade since I published my first paper on this case on healthcare IT project failure in 2007, where I wrote that although IT had touched almost every aspect of human life, there was extensive evidence to suggest (Chowdhury et al. 2007). A study by Beynon-Davies and Lloyd-Williams (1999) argued that 60–70% of all software projects fail. The Conference Board Survey in 2001 reported that “40% of projects failed to achieve their business case within one year of going live, implementation costs were found to average 25% over budget, [and] support costs were underestimated for the year following implementation by an average of 20%” (IT Cortex). I had quoted other studies like the Robbins-Gioia Survey 2001, the KPMG Canada Survey 1997, the classic Chaos Report 1995 and the OASIG Survey 1995 that had reported that success rates in IT projects was a matter of concern (IT Cortex).

Such challenges are common to all IT projects across sectors and geographies, and healthcare IT projects are not immune to them. In the next section, I will discuss some of the challenges around IT in healthcare.

5.3.2 *IT in Healthcare*

Arguably, in the context of healthcare, the situation is even more problematic. Apart from the issues already discussed, the nature of the healthcare setting is multidimensional and extremely complex. IT-based systems have existed for many years, but have not largely been integrated into the core business processes of healthcare. Rather they have been used primarily for administrative and audit purposes. According to Protti (2005), issues with IT in healthcare include

- The overwhelming majority of computers in healthcare are for simple accounting and statistical reporting purposes.
- Due to the lack of adequate support systems, most clinicians continue to practice “memory-based medicine” (not surprisingly) with wide variances in diagnosis, treatments, and outcomes.
- Almost no attempt is made to collate the documented historical personal information on family/personal health history combined with genetic make-up and lifestyle, in order to create a risk assessment to possibly predict and prevent diseases (Protti 2005).

The reason behind the inertia of IT adoption in healthcare may rest, at least in part, on the immense complexity of the healthcare sector. Healthcare is not a stand-alone factor for an illness, but embraces socio-cultural, religious, economic and ethical dimensions of human life in an inextricably intertwined fashion (as discussed in Chap. 4). I borrow from Ben-Zion et al. (2014) who talk about why healthcare IT projects are different in the following points:

- Multiple relationships operate in the healthcare setting. These may be formal and informal, direct and indirect and overt and covert involving stakeholders such as

physicians, families, patients, hospitals, caregivers and insurers around the patient themselves.

- Often, the scenario is dominated by external stakeholders. Although the patient should be at the centre of the system, this is a complex environment where the doctor commands ultimate power and there is a great dependency on caregivers and insurers. The danger is that we see insurers often directing the clinical pathway.
- There is still no protocol to ensure consistency of patient data and records. Patient information capture is not only different from country to country, there can be significant differences even within the same country.
- There is (arguably) a high focus on patient care and safety, as opposed to profits. However, with the increase in private care settings across the world and especially in developing countries with concepts like medical tourism and cross-continental cost-effective care coming up, profits are very much taking the centre stage in the healthcare setting.
- Privacy and security of patient data are of utmost importance. A person's individual health data is highly sensitive. With the increasing threat of cybersecurity, people are beginning to question how safe their data is.
- Resistance to radical change is a common phenomenon across sectors. However, in healthcare this is even more prominent. Clinicians believe that they are the experts in what they do (for all good and valid reasons) and they should be allowed to carry on with their existing way of working without any interference—new IT systems are looked upon as interference.

Change in one aspect of patient care will invariably create an effect in other areas. Issues relating to medical examination, intervention and maintenance and transmission of patient information are not straightforward and problem free. However, with the increased realisation of the benefits that technology can bring to health informatics, we have seen several new and aggressive initiatives to integrate IT with the core business process of healthcare. Examples like the NHS mega initiative with Connecting for Health started in 2003 (discussed in detail in Chap. 4), the US Government's initiatives for integrating health informatics started in 2011 and the Israel Government's Maccabi Healthcare Services programme are well documented (Dass 2017). The global healthcare IT consulting market is expected to grow to USD 45 Billion by 2022 (Markets and Markets 2017).

Following are some characteristics typical to healthcare IT projects (Cucciniello et al. 2016):

- Establishing compliance with legal requirements by facilitating transparent systems and streamlining processes for audit requirements.
- High level of accuracy and security for patient records.
- Integration with multiple organisations as the healthcare provision has multiple prongs to cater to the lifecycle of care that is delivered by different agencies and/or individuals.
- Establishing standards due to the lack of consistency recording and prescriptions.
- Cost containment and optimization.
- Quality of care through better management of information and knowledge.

- Ensuring patient safety by enabling better clinical decision-making.
- Addressing the needs of a diverse set of stakeholders that operate in the healthcare setting.

Having set some highlights for healthcare IT projects, I will now turn to introduce the project background for this case study.

5.3.3 Project Background

Current times have seen a greater movement of people across the world for work, education, holiday and asylum. During the time of the setting of this case, the UK had seen a record increase in immigration from various countries as compared to previous years (BBC News 2005), creating an intensely multicultural society. Ferensway itself witnessed a great number of people immigrating from various parts of the world. There had been an increased realization in the National Health Service (NHS) that in order to address to the needs of an increasingly multicultural society, health information should be provided in languages other than English for the benefit of ethnic minority populations, who were not able to understand English. Apart from serving the purpose of equity in healthcare services, availability of health information in a variety of languages also directly addressed issues of public health and welfare. In the context of patient information, the NHS did not have a standardised system for the provision of information; rather, patient information was made available in different ways by different organisations under the NHS. This carried significant implications with respect to the equity of healthcare information provision. For instance, the information needs of ethnic minority populations in their own languages could be overlooked in certain postcode areas. This could put specific sections of the population at risk, leading to the so-called “postcode lottery”, where the nature and quality of health information became dependent on the postcode areas where one resided.

The purposes, therefore, of addressing the issue of health information in this way may be summarised as a need to

- Equitably serve a multicultural society, by providing health information in languages other than English for the benefit of ethnic minority populations.
- Make health information available in a variety of languages to directly address issues of public health and welfare.
- Drive towards the provision of a standardised system for the dissemination of health information, particularly across different postcode areas.

To assess the nature of health information provision in the Ferens PCT geography, I conducted a dipstick study from June to August 2004, as part of the project. The study involved telephone interviews with all the 27 general practices under the PCT and the patient information managers in Ferens PCT. This was followed by a research assistant carrying out a covert participant observation in two general practices.

A covert participant observation is a method of research where the researcher takes part in the research situation as a general actor and observes the situation, without making the “subjects” aware of the exercise (Jorgensen 1989).

The participant observation involved the research assistant posing as a patient, not capable of communicating fluently in English, and asking for information in Arabic. In interpreting publicly available demographic statistics and seeking further information on the ethnic minority population in Ferensway, the advice was also taken of Gary Craig, Professor of Social Justice, at the University of Hull. Advice and information were obtained from the Yorkshire and Humberside Consortium for Asylum Seekers and Refugees, which was a voluntary stakeholder partnership of local authorities and organisations from the statutory, voluntary, community and private sector (Yorkshire and Humberside Consortium for Refugees and Asylum Seekers 2006). Demographic distribution of population in the city was studied using analysis of maps produced by the Centre for Criminology and Sociological Studies at the University of Hull. Some results from this research have been presented in the following discussion.

Ferensway had a total population of approximately 250,000. According to the 2001 census, the city had an ethnic minority population of 2.3% as against 9.1% in England (National Statistics 2001). It was the view of Prof. Craig that the above percentage of ethnic minorities did not include refugees and asylum seekers; if refugees and asylum seekers were included, the population of ethnic minorities in would rise to approximately 3% of the total population of Ferensway. The Yorkshire and Humberside Consortium for Asylum Seekers and Refugees provided statistics up to September 2004, of the geographic distribution of countries that the refugees and asylum seekers came from. Most arrived from the Middle East, followed by Africa, Eastern Europe, South Asia, Asia-Pacific and the Americas. Considering that approximately 3% of the total population of the city was from an ethnic minority background, the estimated ethnic minority population of Ferensway was 7500 when the study was conducted. Further, the majority of this population was heavily concentrated in specific wards of the city and these wards were under the service remit of the Ferens PCT. According to statistics produced by the Centre for Criminology and Sociological Studies at the University of Hull, the concentration of ethnic minority population in certain wards of Ferens PCT was as high as 11% or more. The statistics also indicated that the concentration of population of refugees and asylum seekers in certain wards under Ferens PCT was as high as 22%. These statistics indicated that the area served by the Ferens PCT was ethnically the most diverse area in the city.

My study indicated the inadequate provision of patient support and patient information in ethnic minority languages in Ferens PCT. In certain general practices, patient support in languages other than English was totally absent. This had implications for equity in healthcare information and related services for Ferens PCT. The results from this study were presented to the management of Ferens PCT in November 2004. This led to an interest in the PCT exploring a new initiative to provide health information in languages other than English. This initiative was in terms

of understanding how multilingual patient information may be provided through a single channel using the aid of modern information technology.

In December 2004, the mandate to me began with an invitation from Ferens PCT to lead a pilot project for the provision of health information in the PCT in a range of languages to cater to the needs of its diverse population. The project was to set up an internet-enabled IT system that would provide health information in both visual and audio formats to be delivered through electronic kiosks in general practices. If necessary, users were to be given the option to take printouts of leaflets from the kiosks. The overall aim of the project was to directly address the inadequate provision of patient support and patient information in ethnic minority languages in Ferens PCT. The expected outcomes of the pilot project were

- Better dissemination of health information through a multilingual internet-based IT system via touch screen “kiosks” in two doctors’ surgeries.
- Conversion of leaflets from paper to digital based.
- Increased user satisfaction as determined by usage and rating information drawn directly from the system.

Two GP practices were chosen for the pilot. It was agreed that if successful, this system would be rolled out to all 27 practices within Ferens PCT and possibly to pharmacies. This would result in a complete overhaul in the manner in which patient information was organised and provided in Ferens PCT.

5.4 The On-Ground Project

5.4.1 The New Technology

The pilot project on multilingual health information provision in Ferens PCT involved the introduction of new technology. It consisted of stand-alone kiosks that were operable with touch screens. It offered approved health information in eight languages: Arabic, Bengali, Chinese, English, Gujarati, Punjabi, Somali and Urdu. The user did not have to be computer literate to use the system; the touch screen kiosks were self-directive in terms of using them and did not involve the use of a keyboard or mouse. There were two general practices selected for deploying the systems, and the sites where the machines were placed were different. In one general practice, the machine was placed in the patients’ waiting room, and in the other, it was placed in the community development room next to the waiting room. Two different locations were chosen to understand if this was a factor for the uptake of the service.

This was a sophisticated system that allowed conversion of old leaflets to digital formats in the new system, allowed the creation of diagrams in the leaflets, had a facility to auto-remind the project lead when leaflets neared revision, allowed detailed usage statistics to be recorded and monitored, and also allowed users to rate leaflets according to their satisfaction levels. The system allowed the networking of key

individuals such as authors (who may be experts and professionals), approvers (who may be a second expert or professional and a patient) and the project lead, who was given the ultimate authority to publish the leaflets in the new system. Whilst the users of the system did not necessarily have to be computer literate, the staff who maintained the system and controlled the updating of information had to be trained in using the system.

5.4.2 *Deploying the System*

Commentaries within the following sections are drawn from the pilot project; all names used are pseudonyms.

I, as the project lead, was assigned to work with the Performance Management department of Ferens PCT. This department was responsible for commissioning the project. A private company called *Health Computer*, based in the South of England, was commissioned to deliver the service. *Health Computer* had previous experience of successfully deploying similar systems in different parts of the UK. I met with the head of Performance Management of Ferens PCT and the CEO of *Health Computer* met in December 2004. Budgets were approved and the company committed to put the systems in place in mid-January, 2005. The license for use of the system was bought for one year, to expire in mid-January, 2006.

This project has a high level support from Ferens PCT, and a satisfactory pilot would see the system being rolled out in the whole PCT...

...informed the head of Performance Management of Ferens PCT. The total investment in the pilot project was about GBP 35,000. This included training the PCT staff to use the system. The new system was named the Patient Information Centre (PIC).

Health Computer committed to instal the PIC in January 2005. However, the systems were not in place until April 2005. The CEO of *Health Computer* explained the main reason for this delay:

This is the first time we have worked with the local internet service provider in Ferensway, and also the first time the internet service provider has deployed solutions specific to the needs of the NHS and related regulations of *Health Computer*.

This meant that there emerged new issues that the internet service provider and *Health Computer* had to address, which delayed the progress. As the CEO of *Health Computer* explained further:

We were, during this time, offering the machines ordered for Ferens PCT to a different customer. We had to do this to ensure stability in our supply chain; we could not afford to simply wait with these machines until the internet service provider readied their part of the system for Ferens PCT. This added to a long lead time in delivery of the next set of machines for Ferens PCT. By the time these major hurdles were overcome and the systems were in place, it was April, 2005, with the license for the use of the system provided until February, 2006.

Along with the physical deployment of the new technology, it was increasingly important that training was provided to the key players. As the lead for this project, I underwent a thorough training conducted by *Health Computer* to understand the system. This included operational elements, and content creation and publishing. I also underwent a train-the-trainer programme so that I could transfer the knowledge and skills to the actual operators of the system. Following this, I facilitated two training sessions for the two general practices where PIC was being piloted. Two months following these training, I facilitated a refresher session with the same audience.

The project teams needed to work across a wide range of teams and departments. These departments (called directorates in Ferens PCT) consisted of

- The information team of Ferens PCT in order to create the awareness that the manner in which patient information was organised would change from the conventional system to the one aided by the PIC.
- The Directorate of Modernisation and Partnerships in order to create the awareness that modernization initiatives of Ferens PCT with expansion to new premises would provide the facilities for the physical incorporation of the PIC machines.
- The Finance Directorate in order that adequate funding be made available for the roll-out of the system if satisfactory results were achieved at the end of the pilot.
- The IT Department in order that new initiatives in Ferens PCT with the deployment of the NHS Connecting for Health (CfH—the then newly introduced NHS IT project to automate patient databases and link with all services) allowed for the provision of the PIC as an integrated service with CfH.

As time passed, I encountered several challenges to manage the project in the operational environment. The project offered a good opportunity for people from different departments to work together towards a common objective, but what happened in practical terms was that this proved difficult to realise. People continued to work within their own departments pursuing the goals that were preset, and started to regard the PIC as just one more system for the provision of patient information. Further, departmental barriers led to the PIC being thought of as a stand-alone system that would exist besides the existing system for the provision of patient information and it would be managed by the people having an interest in IT. The information team of Ferens PCT continued to produce information in conventional paper format without any correspondence with the PIC management. The Directorate of Modernisation and Partnerships thought that it was too early for the PCT to consider integrating the PIC in its overall patient information system. The Finance Directorate showed little interest. The IT Department came in only when I approached them for technical help and advice, but did not show any proactive interest in creating a success story for PIC.

It was becoming increasingly difficult for me to convince staff of the Ferens PCT that the objective of the project was to assess if they could work together to bring about an overhaul in the manner in which patient information was provided to the diverse population. This was because the rigid structures of Ferens PCT meant that staff in particular departments had to continue to work to meet the preset requirements of their particular departments and contracts. The PIC offered them the opportunity

to work differently, but not the impetus. The impetus seemed to lie in meeting the targets set out to them a priori by “higher authorities” that monitored the Ferens PCT.

5.4.3 Project Evaluation

In December 2005, the PIC pilot project underwent an evaluation. Despite the project failing to bring together important members of staff from different departments, the users surveyed expressed satisfaction with the new system. Statistics revealed that in a span of eight months, the service was accessed by nearly 5000 users, and GPs were increasingly recommending patients to use the system.

One GP noted:

As a GP I am aware a number of patients seem to be using it and I direct some patients who want information but do not have easy internet access to use it here. I like it and am happy for it to remain.

The Practice Manager in one of the pilot sites noted:

I feel the touch screen is an excellent facility for patients to access information whilst waiting to see a GP and also patients calling into just use the machine. The reception states that the machine has regular use by the patients, and sometimes it is the children showing their parents how to use the machine.

The Patient Information Centre (PIC) was gaining in popularity amongst users and professionals as a modern, safe, and reliable mechanism to provide patient information with equity of access.

I prepared a proposal for a phased roll-out of the PIC in January 2006, with the support of the Performance Management department of Ferens PCT. Considering the hurdles of staff working in an isolated manner, the assumption was that as time passed, they could be convinced to work differently. The proposal also included for the license to use the PIC to be renewed for the following year for the existing sites. The Performance Management department, who commissioned the project, was confident that given the potential benefits of the PIC, its phased roll-out and its license renewal would be approved by the PCT without much resistance.

However, the reality was very different. The Performance Management department put forward the proposal for the PIC roll-out to the Professional Executive Committee (PEC) in January 2006. The PEC was the professional body consisting of practicing clinicians and core administrators, who advise on PCT policymaking. The PEC summarily rejected the proposal on the grounds that Ferens PCT did not have the budgets for a roll-out of the PIC, and that during the pilot stage, the PIC did not make any difference to the PCT in terms of patient information being provided in a different and more effective manner. The rejection of the pilot could not be supported by the evidence from the project itself, which clearly indicated a number of positive outcomes, and no other evidence was provided by the PEC to prove otherwise.

There seems little doubt that it was more to do with the PEC's view that the PCT was then going through a tough time financially, and investment could be made only for cases that were absolutely essential and unavoidable for the core business processes of the PCT.

I then made a case with the Performance Management department to support an alternative proposal that considering the funds that were already invested by the PCT in purchasing the machines and the license the previous year, the PEC should at least support the PIC with license renewal of the existing machines for the pilot sites, if not with the roll-out with new machines. However, this case was rejected as well on the grounds that Ferens PCT simply did not have the funds available. It was recommended that the case would be taken up by the Local Delivery Plan (LDP) Committee along with the Professional Executive Committee (PEC). LDP was the plan of local capacity building of NHS services tailored to local needs, within resource constraints. However, there was no eventual agreement on the renewal and the project was indefinitely suspended.

Health Computer, which provided the service and the license, continued offering the same level of service without a fee, in spite of there being no formal assurance from Ferens PCT to *Health Computer* that they would be paid for their services beyond the life of the contract. The situation did not change and *Health Computer* eventually suspended providing the services.

I found the lack of a strategic approach in handling this project right from the early stages of design and planning. The mismatch between the roll-out vision of the Patient Information Centre (PIC) in the initial stage of the pilot and the lack of funds of the PCT for the roll-out in the final stages of the pilot demonstrated a failure to have a long-term view of the IS and lack of effective onboarding of the Finance department of the PCT and other important directorates and department to create a long-term strategy. A simplistic approach was taken for the project that was to face the odds of the complexity of the organisation.

It later emerged during the evaluation phase of the PIC that the Performance Management department of Ferens PCT had initially commissioned the funds to start the pilot because it had a potential under-spent in its finances, which it wanted to invest in something useful related to IT. However, in doing so, it assumed that Ferens PCT would have the financial provision to invest in the roll-out of the PIC, provided only that the pilot worked satisfactorily. However, in reality, Ferens PCT did not have any such funds at the first place to invest in the roll-out of the PIC or on any other information system in the following year. The decision of the Performance Management department of investing in the PIC was made without cross-departmental discussion. The very thought of investment in something useful was essentially geared towards short-term gain, where long-term sustenance was not seriously considered. The short-term gain being the investment of available funds in anything useful related to IT. This was a case of breakdown of interdepartmental communication, which was a result of working within rigid barriers of departments.

Considering how the project unfolded, I find it reasonable to conclude that this project failed; or maybe the organisation failed the project!

5.4.4 Organisation Reality Following the Event

I first formally wrote down this case in late May 2006. The situation at Ferens PCT was very different at that time from when the PIC pilot project was conceived. Ferens PCT was in the process of a merger with another large PCT in the neighbouring area to create one single PCT to serve the whole city of Ferensway. When I contacted the PCT about the future strategy to be adopted for the PIC as part of my “post-mortem” analysis, the response was that it was still awaiting approval from the Professional Executive Committee (PEC) and the Local Development Plan (LDP) committee. The scenario in the National Health Service (NHS) had also undergone changes. The NHS was predicted to be operating at a deficit of almost a billion Pounds at the end of 2006. All Trusts in the UK were instructed to stay away from “avoidable” expenditure. Ferensway PCT was advised to save GBP 2.9 Million in 2006, by the Strategic Health Authority (SHA), the regional body which monitored the functioning of Trusts. Hence, the climate of operation for Ferens PCT had itself changed, which largely left the PIC project in the middle of no less than a fiasco. (I have discussed the SHA and PCT structure in greater depth in Chap. 4).

5.5 Analysis of the Project Failure

My assessment of this situation for the PIC is that the pilot was a failure. Here, I will use a systems understanding to delve into the experience of the PIC and present a discussion of what led to this undesirable outcome. I will borrow existing theories and concepts to further the critique and present an argument for what I call a need to move from the mindset of “barriers” to that of “boundaries”.

5.5.1 Patterns of Thinking in Information Systems (IS)

I borrow the concept of patterns of thinking in information systems (IS) from Cordoba-Pachon (2010). IS has been used in social settings with a variety of intent that include creating efficiency and effectiveness at work, facilitating a better life, bringing in entertainment to social settings, enhancing safety and security, so on and so forth. Design and deployment of IS and what it is meant to deliver is driven by ways of thinking harboured in teams or lead by a team leader with the rest falling in line. Members of the team usually have similar thought processes about the vision of the IS project that influences action steps, policies and implementation plans. This set of people can be said to think and act in a particular “pattern”. Patterns push people to follow a specific direction they are influenced by or that they are familiar with, and this also makes them fall prey to complete oblivion to another way of thinking and acting (De Bono 1976). This situation is represented in Fig. 5.1.

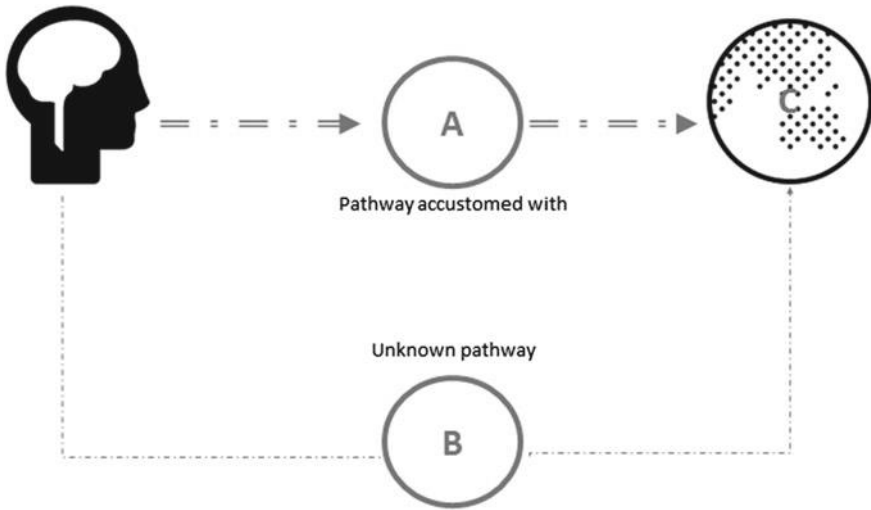


Fig. 5.1 Patterns of thinking (Adapted from Cordoba-Pachon 2010; p. 66)

Figure 5.1 illustrates the concept of patterns of thinking. If one has to reach point-C, they will usually like to go through route-A that they may be accustomed to (marked with a more prominent path). But they can also reach point-C via point-B that they may not be familiar with (marked with a less prominent path). Hence the latter pathway can be completely ignored. The way a project team envisions the outcome and the way they choose to reach the destination have consequences for the effects they leave in the pathway and impacts the way they touch stakeholders along the way. The patterns of thinking understanding help us in evaluating our own approaches towards IS projects and how we choose our pathways to execute projects. This understanding can also lend a critical perspective to IS project conceptualization and design asking questions on preset ideas and mental models, which is central to systems thinking.

Cordoba-Pachon (2010) talks of three patterns of thinking in IS:

- *Idealist pattern*: Driven by an urge to create a “transformation” into an ideal state in the system. Goals are envisioned clearly and all efforts are directed in a concerted fashion towards the same. IS is perceived to facilitate new modes of interaction between people as a result of this transformation. A more project-management approach is undertaken in this pattern where technology implementation is looked upon as an end in itself assuming that once this is done, the envisioned system will fall in place seamlessly.
- *Strategic pattern*: Focuses on “engagement” along the route of IS design and implementation. Understanding of stakeholders and their involvement is considered highly critical through the process. Stakeholder consultation and involvement is taken into consideration throughout the lifecycle of an IS project. Social

relationships are considered to be at the centre of IS adoption and how people interact with technology.

- *Power-based pattern*: Understands the “unintended consequences” of IS in society. Going by the above two patterns, one may adopt a purely idealist pattern to put in place a transformation journey or one may choose to take stakeholders along the journey. But power relations, hidden dynamics and the technology itself can result in consequences that are totally unanticipated, and that project sponsors and users later need to simply deal with. The power-based pattern keeps teams constantly cognizant of such dynamics and implications of the project.

No particular pattern is superior or inferior, good or bad. Taking a holistic approach to IS that accommodates for flexibility and adaptiveness requires the presence of all three patterns of thinking. The idealist pattern gives direction and focus. The strategic pattern enables stakeholder involvement and participation. The power-based pattern lets us be cognizant of human dynamics and emancipation. With this perspective, I will attempt an understanding of why the PIC pilot failed in Ferens PCT.

5.5.2 A Perspective on Why the Project Failed

I relate the approach taken for the project to an idealist pattern of thinking with a significant bearing of power dynamics operating through its lifecycle. Through the deliberations, I will draw from the strategic pattern to throw light on how the journey could have been different if this was considered.

This case is an example of planning and deploying an information system (IS) in a complex environment. However, the manner in which Ferens PCT approached the project was effectively confined within the Performance Management department. The department had the idealist vision of leveraging IS to address a real need of providing multilingual health information to a diverse population. This need was surfaced by my research that was presented to the Ferens PCT. The department approached the project in a unidimensional manner. The intent was just, and my understanding is that an idealist pattern of thinking construed the objective as the installation of the IT system assuming that this will contribute to the betterment in health information access for ethnically minority groups. It had the budget from an under-spent and there was a need; the prompt decision was to go ahead. The department demonstrated a sense of responsibility for the society and harboured the assumption that the PCT will support the sustenance and roll-out of the PIC in the following years.

As the PIC project lead, even I was not informed in the beginning that the budget was allocated for the pilot only because there was an under-spent. I was informed about this only at the evaluation stage of the project, when no matter however much I tried, the outcome would likely to have been the same—that would have been a “no”.

At an operational level, the PIC offered the opportunity of effectively bringing together staff from different departments to work together participatively towards a common objective; but it failed to achieve this. The objective of enabling staff to rethink the mechanism of patient information provision was negated by staff continuing to do what they had always done with regard to patient information provision.

Information leaflets continued to be prepared in paper form in English only, and staff responsible for this perceived the PIC as just one more system that existed. This had resulted in a situation where initiatives were replicated for the same purpose. Staff also assumed that the PIC would exist side-by-side with other systems of patient information provision, and that the PIC was mainly the terrain of the IT department. Staff also felt that there were numerous pilot projects in the NHS, and no consistency in the manner in which services are provided.

The PIC failed to bring together people and make them think differently because of the very culture of the organisation. In addition, there was also a change fatigue that had set in the system due to repeated pilots and new processes and technologies introduced on a continual basis.

Staff continued to work on directives issued from their individual departments, with a lack of insights into how they could work differently with the new environment offered by the PIC. The culture of Ferens PCT failed to adapt to the change that was introduced. The barriers that existed within the organisation prevented adaptability and flexibility.

Whilst departments rightly have the purpose of integrating people to work towards achieving goals, it seemed to have been forgotten here that the organisation as a whole must work towards the goals in achieving objectives common to all departments as an act of a shared vision.

These issues demonstrate that at a planning and operational level, senior management and staff in Ferens PCT were bound within their own departments. I quoted Starbuck and Mezias (1996; cited in Starbuck and Hedberg 2001) in Chap. 1, who found in their research that organisations define their responsibilities and their environments “very narrowly” leading to a kind of a pathological compartmentalization; and this has to be overcome to achieve an intra-firm collaborative synergy. What was observed in the case of Ferens PCT was an example of pathological compartmentalization in action.

I have earlier discussed that healthcare is a complex domain, ill-suited to the largely bureaucratic approaches that were favoured by the NHS. The management systems of the NHS might be seen as attempts to control variety and complexity through a reductionist approach. As I discussed in Chap. 1, reductionism seeks to understand systems in terms of their constituent parts, assuming that these parts operate autonomously and independently. This approach, which sees organisations as rigid in structure, with departments working in an isolated manner, is ill-suited to the healthcare sector with its mix of professionals working towards common objectives but within fairly loose forms of organisation. Here, a more holistic and systemic approach might be seen as more likely to bear fruit, and such an approach is fundamental in systems approaches to management. Systems thinking can provide

significant philosophical and practical underpinnings for Information Systems (IS) research and projects. IS needs to be perceived as a network of activities, rather than as stand-alone technological projects managed by the IT department. For effective planning and deployment of IS, teams need to work across departments forming networks, the members of which can then be enabled to think more systemically about the organisation as a whole, instead of perceiving their own responsibilities in an isolated manner. Merali (2006) notes:

...in order to engage effectively in the discourse of the network society, there are two shifts necessary in the “classical” conceptualisation of information systems:

- a shift in the focus of “systems thinking”:
 - from focusing on discrete bounded systems to focusing on networks and
 - from focusing on the structural properties of systems to engaging with the dynamics of systems, and
- a shift in ontological assumptions about information: from focusing solely on discrete entities (individuals, organizations or applications) as loci for information creation and interpretation to incorporating the role of the network as a locus for these processes. (p. 224).

This understanding is of crucial significance for the case of Ferens PCT. This is because it was understood that if the deployment of the new information system, as a pilot project in the PCT, was successful, it would have been used to inform a whole systems redesign of Ferens PCT with regards to patient information provision. Hence, this was a project where a systemic perspective was the prerequisite of success. However, as the analysis of the project failure shows, the challenges that this project faced was a direct result of an un-systemic way of working within an organisation defined by departmental barriers, instead of boundaries.

5.5.3 What if the Pattern of Thinking Was Strategic

A strategic pattern of thinking would have approached the situation in a different way. This would have involved necessary stakeholders from the very early stages for consultation, decision-making and implementation. Stakeholders would be both who were involved or affected by the IS. This would include both internal and external stakeholders. Internal would be other departments and directorates of the PCT; external would be users and general practices. To a certain extent, external stakeholders were addressed through my research and through the capacity building sessions I facilitated as part of the PIC implementation. However, the involvement of internal stakeholders in the PCT was a complete miss from my side and from the side of the Performance Management department. In retrospect, I see myself as complacent in the project management to have accepted the unidimensional idealist vision proceed without many critiques. Probably, my own excitement of having got an opportunity

to implement recommendations from my own research was overwhelming enough for me not to question anything at that point in time.

5.5.3.1 Elements in Strategic Pattern for IS

Cordoba-Pachon (2010) talks about four elements in developing a strategic pattern of thinking for IS. I discuss these below in the context of this case.

- *Concerns*: This is about identifying what stakeholders are concerned about and how these concerns can be addressed. My retrospective analysis of this case indicates that concerns of the actual beneficiaries were taken into consideration, but I certainly did not engage them in the design of the system. My research on the ethnic population in the city was certainly focused on the target population, but the research design was itself management led as opposed to concern led. I call this management-led because as a researcher I jumped into the field driven by the idealist pattern of Ferens PCT to enable better multilingual information by IS, but I did not explore from the target population’s perspective what they actually wanted. The fact that the receptivity of the PIC was highly positive, as we found out in the evaluation phase, amongst the target population was a matter of sheer luck. Exploring concerns of the internal stakeholders of the PCT was a complete miss as I mentioned earlier. Perhaps the unidimensional approach of the Performance Management department along with my own complacency contributed to this. A concern-led approach, on the other hand, would have led to the unfolding of concerns (note the plural) from multiple stakeholders through the process and could have led to the better receptiveness of the project enablers, i.e. general practices and the other directorates and departments of Ferens PCT.
- *Sweeping generalisations*: Generalisations are assumptions that we use to create abstract concepts of what can (or cannot) be done. Generalisations are based on our culture, values and individual thought processes. They lead us to understand people, cases and experiences in a certain way because we are used to it—very much related to De Bono’s “pattern of thinking”. Often generalisations create a state of “cocoon” for us within which we face our own comfort. A systemic mindset would rather need to challenge generalisations and sweep-in other generalisations to make sense of the situation. In the case of this project, I have said little about the process of selection of *Health Computer* as the preferred partner for the project. The connect with the company happened as a result of a sales call from *Health Computer* to Ferens PCT. This lead was passed on to me from the Trust as an “exciting” solution that we should explore. I was informed of specific budget availability and was given a timeline within which the project needs to be completed. I jumped into the situation with a “generalisation” of the solution and shaped the deployment plan within the constraints I was operating under.

In retrospect, I would articulate some of the generalisations made as under:

- We know there is a concern with multilingual health information in the Ferens PCT area.
- Technology is the best way to resolve this concern.
- There is one suitable technology solution that can be offered in this case that is tried and tested.
- We have a specific budget available that needs to be utilised; funds for scaling the programme will be arranged if we are able to showcase a successful use-case.
- Acceptability of the solution is not a doubt as what we are offering is so perfect.
- Once the technology falls in place, people will fall in place too.

Unfortunately, the generalisations become barriers creating artificial walls around what we do and how we do things. Cordoba-Pachon (2010) talks about challenging such generalisations that are shaped by our culture, society and individual experiences and constraints. He quotes Mendoza who envisions a state of continual criticality to challenge generalisations (Cordoba-Pachon, 2010). This is instigated by a sense of curiosity, openness, experimentation and exploration of possibilities. This nature in turn demands courage and risk-taking ability.

- *Systems methodologies*: Approaches and methodologies from systems thinking can come a long way in problem-solving such situations. The context here falls in the realm of the simple-pluralist position in the SOSM matrix (discussed in detail in Chap. 3). Methodologies inspired by soft systems thinking that are handy for this grid help in bringing people together, consider diverse stakeholders and challenge assumptions. Some of such methodologies include Soft Systems Methodology (SSM) (discussed in detail in Chap. 6) and Interactive planning (IP) (discussed in detail in Chap. 7). SSM brings together stakeholders with diverse viewpoints and engages them in an intellectually creative process to come up with perspectives for social planning and execution. IP can help to establish clarity in end objectives, means planning, resources planning and execution excellence. The interventionist can articulate review mechanisms and success metrics and dependencies as part of this process. Approaches in the simple-pluralist position expose the interventionist in a situation where the issue could be one, but stakeholders can have multiple viewpoints and there is a need to bring them into a common understanding.

The approach adopted here would have been more suited for a situation in the simple-unitary position in the SOSM grid, where issues are singular and there is parity of thought amongst the stakeholders. This approach was ill-suited in the planning and execution of the PIC project, as we clearly saw in this case.

- *Boundary critique*: I have discussed the concept of boundary critique in detail in Chap. 3 through the works of Churchman (1968), Ulrich (1996) and Midgley (2000). It is about constantly questioning our own assumptions and values that make us draw our own boundaries. A systems mindset constantly lets the interventionist broaden one's boundaries of thought, definitions, stakeholders and approaches. I referred to De Bono (1976) earlier and his work on patterns of thinking. It is through boundary critique that rigid patterns of thinking can be overcome and alternatives explored.

In retrospect, as the project lead of the PIC pilot, I should have devolved my own boundaries beyond the Performance Management department of Ferens PCT. The bureaucracy and constraints of time and resources did not allow me and my project sponsor to do so. We seemed to have created barriers around ourselves and set off with the project with the same. The only time we attempted to bring together a set of different stakeholders together was during the roll-out of the PIC in sessions that were meant to be for orientation and capacity building. These sessions were purely meant to be operational, and not strategic.

Even during the project evaluation, our metrics were purely management-driven as we assessed numbers of access, downloads and visible engagement of children with the machines. But the evaluation did not take into account the user perspective on if the PIC really made a difference to their lives. Evaluation itself was not user-centric. This was also the result of barriers created by an idealist pattern of thinking in IS that may lead the interventionist look at technology as an end in itself.

A strategic pattern of IS takes a holistic approach and systems methodologies can be an enabler for the same, as represented in Fig. 5.2. Flexibility plays an important role in this pattern in the ability it creates to adapt designs and plans suited to concerns of different stakeholders. A systems mindset instigates the questioning mode for boundary critique and systems methodologies bring multiple perspectives to be surfaced and understood in an actionable manner. A systems analysis, applied in retrospect, brings to light several drawbacks of the PIC pilot as we have discussed above.

Of course, it could simply be argued that competent management would not have committed funds to a pilot project when there was not secured funding to roll-out the complete system. But, in essence, this emphasises the point: an approach which considered the wider implications of the system from the outset, not only had the capability to ensure that any implementation would be a better fit with the organisation as a whole, but would even have ensured that the pilot did not get off the ground! What is required in organisations of today is the ability to be adaptive to change and

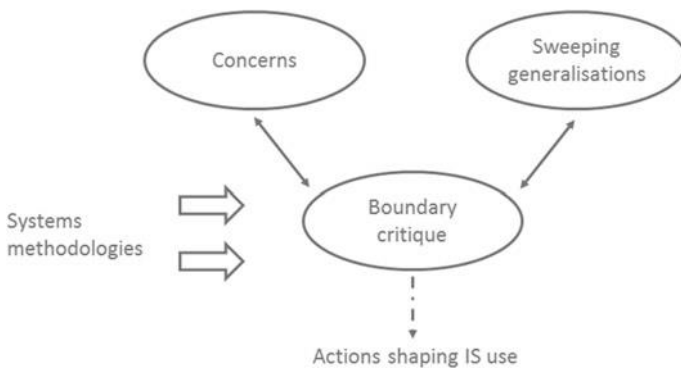


Fig. 5.2 Elements of the strategic pattern of IS (Cordoba-Pachon 2010; p. 91)

flexibility. To tackle the variety in the environment, organisations need to increase their own variety and behave as complex adaptive systems. A complex adaptive system is one which can change and shape itself according to the demands of the environment so that control and order become emergent, rather than predetermined (Dooley 1995).

The organisation is very complex, but the manner in which the project was implemented failed to match this complexity.

I now go a step further to understand the case from a power-based pattern of understanding.

5.5.4 Power-Based Pattern

IS projects do not operate in isolation from human relationships. As Foucault (1982) advocates, every relation is a dynamic of power and relationships in the context of IS is not outside the consideration. I would like to introduce Foucault's work (as borrowed from Cordoba-Pachon 2010) before getting into discussing the power-based pattern for IS in the PIC project.

Foucault breaks down the concept of power from the grandiose understanding of power to be driven by established institutions and the state to what can be experienced and observed in individual interactions and micro-relationships. He identifies power in everyday interactions between individuals and teams that give rise to "true knowledge" and it is also these relationships that shape our understanding of the truth that he calls "discourse". He further goes on to argue that the power-knowledge discourse does not necessarily imply that knowledge is power; rather it is the nature of the relationship that suppresses certain knowledge at the hands of another. It is this discourse of promotion and subjugation that has led to certain disciplines and concepts to establish legitimacy over others. This includes how society defines systems of knowledge, language, social codes, cultural norms and academic disciplines. Language and social codes are used to "objectify" and "legitimise" one discipline over another, one type of thinking over another and one pattern over another. This discourse further reinforces itself into the society to define individuals and groups as "subjects" or those guiding and directing norms. Foucault argues that in every interaction we go through as parts of organisations, individuals and social systems, we constantly interface with a discourse of power.

Foucault goes on to say that at another more personal level, individuals submit themselves to norms and directives as an act of exerting power on the self as a matter of "ethics". Individuals proactively accept society and institutions as "superior" and unquestionably accept social codes—both written and unwritten—with the fear that any dissociation from the same will lead to their isolation and alienation. This leads individuals to become a certain kind of "subject" they want to become and that seems to be "ethical".

Power itself is a dynamic phenomenon and can change hands over time. Dominant power creates resistance and the resistance force itself can, over time, take over as a

dominant power. Its nature is complex and not well defined at times making power play a transitive characteristic. As Foucault (1982) says the effect of power cannot be fully foreseen and can result in consequences and characteristics that are completely unintended. Hence the effects of power dynamics can be intended or unintended, seen or unseen, but never static.

With this context of power-based pattern of IS, I will now discuss the PIC project considering three aspects identified by Cordoba-Pachon (2010)—power relations, constraints and possibilities, and ethical behaviour.

5.5.4.1 Power Relations

Power is ubiquitous and no one can exist external to power relations. Any interaction in any social setting occurs in a context of power relations and also leads to power development. Awareness of this fact leads one to have more control over the situation and participate in the social setting that we continually and consciously renegotiate with and redefine.

Introspecting on the very mandate of the PIC, we see that the need for a multilingual health information system itself came from Ferens PCT that I later found out was because the technology vendor reached out to the PCT and this was fuelled by the fact that the Performance Management department had an under-spent. This was a novel initiative but the novelty itself was not authentic enough because of the origin of the project (namely a sales call and an under-spent). However, the very act of commissioning the project legitimised the position of the PCT as an organisation that was empathetic to the needs of the ethnic minority population, which was an “ethical” stance to take at the first place. My retrospective understanding is that this was, however, a diversion of funds because the funds had to be utilised in some way and *Health Computer* just provided the channel to divert the funds. The following year saw the discontinuation of the project due to the reasons discussed earlier and the little help the technology brought to the “subjects” was also discontinued along with it. All funds (essentially taxpayers’ money) was nothing but a mere waste.

As the project lead, I also led the study that established the need for a multilingual patient information system. However, if I look back, the management-centric bias in the study is evident where I reached out to caregivers as delivery agents and relied on extensive secondary resources. My interviews were with NHS management and senior academics. I employed a covert participant observation method with a research assistant. But this research did not reach the target population itself; nor did it involve them in the design and implementation of the PIC. I found myself in a position of power in relation to the actual beneficiaries of the system.

Power dynamic was clear within the functioning of the PCT. The head of the Performance Management department was clearly at the receiving end within the larger system. Despite their efforts to push the case for the PIC roll-out, the more powerful officials and interdepartmental barriers did not allow him to continue with a programme that was for the benefit of the population the PCT existed to serve.

The NHS bureaucracy played a critical role in creating a complex dynamic in the setup. Here I am not delving into a discussion on another important aspect in the NHS, i.e. power dynamics between clinicians and managers that I have discussed in detail in Chap. 6.

5.5.4.2 Constraints and Possibilities

Given the reality of the omnipresence of power as social agents, we need to understand and analyse the dynamics of power so that we understand the constraints power poses and the possibilities for action it offers in the context. This is about digging deeper to see unseen relations, anticipate unintended consequences and understand asymmetry of interpersonal interactions that shape how we behave, and what we accept or reject.

As a project lead, I was perhaps coloured by the then current realities of the system that led me to be absorbed in the system itself. I was unable to see the constraints through the research, planning, implementation and evaluation stages, and this led me to be the system itself rather than being the agency that could challenge incumbent realities and decisions. The PIC pilot itself was technically “successful” but the system failed the PIC and this was an unintended consequence. Although I have emphasised on the constraints of operating in a large bureaucratic setup, I was as much responsible as the rest of the teams to have been unable to see the PIC to a successful roll-out in the PCT.

5.5.4.3 Ethical Behaviour

Power relations have shaped norms, social patterns and behaviours that exercise control over individuals to demonstrate “ethical” behaviour. Recognition of this aspect enables us to be vigilant about the same and create conditions for “subjects” to demonstrate behaviours that they truly aspire for and live the norms they would like to cherish.

The reference to “ethical” behaviour flows through the discussions I have presented through this case. This starts with the commissioning of the project itself; the question I ask is that if “ethical” behaviour really ethical (referring to the point I raised above under power relations)?

Coming to the capacity-building sessions for the PIC orientation, it was again my decision to invite the management and the operational staff for the sessions. In retrospect, perhaps involving representatives from the users could have lent a different experience to operationalize the project itself.

Even coming to the impact evaluation I carried out of the PIC pilot, this was again from a management perspective as I assessed user uptake from a purely numbers perspective without asking the actual users if the PIC made a difference to them.

5.6 Barriers to Boundaries

Finally, I will reflect on my experience of the PIC project in Ferens PCT. This was a classic example of silo working and myopic functioning. The modus operandi of the Performance Management department of working within its own confines was an act of creating a barrier around the department within which thinking, planning, resource allocation and project management happened. Departments are created to ensure work allocation, bring in efficiency and accountability in organisations. Boundaries around teams, departments and functions facilitate better management and predictability. However, when people start considering these boundaries as opaque and restrict interactions outside their boundaries, that is when boundaries no longer remain facilitative; they become barriers. Barriers are prohibitive; they restrict information flow and exchange of ideas, and create cocoons of self-containment. This, in the long run, leads to saturation of thought and eventual lack of support from the larger system within which they are supposed to exist.

I discussed the cybernetic principle of creating more variety to counter external variety in Chap. 4. Barriers by their restrictive nature contain the ability to think beyond silos and thereby limit creativity and variety. They prohibit learning and thereby increase system vulnerability to complexity. Boundaries, on the other hand, enable greater flow of information and communication, encourage learning and bring in greater creativity. This, in turn, is able to attenuate variety and thereby system tolerance to complexity.

In an IS project, boundaries should enable the exchange of ideas and leverage of competencies for collaboration and cogenerative learning (Elden and Levin 1991) (Cogenerative learning is defined in Chap. 4). In the case of Ferens PCT, the situation was quite different. Even towards the end, when the shortcomings of siloed working were discovered at the time of the license renewal of the existing machines, the PCT management failed to appreciate the efforts and resources already invested in the PIC to keep it alive. Rather it saw its finances from its rigid lens of inflexible budgetary allocation and failed to support even the license renewal fees for the PIC.

At an operational level, the PIC failed to bring together people and make them think differently because of the very culture of the organisation. Staff continued to work on directives issued from their individual departments, with a lack of insights into how they could work differently with the new environment offered by the PIC.

Working with a boundary mindset encourages flexibility and creativity. Boundary critique as a concept itself enables questioning our values and how we choose to draw our own boundaries of thinking and our definitions. This eventually leads to a devolution of power dynamics. Authenticity in this devolution of power dynamics can even create conditions for enabling ethical considerations in social systems. On the other hand, working with a barrier mindset encourages inflexibility and rigidity. Power emanates out established status-quo, and “subjects” remain where they are.

The endeavour should be to move from barriers to boundaries. Whereas boundaries are facilitative, barriers are prohibitive. An interventionist needs to endeavour to

move from a barrier mindset to a boundary mindset, for which the following qualities need to be kept in mind:

- Challenge one's own mental models.
- Critique preset assumptions about why reality is constructed the way it is.
- Consideration of the human activity system at the centre of the design principle.
- Openness to learn.

A number of findings can be drawn from this case at a descriptive level, and these are outlined below. Further to this, there exists the possibility of using the case to address deeper, systemic insights, and the support materials available with the case help to further this understanding.

- For IS projects to be successful in a complex social setting, teams need to work beyond siloes and across departments through planning and operational levels.
- The implementation of IS projects needs to address long-term organisational objectives and sustenance of the system, as well as short-term gains.
- There is a difference between seeing the separation of departments as barriers to interaction, and seeing them as boundaries to be permeated. At the planning level in Ferens PCT, what existed were barriers, not boundaries. The PIC offered the opportunity of effectively bringing together staff from different departments to work together participatively towards a common objective; however, it failed to achieve this.
- Participation in decision-making from the earliest stages of a project can offer the opportunity to determine whether IS projects will be sustainable or not.

5.7 Conclusion

In this chapter, a case of an IT project failure from a systems thinking perspective is presented. This was a retrospective analysis of a situation where I was involved in directly as the project manager. I started by introducing the organisation under consideration. I then talked about IT project management and the challenges they encounter. I then discussed the case in detail right from its genesis, planning, execution and impact evaluation, leading to a state of unfortunate closure of the project that I defined as a failure. I undertook a detailed analysis of the case from a systems thinking perspective and considered the same under different patterns of thinking in IS. I finally argued for the case for a need to move from a barrier mindset to a boundary mindset. I argued that whilst boundaries are protective, barriers are prohibitive. I also presented specific insights on how to make a shift from a barrier mindset to a boundary mindset.

I finished the analysis with key considerations for IS practitioners and project managers. Learnings from this case analysis can be handy for IS project design and implementation. Elements of power and ethics have been highlighted that can lend a completely new lens for approaching IS cases from an “ethical” standpoint.

In the following chapter, I will delve deeper into the contextual nuances of the healthcare sector, in general, and the NHS, in particular, to lead a discussion on power dynamics in the system and how it presents its own challenges to further meaningful project strategy and implementation.

References

- BBC News (2005) Record immigration levels to UK. <http://news.bbc.co.uk/1/hi/uk/4359756.stm>. Accessed 23 Jan 2006
- Ben-Zion R, Pliskin N, Fink L (2014) Critical success factors for adoption of electronic health record systems: literature review and prescriptive analysis. *Inf Syst Manag* 31(4). <https://doi.org/10.1080/10580530.2014.958024>
- Beynon-Davies P, Lloyd-Williams M (1999) When health information systems fail. *Top Health Inform Manag* 20(1):66–79
- Chowdhury R (2007) Healthcare knowledge management and information technology: a systems understanding. In: Bali RK, Dwivedi AN (eds) *Healthcare knowledge management: issues, advances and successes*. Springer, New York, pp 41–54
- Chowdhury R, Clarke S, Butler R (2007) Healthcare IT project failure: a systems perspective. *J Cases Inf Technol* 9(4):1–15. Idea Group
- Churchman CW (1968) *The systems approach*. Delacorte, New York
- Cordoba-Pachon JR (2010) *Systems practice in the information society*. Routledge, Oxon and New York
- Cucciniello M et al (2016) Managing health care in the digital world: a comparative analysis. *Health Serv Manag Res* 29(4)
- Dass K (2017) *Critical success factors in healthcare IT projects*. Project Management Institute, North Carolina (USA). <https://www.slideshare.net/DrKaaliDassPMPPhD/ncpmi-health-careoct2017>. Accessed 1 July 2018
- De Bono E (1976) *Teaching thinking*. Temple Smith, London
- Department of Health (2006) http://www.dh.gov.uk/AboutUs/DeliveringHealthAndSocialCare/TheHealthAndSocialCareSystem/HealthAndSocialCareSystemArticle/fs/en?CONTENT_ID=4105335&chk=IRrIvj. Accessed 11 May 2006
- Dooley K (1995) A complex adaptive systems model of organizational change. *Nonlinear Dyn Psychol Life Sci* 1(1):69–97
- Elden M, Levin M (1991) Cogenerative learning: bring participation into action research. In: Whyte WF (ed) *Participatory action research*. Sage Publications, Newbury Park, California
- Foucault M (1982) Afterword: the subject and power. In: Dreyfus H, Rainbow P (eds) *Michel Foucault: beyond structuralism and hermeneutics*. Harvester Press, Brighton
- Greene J (2018) The top 9 reasons for IT project failure: is your project at risk? <https://www.askspoke.com/blog/it/reasons-for-it-project-failure/>. Accessed 3 July 2018
- Healthcare Commission (2005) 2005 performance ratings. <http://ratings2005.healthcarecommission.org.uk/>. Accessed 17 Jan 2006
- IT Cortex (no date) Failure rate: statistics over IT projects failure rate. http://www.it-cortex.com/Stat_Failure_Rate.htm. Accessed 23 Jan 2006
- Jorgensen DL (1989) *Participant observation: a methodology for human study*. Sage, Newbury Park
- Markets and Markets (2017) *Healthcare IT consulting market by type (Strategy, Project Management, Integration, Migration, Security, Risk Assessment, Analytics, BPM, Regulatory), end user (Provider, Hospital, IDN, ACC, Home Care, Payer, Public, Private)—forecast to 2022*. <https://www.marketsandmarkets.com/Market-Reports/healthcare-it-consulting-market-42622745.html>. Accessed 4 July 2018

- Midgley G (2000) *Systemic intervention: philosophy, methodology and practice*. Kluwer Academic/Plenum, New York
- National Statistics (2001) Neighbourhood Statistics. <http://www.neighbourhood.statistics.gov.uk/dissemination/LeadTableView.do?a=3&b=276821&c=Hull&d=13&e=16&g=389985&i=1x3x4&m=0&enc=1&dsFamilyId=890>. Accessed 18 July 2015
- Project Management Institute (2017) Pulse of the profession: 9th global project management survey. http://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/pulse-of-the-profession-2017.pdf?sc_lang_temp=en. Accessed 3 July 2018
- Protti D (2005) The benefits of computer technology can only be realised when systems of work are changed. NHS Connecting For Health. <http://www.connectingforhealth.nhs.uk/worldview/protti6/>. Accessed 3 April 2006
- Starbuck WH, Mezias JM (1996) Opening Pandora's box: studying the accuracy of managers' perceptions. *J Organ Behav* 17(2):99–117
- Starbuck WH, Hedberg B (2001) How organisations learn from success and failure. In: Dierkes M, Antal AB, Child J, Nonaka I (eds) *Handbook of organisational learning and knowledge*. Oxford University Press, Oxford
- Ulrich W (1996) Critical systems thinking for citizens: a research proposal. Centre for Systems Studies Research Memorandum #10. Centre for Systems Studies, Hull
- Yorkshire and Humberside Consortium for Asylum Seekers and Refugees (2006). <http://www.refugeeaccess.info/default.asp?step=4&pid=283#y&h2>. Accessed 13 June 2018

Chapter 6

Strategic Convergence: Overcoming Differences in a Professional Setup



6.1 Introduction

My experience of working in change management in the healthcare setting in the UK during 2003–2006 brought to my notice, amongst other things, the interesting dynamics that exist between clinical and managerial/administrative functions.

Discussions in this chapter are reminiscent of some of the references I have made earlier in this book. In Chap. 4, whilst discussing a problem structuring case, I spoke about unclear flow of communication and control within the National Health Service (NHS) in a highly complex and bureaucratic setting. Overlap of roles and responsibilities, clashes in objectives between departments and confusion in success metrics for clinicians set by managers resulted in lack of trust and a sub-optimisation of organisational processes. Stakeholder participation was amiss, clinicians being the key stakeholder cohort. In Chap. 5, whilst discussing the implementation of a multilingual Patient Information Centre (PIC) I talked about a lack of stakeholder involvement and silo working as key factors that led to the failure of the PIC.

In this chapter, I will discuss how I deployed select systems methodologies to bring about strategic convergence between clinical and managerial staff in the NHS that was necessary for effective functioning of the system that was going through transformation with new technology deployment. In the context in which I was involved in the NHS, i.e. deployment of the Connecting for Health (CfH), I shall discuss one of my interventions with specific teams within the NHS that led to the creation of a normative approach for healthcare information system (IS). I call the process “strategic convergence” that I have formulated in detail at the end of this chapter. I leveraged two systems methodologies in this process—Soft Systems

Parts of this chapter have appeared previously in “Critical Insights into NHS Information systems Deployment” authored by Rajneesh Chowdhury and Alan Nobbs (2008). D. Jemielniak and J. Kociatkiewicz (Eds.), *Management Practices in High Tech Environments*. Hershey (USA): Idea Group Inc; pp. 245–262. Reprinted with permission from the publisher.

Methodology (SSM) and Strategic Assumption Surfacing and Testing (SAST)—that I will discuss in detail.

After a context setting for the case, I will lead a discussion on the journey that was undertaken.

6.2 The Context Under Consideration

The ambitious Connecting for Health (CfH) programme had the vision of implementing a highly sophisticated healthcare knowledge management system with IS as the core enabler. It was by far the most ambitious civilian technology project at that time globally. I realised early on that for my role as an enabler of the CfH programme in the East Yorkshire region (discussed in detail in Chap. 4) to be successful, I had to bring both the professional cohorts of clinicians and managers together to work as partners.

Here I will reflect on some of the key issues I encountered. As I discuss the context under consideration, I will make references to existing literature and perspectives in the area of interpersonal dynamics and power play between clinicians and managers in the healthcare setting.

6.2.1 *Interpersonal Dynamics*

The NHS is a large public sector setup that was founded on the principle of providing comprehensive, universal and free healthcare service at the point of delivery to residents in the UK. With the scale of operations, sensitivity of the healthcare sector and multiple specialist skill sets brought in under one roof to manage scale and quality, the NHS had all the qualities of a complex system. Change initiatives directed towards greater efficiency, cost reduction and higher quality were common in the NHS. The management attempted to run the organisation like a corporate enterprise to enable predictability and greater efficiency. Over time, the management attempted to bring in best practices and work processes from private enterprises, sometimes successfully and sometimes unsuccessfully. These included vision and strategy articulation, organisation design and structuring, benchmarks and targets, goal setting and performance measurement, process redesign and technology enablement, and stakeholder management and patient engagement. The NHS employed leading international consultants to design and implement several strategic initiatives alongside employing a large managerial and administrative staff in-house to manage change and ensure smooth functioning of the enterprise.

Commonly observed was a tension arising out of the difference in priorities between clinicians and managers. Talking specifically about CfH, a large administrative setup was created to drive implementation of the programme. Technology adoption and capacity building of clinicians became prime drivers of success for

such roles. At the same time for doctors, patient care and quality of service delivery were the prime drivers—needless to say that technology adoption and capacity would finally lead to the outcomes the managers were set to achieve. But the tension was prominent due to the short-term goals that the administration was driving at the hands of the managers. Due to the transformation the organisation was going through, managers were accorded with significant power that was alienating for the clinicians. This tension was quite overt on several occasions even beyond the CfH programme. Managers who had a clinical qualification (such as medical or nursing degrees) would have a better buy-in than their counterparts who would come in from a general management background without any clinical qualification. A study by Davies et al. (2003) had also highlighted that doctors in managerial positions expressed serious concerns about the state of relationships between managers and clinicians.

Managers were entrusted to drive performance and accountability of doctors. These were closely linked to targets and efficiency measures that had a certain assumption value of the successful application of the technology solutions and platforms that were still in the stage of pilot across the NHS. Managers would develop frameworks and guidelines for doctors to adhere to and deliver within set benchmarks. Periodic meetings and feedback protocols were put in place for managers to assess clinical performance. Doctors on the other hand would always work better if “left alone” without much interference. Measures undertaken to create accountability for clinicians often began to be looked on as interfering mechanisms that hampered service delivery and patient care.

According to Edwards and Marshall (2003), there are five key dimensions where doctors, managers, and nurses differ in their views. These are as follows (cited from Edwards and Marshall 2003):

- **Accountability versus autonomy:** whether they ascribe to accountability to others or personal autonomy.
- **Clinical purists versus financial realists:** whether they accept that all clinical decisions have resource implications and that this matters. Doctors tend to resist the intrusion of financial issues into clinical decision-making.
- **Systematisation of clinical work:** whether this is seen as appropriate—nurses and managers tend to support this view, doctors to reject it.
- **Individuals versus collectives:** unsurprisingly and appropriately, doctors tend to consider the individual patient, whereas those in management positions are more likely to think in terms of groups.
- **Power:** doctors tend to reject the idea that the power sharing implied by team working is appropriate; nurses and managers tend to be more positive.

I observed all the above five key elements in the relationship between the internal stakeholders at NHS. The tense interpersonal relationship between clinicians and managers was a significant impediment in the implementation of the CfH programme. This directly impacted my own work as an enabler of the CfH programme in such a setting.

Table 6.1 Doctors and managers: who needs whom (Cooper 2007; p. 227)

Doctors need managers	Managers need doctors
To resolve complexity of the working environment, which needs managing	Doctors are vehicle of the “health delivery product”
To help them with unrealistic expectations	To ground them in the human and clinical reality of patient care
To mediate with the state	To translate government policy into clinical reality
To set boundaries of care	To recognise where boundaries are ineffective, unrealistic, or inhumane
To act as repositories of negative comments from patients and to deal with complaints against the omnipotence of doctors	To contain their anxiety in certain situations
To have an overview of the needs of the whole service and not be influenced by parochial needs or those of the most powerful and influential	To inform them about the clinical realities in order to decide on appointment of resources
To get the resources that are required to deliver the service	To use resources effectively and efficiently
To help them understand networking and committee skills	To communicate evidence-based clinical practice based on sound scientific principles

My work was closely associated with the administrative setup of the Ferens Primary Care Trust (PCT) (pseudonym used for anonymity), where such interpersonal professional dynamics interfered in decision-making and change management. This resulted in delayed decisions or misguided action steps that eventually did not contribute to the overall vision of establishing a knowledge management system through the CfH programme for Ferens PCT. At the same time, clinicians and managers would also need to work together as their roles are complementary. I refer to Cooper (2007), who talks about the complementarity of this relationship by defining “who needs whom” in Table 6.1.

As a change facilitator, I certainly needed to see this relationship as symbiotic and I made all attempts to navigate through the situation to the best interest of my role in the context.

6.2.2 *Rationality and Change Management for Managers*

The on-ground reality at Ferens PCT meant that managers had to navigate a complex situation where on one hand they had to further the CfH implementation and on the other hand, had to win the confidence and comfort of the clinicians; this was at times possible, at times problematic and at times far from possible. I observed decisions getting stuck at several levels or sometimes wrong decisions being taken due to lack

of information or support, which later fell back negatively on the decision-makers (managers), thereby furthering the tension already existing in the system. I began to look at the rationality behind decisions and actions that was itself in a rough terrain. Understanding this was important for me to delve into the situation from a solution orientation perspective.

Simon (1976) talks about two forms of rationality:

- **Procedural rationality:** This form of rationality stems from the functionalist paradigm where direct cause–effect relationships are observed. Procedural rationality gives rise to approaches where knowledge base and expertise are leveraged to arrive at particular decisions. Knowledge base is built with information, calculation and analysis. Options are debated based on insights and there are fixed criteria that guide evaluation of options and decision-making. These situations normally operate within agreed terms and conditions. Level of complexity may be in terms of scale but may not necessarily be in terms of hidden agenda and fundamental conflict. Procedural rationality works where the end is clear, but there is uncertainty about the means to the end. However, procedural rationality does not work when the end itself is a matter of debate.
- **Substantive rationality:** Whereas procedural rationality is helpful when there is an inherent understanding between participants and the “battles” to be won are the “how” and the “what”, substantive rationality comes into play when we need to move beyond and address the “why” question in a situation where participants do not converge at the level of a common understanding and/or objective. Information and analyses do not provide all the answers required to win such “battles”. The situation here has several interrelated elements, personal agenda and hidden intentions. Here, more important is the process of reasoning rather than the process of choice making. Substantive rationality can guide the process of debating alternatives and questioning why an objective was chosen at the first place.

The situation I encountered at Ferens PCT meant that there was a clear need to arrive at substantive rationality for the CfH programme between the clinicians and the managers. The end itself was a matter of debate at several levels because there were several personas that I observed who perceived and reacted to the CfH initiative in different ways. I discuss these personas more in the next section.

6.2.3 *Personas at Work*

Personas are fictional characters for representing different types of professionals in this setting with respect to their perception of the CfH programme. Existence of different personas in the system added a different layer of complexity. There were three overall kinds of personas that I considered as generic that cut across managerial and clinical professionals.

- **Supporters:** They were people who believed in the intent of CfH and fully supported the initiative. They understood the importance of technology as an enabler.

They might not have been familiar with the formal jargons associated with knowledge management but they identified with the cause that the change was driving. They also recognised that processes put in place were more from an execution effectiveness point of view rather than those meant for monitoring them. Supporters could be both who were involved or not involved during the design and implementation stages. They gave their full support to the initiative and looked at associated challenges as temporary glitches.

- A subcategory of supporters was champions. They unconditionally and wholeheartedly spoke and acted in the interest of the programme and also championed to take their colleagues with them. They also took risks and volunteered to spearhead initiatives. Their involvement or non-involvement in the initial stage did not matter to them.
- **Protesters:** These were people who resisted change due to a variety of reasons, some of which are mentioned below.
 - Resisted change due to inertia that generally emanated from embracing any change. This might not have to do specifically with CfH, but could be true for any initiative. This persona would be comfortable with established ways of working and would see anything new as “too much to handle”. They were also not welcoming to constantly building their skills and capability that is brought in with the onset of any change.
 - Resisted change due to lack of involvement. They believed in the intent of the initiative but were not consulted by the management during the design or the implementation process, and there were a large number of such people. They felt left out during the process and therefore had the tendency to amplify any misses of the project as mammoth shortcomings.
 - Resisted change due to organisational factors, which were again twofold. First, there were too many changes that were constantly being brought into the system on several fronts, not just technology; these included organisation structure, processes, partnerships and delivery models. Very often several projects were pilot, and they were abandoned mid-way not doing justice to time and resources spent. This led to a change fatigue that set into the system. Second, they viewed the NHS as an opaque structure with too much red tape. They did not know who took decisions and how they were formulated. They saw themselves as cogs-in-the wheel and hence resisted from supporting initiatives that they did not see any direct value or short-term gains.
- **Fence sitters:** They were not any of the above types, but would not clarify their own stance. The intent of this persona was always difficult to gauge; this is because depending on the situation and who they were speaking to, they could swing different ways at different times. They did not support or protest change openly, but would accept or resist the initiative depending on the immediate effect they would foresee for themselves as a result of any action from the programme.

Given the various kinds of personas that were surfacing in the situation, it was not the question of the two kinds of rationality (Simon 1976) discussed above, but a variety of rationalities that needed to be applied to make sense of decision-making and change management in Ferens PCT. This was where my role in the situation became more complex. As an enabler for CfH in Ferens PCT, it was important for me to bring about a vision alignment within the system. Different members within my core team (that had both clinical and managerial representations) had differences in opinions such as the ones I have highlighted above. They had different expectations from their roles and they also had overlapped. I realised that I had to marry the technology narrative with the social reality if we had to collaboratively find a fruitful way forward. It will be relevant to note here that Mumford (1995) developed a socio-technical methodology called ETHICS—Effective Technical and Human Implementation of Computer-based Systems. The key lies in getting the human and technical balance right. A failure to do so may result in failure of entire projects, no matter, however, advanced the technology is. In this context, Clarke (2001) notes that although the development of information systems is functionally a technological and networking exercise, the system essentially has to work within a “social framework”. The inability to recognise this has led to a large number of high profile failures in IT systems implementation, including cases like the failures of the systems of the London Ambulance Service and the London Stock Exchange System (Clarke 2001). Clarke (2001) notes:

The London Ambulance Service (LAS) computer-aided dispatch system failed on 26 October 1992, its first day in operation. From its inception, the system has been treated as a technical problem, to which a viable solution could be found. But LAS exhibited social and political dimensions which the technology-based approach proved ill-equipped to address (p. 10).

As I grappled through the various personas in an intensely complex situation that was already festered with traditional differences, my interest was to

- Critically evaluate the substantive rationality and establish a common vision
Deployment of Soft Systems Methodology (SSM).
This led to an emergent opportunity for me to...
- Address procedural rationality by collaboratively coming up with a normative approach for Healthcare IS
Deployment of Strategic Assumption Surfacing and Testing (SAST).

6.3 Critically Evaluate the Substantive Rationality and Establish a Common Vision

I wanted to understand if there was an in-principle agreement for a knowledge management solution within Ferens PCT between the clinicians and managers or not. I needed to apply a collaborative methodology to lay the ground strong so that a way forward could be defined. I wanted to understand if the situation had a “sub-stantive rationality” as if the “end” could be uncontested. Once this was established,

articulating the “means” would be the consequent step. I realised that issues around defining knowledge and related differences between organisational members could be best surfaced by bringing a wide variety of stakeholders of the system together and deliberating on the issues in a transparent and accommodative manner. Different people were very likely to have different viewpoints; and so was the case in Ferens PCT when it came to the CfH programme.

To critically evaluate the substantive rationality, I employed the Soft Systems Methodology (SSM) (Checkland and Scholes 1990) to delve into the system. SSM is an inclusive methodology that offers an interactive platform to bring together diverse worldviews. It follows a lateral approach to problem-solving. In IS projects, SSM does not address technical requirements or solutions but serves to address issues that may arise out of conflict of values and differing perspectives emanating out of differing worldviews. The position of the “expert” is eradicated in the methodology as all participants can receive an equal opportunity to share their understanding and establish their individual rationalities. This enables an intervention to be approached from multiple standpoints where issues are not treated in isolation. This approach is particularly important in the context of IS where there is a tendency for system designers to approach technology purely from a technical standpoint. Effective IS planning, however, requires a socio-technical approach considering the various stakeholders that are involved and affected by it. As Gasson (1994) says:

An information system is not seen as a computer system, but as a human activity system: the combination of purposeful human activity which may or may not be supported by computer-based technology. The idea of a system is based upon a holistic understanding of human interactions, where the whole is greater than the sum of its parts: by examining the separate functions of a computer-based accounting system, one cannot appreciate the tasks performed by all of the people in an accounting department (p. 2).

SSM enables the appreciation of the human activity system by shifting the focus from the system per se to the actors, all of who demonstrate purposeful activities. The facilitator needs to be able to bring out that purpose that is intended in all activities and the worldviews that drive the intent. SSM is aligned to interpretive systems thinking.

In the situation under discussion, I intended the SSM exercise to expose what was perceived to be knowledge by the members, if healthcare IS was even considered as a requirement, and what healthcare knowledge management actually entailed in the ideal world according to agents in the system. It could also enable stakeholders understand one another’s points of view on how information and knowledge was characterised, thereby minimising conflicting opinions. This would enable me to analyse the structural dynamics within which the definition of knowledge emerges.

6.3.1 *Soft Systems Methodology (SSM) in Practise*

SSM is a seven-stage methodology facilitated by bringing together a diverse group of people to share issues of concerns. The facilitator leads the participants through an

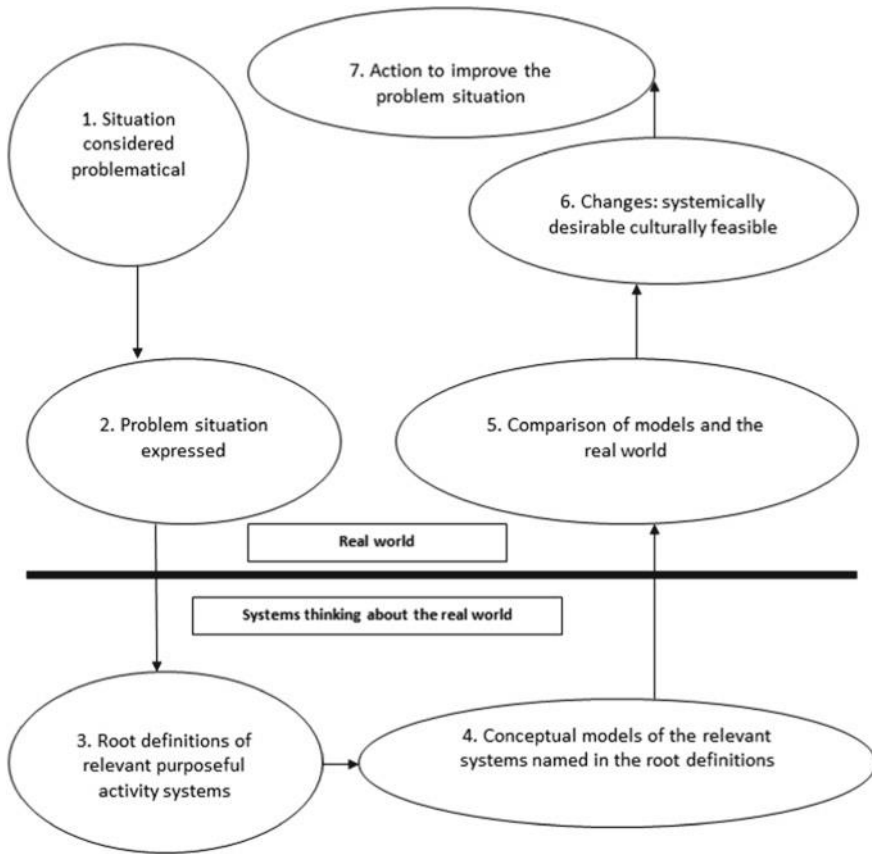


Fig. 6.1 Seven stages of SSM

engaging process of deliberation and discussion shifting their minds from the “real world” to the “systems thinking about the real world” and back to the “real world”. The conventional SSM is represented in Fig. 6.1.

The idea behind these shifts is to enable the participants to understand the problem situation realistically and consider it systemically to create mental models that ease the process for deliberation and resolution. Creativity and inclusion run through the process and in spirit to make participants express themselves in a free and open environment.

To critically evaluate the procedural rationality and establish a common vision, I facilitated an SSM bringing together 10 participants of Ferens PCT in a summer afternoon in 2004. The participants were 1 Clinical Programme Manager, 1 Clinical Lead, 1 Clinical Support Manager, 1 Nurse Practitioner, 1 Information Coordinator, 3 CfH Project Managers, 1 Deputy Programme Manager—New initiatives, and 1 Programme Manager—New initiatives.

I will now present a narration of the seven steps below. For specific details about the NHS structure, the reader may refer to Chap. 4.

6.3.1.1 Situation Considered Problematical

The first step involves a general recognition about the situation as considered problematical. This is in a way establishing clarity and agreement on where we were headed, without which there was no point of working towards a convoluted end goal.

This is an interactive step. However, I adopted an unconventional approach of conducting a questionnaire study with select stakeholders and leading individual interviews with select senior management team members of Ferens PCT using the philosophy of Critical System Heuristics (CSH) (CSH is discussed in detail in Chap. 13). The questionnaire survey and interviews helped me have a more informed understanding of the situation on-ground before I engaged in an interactive exercise. The purpose of the questionnaire was to elicit the perspective of the General Practices (GP) regarding information sharing and dissemination, given that GPs were the first point of contact for patients.

My objective here was a clear articulation of the problem situation that centred around the information identification and recording, and the way this was handled. I facilitated a brainstorming session to enable participants to articulate their problems and why they thought the problems had arisen. The most pertinent issues could be classified as the following:

- *What (?) information:* There was a confusion highlighted regarding what could be defined as information. What could be very valuable to one group of people might not be relevant to another group. Sometimes there was also an issue of the collection of too much data under the banner of information and which might not be useful at all. Scepticism was also highlighted about why certain information was being compiled in the first place—was it for actual clinical care or was it just for administrative purpose?
- *Scope of information:* It was noted that there was considerable duplication of information collection caused by obvious overlaps in the system and the collection of similar data over and over again at different points of time by different points of contact. There was a lack of understanding about who inputted the data, which leads to a lack of comprehension about the scope of data usage. As far as the definition of information was concerned, whereas the dividing line between primary and secondary care data was very broad, the actual organisation structure between them in the NHS was very rigid. This led to confusion of data ownership and access (from an administrative point of view and not ethical).
- *Information support systems:* Participants believed that there were pre-existing information support systems like IT systems and READ codes (a standard clinical code) but there was a lack of consistency in the way these systems were used throughout the departments. For instance, the READ codes were being used in primary care but not in secondary care.

- *Managing information*: Often information was available, but not accessible; or people were just not aware that information was available. There was also a lack of understanding of differing jargons between the clinical and non-clinical staff and the service users. It was not been seriously considered that information was to be made available to a diverse audience base with striking differences between them. Patient confidentiality was highlighted in the context of managing information and it was mentioned that the non-clinical staff were not motivated to preserve patient and organisational confidentiality. This led to considerable debate amongst the participants that was a mix of both clinical and non-clinical staff. Moreover, many times, the clinical staff make assumptions that other clinicians and non-clinical managers were aware of information codes, which was not necessarily the case.

6.3.1.2 Problem Situation Expressed

Once the situation considered problematic is articulated, the next step is to express the same in a creative manner using a visual representation. Creativity releases tension and “brings out the child in everyone” that enables us to express ourselves in a free-flowing manner. The tool used here is “rich pictures” that are pictorial depictions of the situation from an individual perspective. These can be used to present one’s independent perspective of the situation or the roles they play in their respective statuses and the environment within which they work. Drawing rich pictures is an informal exercise and it gives an opportunity for individuals to freely reflect on their positions, problems and their relationship with others in the context. This is also an opportunity for participants to depict conflict patterns, without necessarily exposing a grudge. Rich pictures are visual representations of a variety of occurrences from a variety of worldviews.

I introduced the fun-and-substance of the rich picture exercise and it was well accepted in the group. Each participant was given flip charts to express themselves and their perception of the situation with each one unleashing their creativity. I highlight the rich picture drawn by the clinical lead in Fig. 6.2.

Consider the situation from the perspective of the clinical lead (highlighted in the black box on the centre top in the rich picture) in Fig. 6.2. He clearly did not seem to be in a comfortable place in his actual role as a cardiac surgeon. He had multiple stakeholders relying on him for decisions; that included general practitioners, managers and junior staff (both clinical and non-clinical). The patient was seen to be interacting with multiple touchpoints and had their own expectations that might or not be clearly articulated for him. Often requests come from the general practitioner and the final clinical lead treating the patient at that stage of the treatment is faced with a confusion of what he is supposed to do with the multiple requests coming in. The question was therefore about who the specialist was and how they were supposed to take an expert decision. Managers were seen with their own teams

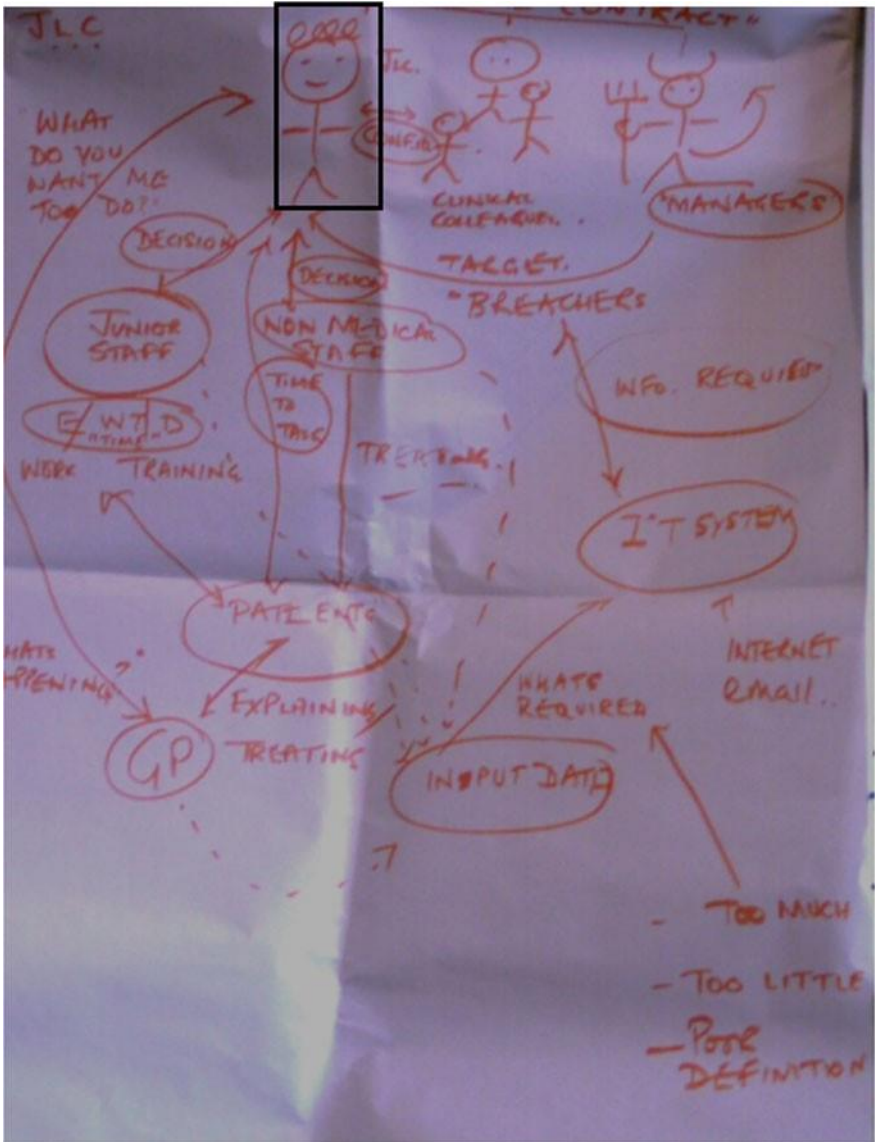


Fig. 6.2 Rich picture drawn by clinical lead

collecting information and imposing targets on the clinician. The manager was in fact portrayed in a negative manner with tongs in their hands ready to find faults with the clinician. Identifying target breaches seemed to be a highlight for the role of managers as identified by the clinician. At the base, the technology system was seen sitting that seemed to suffer from “poor definition”, ask for “too much” and offer “too little”. Key stakeholders seemed to be asking what was required for the system to even function. And with an adequate system at hand, managers were seen to be taking decisions that affected budget allocation and clinical performance in the NHS. The clinical lead believed that these matters were too serious to be left at the hands of managers who did not have adequate information to take those decisions at the first place.

Individual rich pictures had their own story to tell. The divide between the clinicians and non-clinicians were evident and common across all rich pictures. This divide was wide, but not irreconcilable. A major common theme noticed in many of the pictures was that several technology systems were in existence or were being initiated at the same time in isolation. These systems did more harm than good as multi-stakeholder engagement was not considered in the process. The systems were also being initiated without much thought given to interoperability. They were driven at the policy level and were remote from the actual on-ground realities.

6.3.1.3 Root Definitions of Relevant Purposeful Activity Systems

Root definition is a phrase of the problem situation in the form of a “condensed representation” bearing in mind the CATWOE model that stands for the following:

- **Customers:** The final “beneficiaries” of the system in place. Consideration is about what problems they face and how their experience in the system can be eased. In this case, customers would be patients who would be the final stakeholders being served as a result of the CfH programme by putting in place a better roadmap in the care pathway. There would be winners and losers through the process and this needed to be considered as planners work along the way.
- **Actors:** The actual implementers of the system who carry out the tasks required. In this case, actors were the IT system implementers, clinicians and managers who were involved in putting the new system in place. Their thought process and reaction had to be considered including differences between themselves and existing power dynamics.
- **Transformation:** This is the “black box” of what “happens inside” the system. In this context, this meant how the information collected was actually processed and how the knowledge created was actually engaged with to deliver to the final aim of the programme. Both technical- and human-centred design perspectives were important to understand the transformation process.
- **Weltanschauung:** The worldview that exists whilst putting the system in place. Weltanschauung leads system designers to consider wider impact of the solution designed that can extend to social, economic and regulatory factors. In this case, it

was about the beliefs and values that planners and actors relied on for the design and implementation of the system, and how they would define the problem situation at the first place.

- **Owners:** They hold control and have a say on the existence or scrapping of the system. In this case, the ownership lied at the policy level with the Department of Health (the structure has been elaborated in Chap. 4). Foresight and inclusion at the ownership level could go a long way in putting in place a seamless system.
- **Environment:** This is the external environment that influences the system being conceptualised and implemented. In this case, external factors included technological developments that could or could not make the vision of CfH possible, financial consideration of use of tax-payers' money (for an IT system rather than point of clinical care), and ethical considerations of patient data access, usage and ownership, amongst others.

A CATWOE analysis helps understanding stakeholder perspectives holistically in a wider context. This helps consideration of options and facilitates fruitful debate towards creation of viable solutions. The root definitions shift the minds of participants into the systems world as now mental models come into play. Articulation and seamlessness of thinking are expected.

Considering the CATWOE, participants articulated their root definitions. These root definitions also conveyed the role the person concerned played within the system and their limitations in the system considering a relevant human activity system. Invariably the root definitions of all participants indicated working towards improving experiences and outcome for patients within the constraints of time and resources.

Here I highlight two particular root definitions in the interest of this discussion. Below:

Provide information management support, including provision of routine and ad hoc information as required, to support the improvement of services for patients and carers (clinical participant).

To develop a communication system to enable dissemination and sharing of information between all the key stakeholders in the geography in conjunction with the collaborative way of working to improve healthcare services, and provide a more consistent approach to patients (non-clinical participant).

The root definitions clearly expressed the overall sentiment that participants saw the fundamental value of putting in place a streamlined healthcare IS to improve patient outcome. However, what these root definitions lacked was an ability to identify challenges or environmental constraints for/to their role in the system. A further analysis is provided in Table 6.2.

Table 6.2 depicts how critical elements were missed out in the root definitions despite several rounds of explanations. This made me realise that deploying SSM as an intervention methodology does require a certain degree of cognitive maturity with participants due to the technicalities involved in a step like this. However, I overcame the challenge of missing information through the discussions that followed and the way I as the facilitator led them to think about sponsorships, limitations, feasibility and articulation of actors for an ideal system to exist.

Table 6.2 CATWOE analysis

Parameter	Clinical root definition	Non-clinical root definition
Customer	Patients and carers	Patients
Actors	No mention	Mention of key stakeholders; detailing not provided
Transformation	Improvement of services	Collaborative ways of working; communication and dissemination
Worldview	Leaning towards outcome orientation (“provide information”)	Leaning towards process orientation (“develop a communication system”)
Owners	No mention	No mention
Environment	No mention	No mention

The CATWOE analysis also depicted the worldview of clinicians to be heavy on outcome orientation and that of managers to be heavy on process orientation. This difference in worldviews could also have acted as a trigger for conflicting priorities between the two cohorts. In a system as large as the NHS, aspects around processes and governance did have to play an important role to establish consistency and predictability in the care journey. As a facilitator, I broke down the differences in worldviews in front of the team that also helped them understand causes of common tensions between the doctors and managers that seemed irreconcilable, but those that are actually resolvable if an approach like this was undertaken.

6.3.1.4 Conceptual Models of the Relevant Systems Named in the Root Definitions

Whilst still being in the “systems world”, conceptual models are used to depict what the system “does” when the root definition depicts what the system “is” (Jackson 2000). Conceptual models bring out cause-and-effect relationships of the system based on the root definition. This involves the expression of the minimum activities required to achieve the purpose of the root definition. A conceptual model consists of precise verbs to reach this intention. Since the conceptual model is derived from the root definition, both are similar. The conceptual models corresponding to the two root definitions cited above are presented in Fig. 6.3.

The conceptual models further emphasised that despite differences and perceived power dynamics between the clinicians and non-clinicians, they essentially believed in the same success imperatives of patient outcome enabled through a streamlined information system.

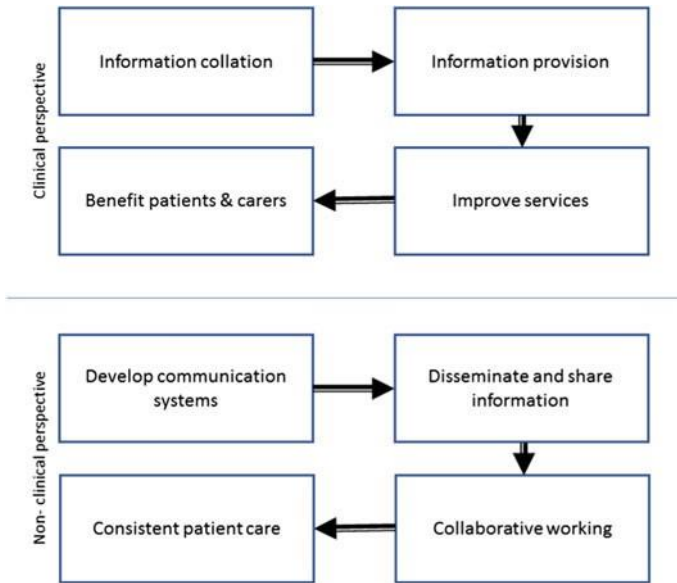


Fig. 6.3 Conceptual models

6.3.1.5 Comparison of Models and Real World

This step brings the participants back to the real world where the conceptual models are compared with the real-world situation. Roles played by participating members in the system are critically reflected upon. Differences are likely to surface, which then need to be debated and discussed in the next stage.

In this case, the comparison of the conceptual models was with what was actually happening with the CfH implementation. We charted out broad areas for discussion from the rich pictures, root definitions and conceptual models; these included stakeholder engagement, technology solution, system integration and interoperability, patient outcome, and clinician–manager relationship. Sure, the CfH initiative had tremendous perceived benefits; however, it had brought about its own challenges (explained in further detail in Chap. 4). The questionnaire survey previously undertaken strengthened the deliberations and brought in a wider perspective.

Out of the 27 General Practices that existed in Ferens PCT, only 5 used some form of online evidence-based decision support system that was available at that time. 11 Practices maintained an electronic dataset of patients which was updated every time a patient visited. Several of the electronic dataset systems for the different Practices were found to be different; this meant there was no integration of the systems. It

was generally noted that about half of the GPs and nurses were competent in the use of IT or were willing to undertake further professional training to improve their IT skills. Clinicians and managers were in favour of creating online linkages between primary and secondary care services. They favoured systems that were integrated and interoperable to uphold information dissemination between different care pathways across organisational boundaries.

The discussions also brought home the message that the IS being initiated at the NHS had to be integrated and consistent. The individual Trusts had a significant role to play in this in terms of cascading learning across boundaries and facilitating service improvement. Internal stakeholders were using different online systems in an inconsistent manner. Significant effort would need to be dedicated to bring about a real change in the system supported by proactive IT usage skills building amongst clinicians.

Driven by the philosophy of CSH, I was inspired to understand the situation in the “is” and the “ought” mode. However, overemphasis on technology can lead to the lack of appreciation of human intuition and opinion. These interviews unravelled that the CfH planning did not pay much attention to involving the end users and clinicians in the process and this led to the programme taking shape as primarily a technology project rather than an information system project. On one of my interviews, when I asked a senior decision maker in the CfH programme about who the client of the systems design was, they promptly replied that it was the people that specified the design. However, it was actually the clinicians, administrators and patients—end users—who ought to be the clients. When I asked them what representation and power the affected stakeholders—the patients—had on the programme, they replied that in the national level, patients had representation and they did play a role; however, in the local level, although they ought to, it was not always possible (Chowdhury 2005). No wonder, when the *Radio 4 File On 4* survey was conducted, only 7% of the 500 GPs and hospital doctors felt they had been “adequately consulted”; and further three-quarters of doctors were not confident that the system would succeed (Chowdhury 2005).

6.3.1.6 Changes—Systemically Desirable and Culturally Feasible

This stage involved participants in a debate about their *Weltanschauungen* (world-view) to bring about an accommodation of perceptions. This is the stage where differing opinions are discussed and options are considered about how best differences may be overcome and challenges met.

In this case, there was an overall agreement that healthcare IS was a requirement and it would certainly enable better patient outcomes. It was quite evident that there was a requirement to establish a common language which could be shared and understood by all clinical and non-clinical staff. Moreover, there was also a requirement of an established protocol of information dissemination and sharing by all Practices. There was also a lack of communication between service providers (like doctors and nurses) and decision-makers (like finance and IT departments), which lead to

situations where the former was not made aware of why some actions were taken by the latter. There was a clear agreement that a collaborative approach to healthcare IS was necessary. Discussion on the difference in worldviews as emergent in the CAT-WOE analysis enabled this process of agreement to proceed with less differences as this made the clinicians and managers understand that both cohorts had the same end goal in mind, but the thought processes leading to this end was different; this was mainly because of the requirements of the role that was in turn a virtue of what would benefit the larger system in the long run.

We agreed on the common vision for a collaborative approach to healthcare IS that would support both clinicians and non-clinicians alike to work seamlessly in a knowledge environment for better patient outcomes.

Now that the problem situation was resolved at the level of substantive rationality, the question for me was how to create an inclusive healthcare IS addressing the issue at a procedural rationality level. As we discussed above, procedural rationality comes into play when there is fundamental agreement on the “end” goal but the question is about “how” to reach that end goal.

6.3.1.7 Action to Improve the Problem Situation

This is the final implementation stage where the derived plans are put to action.

This is where I realised that learning from this exercise need to be leveraged towards a system design as desired by stakeholders. I presented the findings from the SSM to the top management of Ferens PCT and garnered support to work with a core team to develop a normative approach for healthcare IS.

In an ideal-typical model, this stage would have involved project management principles to implement the desired changes with clear articulation of roles, timelines and responsibilities, and regular review and feedback. A clear governance structure brings this step to life with seamless delivery.

6.3.2 Reflection on the SSM

The step-wise deployment of the methodology as articulated above is referred to as Mode-1 SSM. Mode-1 SSM is a planned and structured deployment of the methodology leveraging specific tools that were articulated in the original work of Checkland (1981). The advantage of using SSM in the context of IS has been well covered by Checkland and Holwell (1998) where they talk about the “ill-defined” and “ambiguous” nature of IS owing to the fact that first, IS projects are mainly approached as technology projects and second, there is considerable confusion of what needs to be defined as “data”, “information” and “knowledge”. Such ambiguity can only be overcome if a human-centred design approach is taken where agents are considered as human activity systems and where every individual enters the context with their own meanings and interpretations. SSM offers a platform where such meanings and

interpretations can be surfaced by facilitating a structured discussion taking participants from the “real world” to the “systems world” and back to the “real world”. IS is a network of systems that consist of both closed and open systems. Whilst closed systems exist in the form of technology solutions that answers a problem situation at the level of procedural rationality, open systems are where human activity systems come into play in interaction with the closed systems that need to be addressed at the level of substantive rationality; this is where affiliations, interpretations and meanings are attached.

6.3.2.1 Contribution of the SSM in the Situation Under Consideration

The SSM revealed a number of challenges and opportunity areas for healthcare IS. At a very fundamental level, it established a common understanding for the need of a healthcare knowledge management system that would enhance patient outcome. It helped surface basic issues that needed to be addressed to better the relationship between clinicians and non-clinicians in the NHS that could ease the implementation of initiatives within the system.

Rich pictures offered a facilitative mechanism to expose situations where challenges/conflict/problems were present. The conflict between the direct service providers and the decision-making bodies came to the forefront at this stage. This was a covert conflict within the organisation. This SSM offered them an excellent opportunity to discuss openly the gaps in communication between doctors and managers (and GPs and specialists), which placed one party in a difficult position due to the lack of comprehensiveness about what the other party meant or wanted. This could have also led to conflicting demands from different parties to one person, who could have acted as the information coordinator.

There was also no clear understanding among the specialists about what was exactly happening in the information management level within the General Practices. This led to a difference in expectations from one to the other within the professional community. It also emerged that there was a difference of opinion about what information should be kept confidential between the doctors and the IT professionals (and managers), when the latter may at times allegedly act as “breachers” of boundaries regarding such information. Similarly, there was the possibility of conflict between nurses and managers, and between the national and local strategies. The overarching objective of everyone, working within the organisation, was to ensure that patients received quality service.

The CATWOE analysis was an important element for us to understand how world-views played an important element (often unknowingly) in shaping our perspectives and actions. Inability to appreciate this aspect may lead to irreconcilable conflict and differences.

A strong challenge was posed by the availability of an infinite pool of information itself. One rich picture indicated that information was available, but what was not available is the information about what to do with the information, and how to make improvement in people’s lives with the information. Related to this was the

issue that of information management efficiency over effectiveness. This meant that information could have been rightly collected, but was this the right information?—in reality, if information is not effective, it is not information at all. It is just data. Data has to be both effective and efficient to make it information. Moreover, there was also a doubt regarding the consistency of measurement indices across organisations and also national requirements.

It was also commented during these discussions that the person who oversaw all strategies and projects could be in doubt themselves about “who’s who?” and “who has responsibility?”. This clearly arised from a lack of a clear channel of communication between project managers, and different service organisations, which were overseen by them.

Finally, the exercise offered a platform to participants from both clinical and managerial backgrounds to come together and arrive at a consensus on where they needed to go from where they were. Tensions were surfaced and despite articulation of sensitive and conflicting issues, there were no personal disagreements. The methodology facilitated a professional and open discussion towards arriving at an agreed vision for healthcare IS at Ferens PCT.

6.3.2.2 Weaknesses of the SSM

SSM has attracted its own share of criticism in the literature (Thomas and Lockett 1979; Jackson 2000; Houghton and Ledington 2002; Kimble 2008). I will now talk about some of the limitations I can observe in the exercise I narrated above.

It is true that this exercise brought together two differing fractions—clinicians and managers—but it still cannot be considered an inclusive one. It did not bring in patient representation as a critical stakeholder cohort here where the key objective of all the effort was patient outcome. The SSM undertaken here cannot be considered a representative exercise, but a management-driven one. Clinicians and managers were still at the helm of affairs at the NHS and key decisions rested with them.

The SSM was also primarily consensus-driven with the belief that the “systems world” deliberations would invariably lead us to arrive at establishing a substantive rationality of the situation. The root definitions and conceptual models led the participants in one-sided direction of establishing the need for technology enablement in the system. Discussions from the questionnaire survey and individual interview outcomes conformed to this need and reinforced the dangers of a lack of consistency in the system. There was little room for a radically alternate point of view to emerge as a prevalent narrative in such a situation.

This may lead to the argument that although SSM is considered as an interpretive systems approach, it could end up being used as an eyewash to generate consensus for an already existing dominant voice—an interpretive approach to further a functionalist agenda. With this perspective, inclusiveness, participation and engagement may seem merely for representational purpose without actual meaning attached to it.

Several steps in the SSM require the ability to grasp concepts and be articulate to be able to add value in the process. If not, the exercise may fall short of the desired intent of certain steps. Take for instance root definitions and conceptual models. These tools require a certain level of maturity in the ability to understand what is required and the capability of sound articulation. Despite having a professional participation, the team still struggled articulating their root definitions and conceptual models in this exercise. It required constant support from me as the facilitator. Despite this, the root definitions lacked completeness as we saw earlier in this discussion. Hence, SSM presumes that participants will be literate, articulate and have certain degree of cognitive maturity. Again, rich pictures, if not moderated well, can become messy and difficult to interpret. Often it is only the facilitator who is directly involved in the exercise is able to interpret what is being drawn.

Coupled with the above criticism there is also the argument that it is only assumed that everyone who participates in an SSM will express their opinions and feelings openly. In reality, the social world is beset with asymmetry of power and often difference of core values that people may find impossible to overcome or even surface, for that matter. The methodology overlooks obvious power dynamics between the participants and takes discussions and visual representations for granted as actual depictions of one's values and intent.

The next part of this chapter describes how, after establishing the substantive rationality for healthcare IS, I moved to creating a normative approach for healthcare IS in my endeavour to establish a procedural rationality in the system.

6.4 Address Procedural Rationality by Collaboratively Coming up with a Normative Approach for Healthcare IS

Here, I will talk about how I leveraged a systems methodology called Strategic Assumption Surfacing and Testing (SAST) to address procedural rationality by collaboratively building a normative approach to healthcare IS. This application of SAST in the NHS setting also highlighted deep politico-cultural concerns in the organisational setting and it helped towards the conception of an inclusive approach for health informatics design and deployment. SAST was chosen as a preferred methodology in this context as it facilitates decision-making when there are two groups with distinct viewpoints. In this case, these were the management-led approach and the clinician-led approach in healthcare IS. Critical perspectives on the methodology itself have also been considered and the assumptions fostered towards arriving at the conclusions have been highlighted in the discussion.

6.4.1 *Strategic Assumption Surfacing and Testing (SAST)*

SAST is a methodology that was developed by Mason and Mitroff (1981) to enable managers to deal with complex situations in organisations. Mason and Mitroff prefer to call complex problem situations “wicked problems” where issues are multidimensional, interconnected and uncertain. Wicked problems that arise in these situations have social, political and organisational ramifications. Their understanding was governed by the idea that “in tackling wicked problems, problem-structuring assumes greater importance than problem-solving using conventional techniques” (Jackson 2003; p. 137). This leads to the understanding that unless the formulation and structuring of problems are addressed effectively in the beginning, we may end up tackling the wrong problems. SAST is therefore designed to formulate and explicate assumptions that people harbour in organisations.

SAST was greatly informed by the following ideas of Rosenhead (1987), as described by Jackson (2003):

- A satisficing rather than optimising rationale,
- An acceptance of conflict over goals,
- Different objectives measured in their own terms,
- The employment of transparent methods that clarify conflict and facilitate negotiation,
- The use of analysis to support judgement with no aspiration to replace it,
- The treatment of human elements as active subjects,
- Problem formulation on the basis of a bottom-up process,
- Decision taken as far down the hierarchy as there is expertise to resolve them and
- The acceptance of uncertainty as an inherent characteristic of the future and a consequent emphasis on keeping options open (p. 138).

Influenced by the philosophy of Churchman (1968), Mason and Mitroff embarked on a systems project that would accept the existence of a variety of worldviews, or *weltanschauungen*, as an unavoidable prospect and embrace divergent subjectivity as a strength. Further, all worldviews are restrictive and a holistic perspective can only be achieved by synthesis of a variety of worldviews. A systems mindset would encourage one to question and formulate one’s own assumptions and worldviews, and critically debate the same with opposing assumptions and worldviews (Churchman 1968; Mason and Mitroff 1981). Borrowing from Hegel, SAST is driven by the understanding that in any organisation there would be a dominant set of worldviews—*thesis*, an opposing set of worldviews—*antithesis*, and there is always a possibility for the opposing worldviews to enter a state of constructive debate, and arrive at a higher level of understanding—*synthesis* (Jackson 2003). This is, however, an iterative process, and the synthesis would always give rise to opposing set of beliefs. What was important for Mason and Mitroff is that worldviews and beliefs are derived from deep-rooted assumptions that people hold in their minds. Management decisions are in turn dependent on these assumptions and beliefs. However, an effective organisation is one that is able to formulate these assumptions and counter

assumptions amongst its members and learn how it can behave differently from the knowledge that emerges. As Jackson notes:

An organisation only really begins to learn when its most cherished assumptions are challenged by counter assumptions. Assumptions underpinning existing policies and procedures should therefore be unearthed and alternatives put forward based on counter assumptions (p. 141).

Constructive criticism and investigative debate are central to the above philosophy. This philosophy is essential for “wicked problems” in complex organisations where not only there are a variety of opposing assumptions and beliefs but also a tendency to subjugate the assumptions of the weak. SAST has therefore been designed to be participative, adversarial, integrative and managerial mind supporting (Jackson 2003). Decision-making process ought to involve different stakeholders with different assumptions and different ideas about how problems should be addressed. Hence, the situation should be adversarial, apart from being participative. Further, there ought to be the opportunity to bring together divergent views to a higher level of integrative understanding from which decision-makers can gain deeper insights into wicked problems. Hence, this methodology has the potential to make a real contribution to the practical and operational levels. SAST follows four stages (discussed in detail in the next section): group formation, assumption surfacing, dialectic debate and synthesis.

I facilitated a SAST exercise with select representation from Ferens PCT area following the SSM. The purpose was to examine if the dominant and opposing viewpoints in the context of IS in the NHS could be brought together in synthesis. This was intended to inform the design of a route map for IS in the context of UK public sector health care. This exercise was supported and funded by the NHS North and East Yorkshire and Northern Lincolnshire Network of Cardiac Care (NEYNLMCN).

I will now provide a narrative of the exercise going through the four stages of the methodology.

6.4.1.1 Group Formation

This is the first stage where participants are divided into two distinct groups. The effort should be to “maximise convergence of perspectives” (Jackson 2003) *within* each group and “maximise divergence of perspectives” *between* the groups. The result is two groups of opposing viewpoints with each group consisting of relatively like-minded people.

There were eight participants in the exercise: one consultant clinician, one general practice manager, two nurses, one information support officer, one clerical staff, one service improvement facilitator and one service improvement manager. The conflicting idea that was prevalent in the group was the design and deployment strategy of CfH and how a new health informatics strategy could be conceived and implemented. Certain participants believed that the prevalent top-down approach to the then NHS IS strategy was working and making progress. This was the dominant perspective

overtly cherished by the NHS management. They believed that the as-is CfH system could be used for improvement in patient care and for the monitoring of clinicians' performance. They were of the opinion that there had been considerable consultation with frontline service providers before CfH was implemented. This represented the viewpoint of the management-led approach to health informatics. At the same time, there were other participants who believed that there had not been appropriate consultation before CfH was implemented. This was the opposing viewpoint. They believed that the NHS was wasting its resources in delivering functions that are not required by patients and the public. They were of the opinion that CfH was in a way imposed upon them by the management. This represented the clinician-led approach to healthcare information systems. They advocated that system specification and definition ought to come from frontline service providers like the clinicians, and that administrative staff should also have a say in the system as their role would radically change with the deployment of the new systems.

Considering the overt difference of opinion between the participants, they were divided into the following two groups, based on the approach they favoured:

Group-1 (management-led approach):

- General Practice Manager,
- Service Improvement Facilitator and
- Service Improvement Manager.

Group-2 (clinician-led approach):

- Consultant clinician,
- Nurse 1,
- Nurse 2,
- Clerical member of staff and
- Information support officer.

The result was two groups where difference of opinion was maximised between the groups. However, as the following stages will show, this methodology facilitated the opposing groups to structure assumptions, many of which were quite similar instead of being opposing.

6.4.1.2 Assumption Surfacing

This is the second stage where the aim is to formulate and express key assumptions that members in the groups harbour. As Jackson (2003) notes, this should be done in a “supportive environment”, where the aim should be as “imaginative and creative” as possible.

This stage may be facilitated with three methods: stakeholder analysis, assumption specification and assumption rating. Groups can be asked to conduct a stakeholder analysis to identify who they think the relevant stakeholders in a particular project are, in terms of who the affected parties would be as a result of the implementation of a particular project. Groups may then be asked to specify their assumptions for

each of their stakeholders. These specifications should be related to how these would influence the success of the project under consideration. Groups may then be asked to rate their assumptions in a chart rating them against two criteria: importance and certainty. A spokesperson from each group then has to make a presentation about the assumptions.

To facilitate this stage, both the groups were asked to state who they thought the stakeholders were in the implementation of IS in the NHS. The groups brainstormed their views in different rooms and agreed to a list of stakeholders. Following were the results:

Group-1 (stakeholders)

- Clinical professionals,
- Finance department of NHS,
- General public,
- Department of Health (DoH) (Government),
- Healthcare IT Leads,
- IT Industry,
- Managers,
- Media,
- Patients and
- Regional and local NHS organisations.

Group-2 (stakeholders)

- Administrative staff,
- Clinicians,
- General public,
- Department of Health (DoH) (Government),
- Treasury (Government),
- Industry (Pharmaceutical and medical equipment companies),
- NHS Management,
- Patients,
- Private healthcare providers,
- Suppliers (IT services including software and hardware and telecommunications),
- Support staff (e.g. IT staff) and
- Universities (Research and epidemiology),

The groups were then taken forward to the method of assumption specification, where they had to state what their assumptions were. These assumptions were thought to affect the success of NHS IS strategies, with specific consideration to CfH. The responses were as follows:

Group-1 (assumptions)

1. IT industry has vested interest in personal gains.
2. The media wants to portray a negative image and always wants to highlight problems.
3. The media should be more positively engaged by CfH.

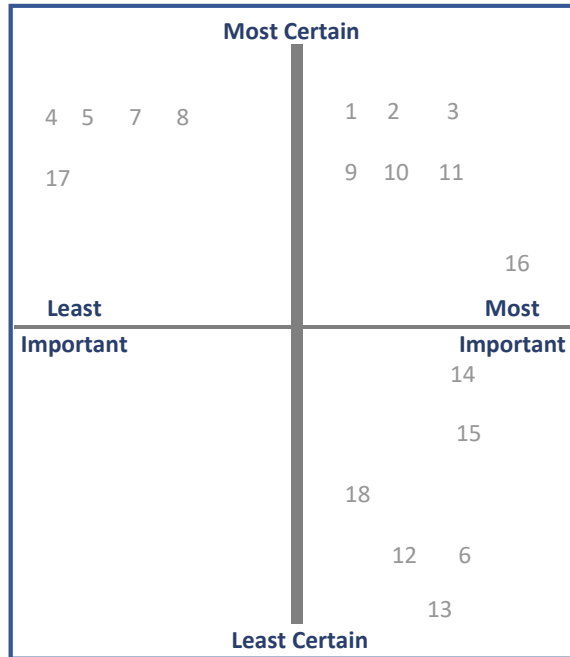
4. The general public have a one-sided view, as portrayed by the media.
5. The general public has a lack of confidence in CfH.
6. The IT industry has a conflict of interest.
7. The general public has a lack of understanding of the aims of CfH.
8. The general public believes that money should rather be spent on healthcare and on professionals, than on IT.
9. The government expects too much too soon from a complicated project.
10. The government has an unrealistic time frame for delivery of the project.
11. The government is politically driven and does things that are locally irrelevant.
12. The healthcare sector has a lack of expertise and lacks adequate IT staff to deliver the project.
13. The finance department underestimated resources needed for the national and local delivery of the project.
14. Clinicians believe that they have not been consulted.
15. Clinicians have an unrealistic expectation of participation.
16. Clinicians have a fear of their IT skills.
17. Patients are mostly not interested in getting involved.
18. There is lack of training capacity to ensure skills for delivery.

Group-2 (assumptions)

1. CfH will go over cost. It is a white elephant.
2. Administrative staff will be resistant to change.
3. Administrative staff has no time to work with the new systems.
4. Clinicians are not computer literate.
5. Clinicians are time limited to work with the new systems.
6. Patients are not computer literate.
7. Clinicians are conservative to accept change.
8. The government is control freak. It wants to control professionals with the information from CfH.
9. Clinicians are sceptical about success of CfH.
10. Patients want local treatment.
11. Private healthcare services are only interested in profit.
12. Clinicians are sceptical about patient confidentiality in the new system.
13. NHS managers need numbers.
14. Suppliers see CfH as an opportunity for profit.
15. Administrative staff will find it difficult to use the new system.
16. The treasury wants to keep costs under control.
17. Patients lack knowledge about the system.
18. The government wants to impose solutions all the time.
19. Universities need to do more research on information and funding.
20. Private healthcare services are always after more NHS work.
21. The government will blame someone else when the system does not work.

The groups then rated their assumptions in a chart against the axes of certainty and importance. A spokesperson from each group then presented their stakeholders,

Fig. 6.4 Chart 1—assumption rating by group-1



assumptions and ratings to the other group. At this stage, it was interesting to note that although both the groups were supposed to be opposing in their viewpoints, there were many issues which were common to both the groups. In addition to this, there were few elements which both the groups seemed to support as the root cause of many of the challenges faced by CfH. This is elaborated in more detail in the discussion below focusing on the presentation by each group.

Figure 6.4 represents the group-1 assumptions.

Group-1, which favoured a management-led approach in healthcare information systems, believed that the IT industry had a vested interest in the implementation of CfH. The group, however, felt that this was a “gross assumption” in their part and they were not certain about it. The group felt that the media had a big role in portraying the CfH negatively. The media always highlighted problems rather than adopting a balanced position. This led to increasing scepticism of the project amongst clinicians and the general public. It was the view of group-1 that the media should be “positively engaged” by CfH and the wider NHS as it was a “very important” stakeholder for the long-term success of the project. This was because the media shapes public opinion. They also assumed that the general public had a one-sided view about what CfH was, influenced purely on what they heard in the media. The public also suffered from a general lack of understanding about the aims and objectives of CfH. The public would rather be interested to see money being spent on healthcare per se and healthcare professionals rather than support systems like healthcare IS.

Group-1 thought that the government was to blame for making the project too complicated. This was because the government wanted too much sophistication in too little time. Therefore, the government had a “fairly unrealistic” time frame for delivery of the project. Moreover, it was the view of the group that the project was politically driven rather than being locally relevant to patients and clinicians. Members of group-1 also felt that there was a lack of expertise in IT skills in health care to realistically deliver the project. They felt that the finance for delivery of the project was also being underestimated. However, they were not certain about this as they thought this could have been the result of media reporting, and the way viewers, including the group itself, were picking up messages from the media. Regarding clinical consultation, this group felt that even it could have been misled by the DoH with the idea that appropriate consultation had taken place. This group was not sure whether or not clinicians were consulted appropriately. At the same time, they also felt that clinicians had an unrealistic expectation about what participation and consultation were supposed to mean, as consultation with every clinician is unrealistic. Fear of IT and skills deficit amongst clinicians was also featured as assumptions that came in the way of the success of CfH. Related to this, the group also featured that there was a general lack of appropriate IT training across all levels in the NHS.

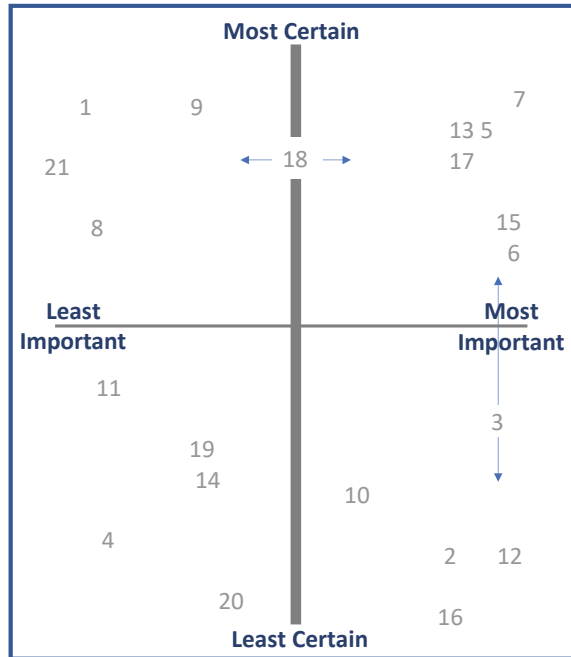
Figure 6.5 represents group-2 assumptions.

Group-2 favoured a clinician-led approach to health informatics. Members of this group were certain that in spite of phenomenal investments in CfH, it was not yielding any of the anticipated benefits. However, at the same time, they also believed that administrative staff, patients and clinicians might not be sufficiently IT literate to work with the new system. This could also have led to resistance to the change process, creating more challenges for the project. They believed that patients lacked appropriate knowledge about the system, and there was no appropriate initiative made to educate the public about the new system. The group highlighted that there was no realistic planning for training and development of clinical staff.

Group-2 was also critical of some of the objectives of CfH. For instance, one of the hallmarks of CfH was patient choice, but the group was confident that patients wanted local treatment. This undermined one of the most important features of CfH itself. Members of this group also had grave concerns about patient confidentiality in the new system. They believed that the new system had been deployed without much consideration of security of access to patient details, which had put confidential patient information at risk.

This group also assumed that clinicians were conservative of change and not receptive to the new IS. This was creating grave challenges for the successful implementation of CfH. It was the view of this group that in spite of knowing about these challenges, the DoH did not take any specific measures to address them. The DoH rather proceeded with its own plan of deploying a system that would enable itself to have more control over the clinicians and management processes.

Fig. 6.5 Chart 2—assumption rating by group-2



The above insights interestingly shifted the blame from NHS managers to the government itself. This brought group-2 closer with group-1 in some of their viewpoints. The unintended consequence of these insights was that the groups already started to sympathise with each others’ position within the organisation.

6.4.1.3 Dialectic Debate

This is the third stage where both the groups are asked to debate the assumptions and viewpoints of each other. Whilst facilitating this stage, consideration should be paid to the following points (Jackson 2003):

- How are the assumptions of the group different?
- Which stakeholders feature most strongly in giving rise to the significant assumptions made by each group?
- Do groups rate assumptions differently?
- What assumptions of other groups does each group find the most troubling with respect to its own proposals (p. 144)?

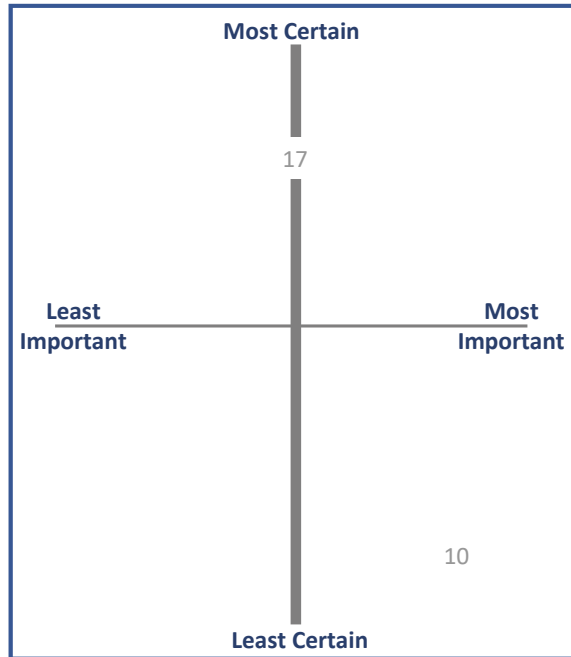
After a certain period of time for which the debate has proceeded, groups can be offered an opportunity to modify its assumptions. This is called “assumption modification”. However, as the following narration of this particular exercise will show, participants from both the groups were already beginning to see common grounds even before the following stage of anticipated consensus.

Group-1, that represented the management-led approach to healthcare information systems, was of the opinion that much of the resistance to CfH from clinicians was a generation issue. Members of this group felt that there was no problem with the younger clinicians accepting the new systems and they are more adept in using IT. Therefore, they felt that probably the problem would solve itself over time when the younger generation of clinicians would replace the older generation. This was, however, taken with much contempt by group-2, who advocated that the main issue with CfH was its lack of consultation. This was immediately refuted by group-1 who was of the opinion that clinicians had never recognised their initiatives in helping them with service improvement.

As the debate progressed, the groups also began to see some common grounds. For instance, one of the key members of group-1 expressed scepticism of the DoH actually carrying out robust consultation with clinicians and patients about its IS strategies. They thought that they themselves might have been misguided by the DoH. In this regard, group-2 added that no one had actually ever approached them and asked what they really wanted. They felt that management would always make decisions about NHS reorganisation or implementation of new strategies in complete isolation from clinicians. Identifying themselves closer to group-2, group-1 felt that there was always talks of a patient-led NHS, but the NHS never asked patients before it formulated its policies. Most of the consultation processes in the NHS were actually “information giving” sessions, rather than consultation sessions, in which patients and the public were just informed about what the NHS was going to implement. When policies fail, management would try and backtrack the consultation process with patients and the public. This insight from group-1 immediately reflected a disparity between the NHS management and the government, represented by the DoH. This disparity was more pertinent in discussions surrounding the Choose-and-Book feature of CfH, which offered choice of five treatment sites for patients in England. Group-1 felt that this was the “most ridiculous” feature as both patients and clinicians preferred local treatment. This view was immediately accepted by group-2. However, the managers felt that they had to work towards supporting Choose-and-Book as “they had to deliver what they had been paid to deliver”. Failure to do so would probably see their funding withdrawn. Hence, group-1 was surfacing frustration with their own position in the sense that they were implementing a strategy, some of its features they themselves did not support.

Both groups-1 and -2 expressed concern about the performance of the private companies that were contracted to deploy CfH. It was highlighted that there was considerable delay in the deployment of specific features of CfH and that some of the features that had been deployed were not functioning as expected or not functioning at all. At this stage, it could be easy to blame the contracted companies for the fiasco. However, the participants suggested that there was a lack of realism that existed not only in the side of the NHS but also in the side of the suppliers regarding what could be delivered and in what timescale the same could be delivered. However, at this stage, group-1 was again radical to question whether the contracted companies were failing to deliver due to their incompetence, or because the NHS did not clarify its specifications in the first place. One member of group-1 said: “If we can’t tell them exactly what we want and stick to it, they are bound to go wrong”.

Fig. 6.6 Chart 3—changed assumption rating by group-1

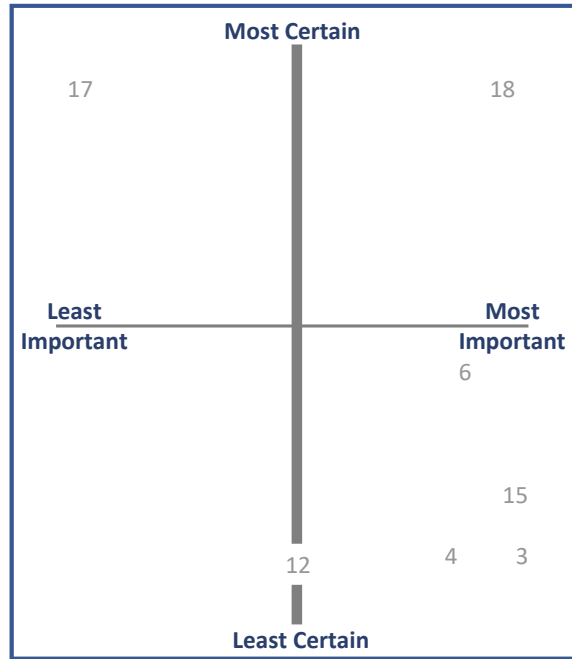


However, it was stated by both the groups that people’s expectations and demands also changed from time to time and that change is unavoidable. There was some agreement at this stage that IS should have built-in flexibility so that it can be adaptive to changing requirements. Group-1 believed that this could be possible only through true “partnership working” between management, clinicians and the public right from the beginning. Partnership working is about involvement of key stakeholders in the whole process of design and deployment of strategies. Certain comments from group-1 indicated that NHS management itself was operating under the pressures of DoH. This issue becomes more explicit in the discussions that followed.

After a lapse of time, the groups were asked if they would like to change ratings of any of their assumptions or the assumptions themselves. Participants returned to their own groups and spent some time discussing how their assumptions were informed and influenced after the debate and discussion. Both the groups decided to change how they rated certain assumptions initially. Figures 6.6 and 6.7 present the charts with revised assumption ratings by group-1 and group-2, respectively.

The groups then discussed their assumptions again and started to consider how the unwelcome situation in health informatics in the NHS could be addressed. This led to an interest to envisage a normative approach for health informatics that would be able to involve stakeholders in partnership, with the element of learning built into the model so that system flexibility and change is not seen as a challenge, but as an opportunity for the system to evolve. Working towards this approach was the final stage of this exercise.

Fig. 6.7 Chart 4—changed assumption rating by group-2



6.4.1.4 Synthesis

This is the final stage of SAST where the previous stages are expected to lead to a synthesis of views. This is the result of modification of assumptions, negotiation and accommodation of viewpoints. Synthesis is expected to result in a reformed strategy for the organisation to adopt. However, if the groups fail to arrive at a synthesis of views, the problematic assumptions and conflicting viewpoints should be taken up for further research and consideration.

In the exercise under consideration, the final stage was concentrated on both the groups working towards overcoming their differences and envisaging a normative approach for healthcare IS. This stage facilitated the groups to be critical of their own boundaries and perspectives. It implied the groups “sweeping in” the viewpoints of the opposing group and conceive a more inclusive approach towards healthcare IS. All insights in the discussion to follow have been the result of a synthesis of ideas of both the groups, and represent an approach conceived by the participants supported by the facilitator.

The groups collaboratively identified and agreed on the following iterative stages as a normative approach towards building a health informatics system that is relevant to their context.

- **Needs assessment:** The conception of ideas for new IS emerges only from the need of such ideas to improve the operational situation. In the healthcare sector, needs may be realised at the level of healthcare service delivery for the improvement of services and enhanced effectiveness in care delivery. If systems are introduced

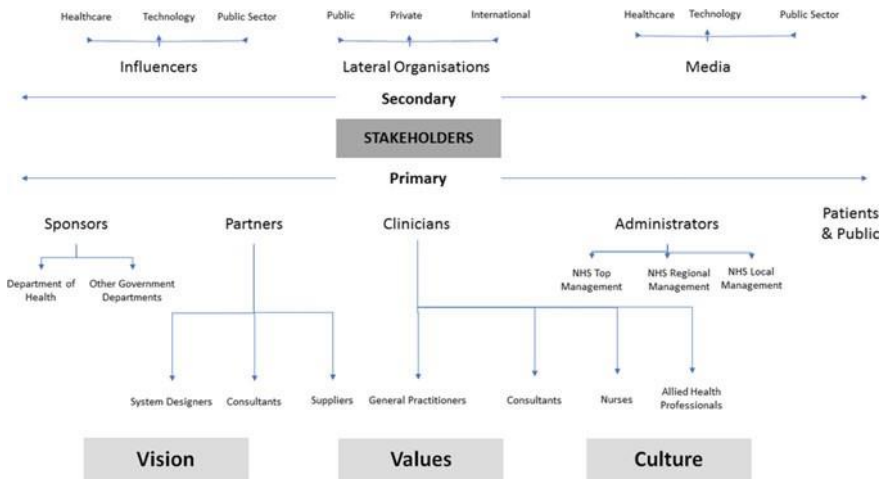


Fig. 6.8 Stakeholder map

without any need, these can be a dangerous toll on organisational resources and efforts. Once needs are realised, they have to be assessed to see if there is actually a requirement to introduce new IS or can those needs be met with existing facilities. Once needs are assessed and there is an agreement that new IS is a requirement, should service providers and management conceive of the new technology. If new systems are introduced without any need, they may come as a management-led initiative to cater to management needs. This can lead to members of an organisation feeling imposed by new systems and not being committed to what has been introduced. Therefore, the conception of any new system is the realisation and assessment of needs by members of the organisation.

- Stakeholder analysis:** Once management is convinced that there is a need for the introduction of new IS, there should be an understanding of who the stakeholders are in the new project. A thorough stakeholder analysis should be initiated to identify all those people who would be involved in the project or would be affected by it. Therefore, it goes beyond just the people who would use the system. A set of primary and secondary stakeholders were compiled. This list was by no means meant to be exhaustive. For a health informatics project in the NHS, stakeholders were indicated as presented in Fig. 6.8.

Stakeholders were categorised into primary and secondary stakeholders. Following are the salient features of the stakeholder map:

- The primary cohort included those stakeholders who were immediately engaged with the project. The DoH sponsored such initiatives and other government departments were involved in strategic decision-making. The final projects were implemented by partners mainly from the private sector and could also include international experts; they were responsible to meet project specifications on time

and in the desired quality. Clinicians were the primary users of such systems and they spread across primary, secondary and tertiary care. It was recommended that clinicians were engaged throughout the process of setting expectations and defining specifications. Administrators in the form of NHS management were responsible to make sure that the desired system was implemented as per the strategic direction. Patients and the general public were critical as the entire objective of such a system is to improve patient outcome.

- The secondary cohort included stakeholders who were influencers and had an indirect capacity to influence it. Influencers in the healthcare, technology and government sectors play an important role in opinion creation decision-making of primary stakeholders. It was the view of the groups to consider lateral organisations that had had implementation of successful IS as secondary stakeholders. These were systems from where learning could be gained for the development of the new IS. This was because designing a system from scratch could have led to lack of realism in what could be achieved and how the system could be designed. This could further lead to lack of direction posing considerable challenges in the deployment of the system. Other successful systems could be specifically from the healthcare sector, but not confined geographically to the area for which the system was designed for. Insights could be drawn from successful systems in other countries. The media played a crucial role in shaping public opinion and it required close engagement. Media focusing on technology, healthcare and public sector were highlighted.
- The vision, values and culture were highlighted as directional for the team. Initiatives are always designed and executed with an intent and the same is defined by one's vision and values; culture shapes how the intent is carried forward on the ground.

There should be a prime initiative to understand how the stakeholders should be involved in partnership right from the beginning. This should move beyond just information giving about the project, and there ought to be true consultation and partnership working from the beginning.

- **System specification:** Needs assessment and stakeholder analysis may lead to the specification of what is actually desired from the system. This involves understanding of what the vision of the system is, what the vision of the organisation is, and what can be realistically delivered. In a healthcare organisation, the vision may be to improve the quality of care; this will be supported by a whole gamut of technological activities and features. However, everything may not be possible to be delivered in a realistic sense. This was feared to have happened with CfH, in which the planners demanded too much within a limited time span. System specification should therefore be realistic and should be aligned with the organisational culture (discussed in more depth in the next stage). In another sense, this may also be called the stage of feasibility study to examine whether the whole idea is feasible or not. At this stage, there may also be the requirement to go back to the first stage of needs assessment if there arise any scepticism about the success of the specified system.

It has to be realised that IS is integral to the process of healthcare service delivery. Therefore, it has to be noted that the specified system is not treated as just one more piece of IT, but that which supports effective healthcare delivery underpinned by a systemic approach.

- **Context analysis:** Every organisation is different. Design and implementation of any IS has to be suited to its context including the core business, the people and its culture.

Operations in the NHS depended on collating, storing and dealing with confidential patient information. This entailed that the nature of information that would be dealt with by the system was highly sensitive and confidential. This was a significant and decisive factor in the design of new systems. Any IS should regard confidentiality of patient information and safety of patients as its top priority. For instance, the NHS Care Record Service in CfH would record information for the whole population of England registered in the system. This sort of information was unlike of anything that could be found in other businesses. Security services and access criteria to manage and maintain this information is specific to the healthcare context. If the system had to be developed effectively, it had to take the specific nature of this information into consideration.

In terms of people, the NHS employed highly qualified professionals. It has to be noted that they could be forced by management to adopt an IS that the management wants. Any IS would have to prove its potential functionality and benefits to the professionals and patients. This would be best achieved when professionals were directive of the design of the system. This takes us back to the first point of needs assessment, the primary impetus for the development of new IS. Due to the nature of work, it was the professionals who would normally recognise the need of new IS. Therefore, the participation and active involvement of professionals is paramount.

Organisational culture is important because any change not respecting culture may face stiff opposition to the change process. Organisational culture will include existing levels of receptivity of IT amongst staff, and also myths and stories associated with the same. The NHS found itself in a unique position within healthcare as well, due to its sheer size and disparate organisation structure. Myths and stories included comments such as one that was featured in the exercise by group-2: “we have not seen a single government IT project in a large scale succeed”. This is an example of cultural scepticism of IS projects in the NHS. These feelings and opinions should be taken into consideration in the design of new IS. Scepticism ought to be understood and addressed in a manner that is culturally sensitive and appropriate to the organisation.

Application of a generic IS model for the NHS would not be adequate, but any approach needs to be firmly based in the context itself including core business, people and culture.

- **Risk analysis:** System specification may be followed by understanding the nature of risks the IS may face. Risks may be both technical and human. Following were some of the technical risks that were surfaced by the groups:
 - Failure of the systems to be delivered on time,
 - Failure of the technology to deliver what has been aspired to be delivered,

- Failure of suppliers to deliver what they have been contracted for,
- The system failing to cope with changes in requirements and project specification,
- Confidentiality of patient information breaking down, and
- Rapid change in technology rendering the original systems to be obsolete.

In spite of involving stakeholders appropriately, and considering the sociocultural factors of new IS, there could still be human challenges in the way of implementing successful systems. Following were some of the human risks that were articulated for an IS project.

- Staff unwilling to use the new system,
- Staff incapable to use the new system and
- The system clashing with the organisational culture.

The analysis of potential risks could even require designers to go back to the first stage of needs assessment and follow up the rest of the stages. Risk analysis is a crucial stage and if this is not undertaken in a detailed and critical manner, there would always be the fear that in spite of undertaking the rest of the stages effectively, the system could still fail.

- **Development and Implementation:** The above stages were expected to provide a robust background for the development and implementation of the desired IS. This was more the technical aspect of IS. The challenges here were to select the appropriate contractors and suppliers who would be able to technically deliver what they had been asked to. Success for the technical teams could be achieved with their work in partnership with the rest of the stakeholders.

It may not be appropriate to regard the implemented system as the final solution. Human expectation and system specifications are deemed to change. It was argued that IS should be developed in such a way that changes do not threaten the existing system, but aids in the evolution of existing systems. This brought us to the overarching idea of cogenerative learning, discussed below.

- **Cogenerative learning:** The idea of cogenerative learning is borrowed from Elden and Leven (1991) who talk of the term in the context of action research. They are of the opinion that cogenerative learning is the process where the power relations between the researcher and the research participants dilute, due to the active process the researcher involves the participants in. They note:

The insiders are not simply sources of data or sanctioners of studies and reports but actively help create and codetermine in every phase of the research process—especially in creating new meaning. They are not merely consulted in each phase of knowledge production; they participate as *cocreators*. We call this empowering participation (Elden and Leven 1991: 133).

In the context of IS implementation, system designers, managers and planners ought to work cogeneratively with system users, “the insiders”, to encounter challenges, learn from pitfalls and cherish knowledge. This has to be achieved in partnership and not in isolation between stakeholders. Constant learning ought to be integrated into IS so that the system is able to evolve from one stage to another and

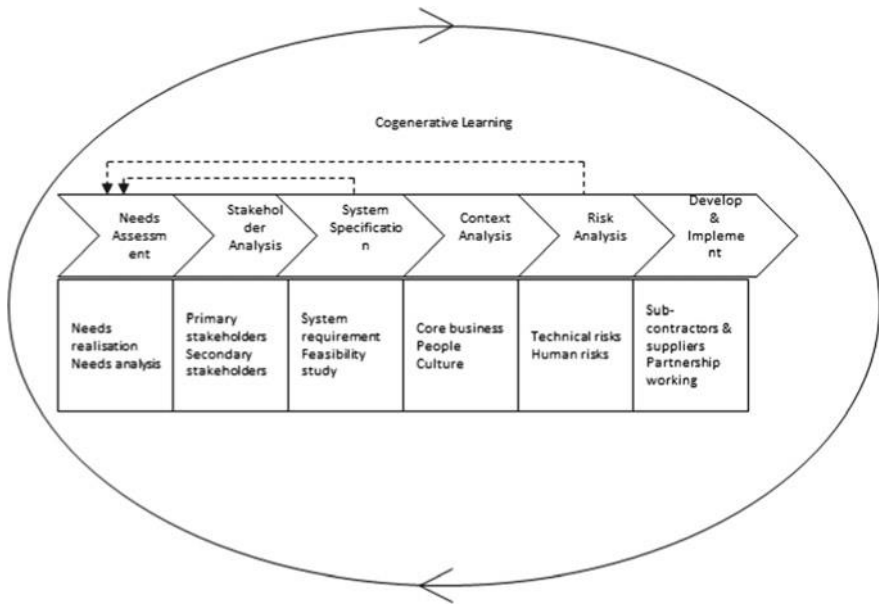


Fig. 6.9 Normative approach to healthcare IS as collaboratively created by participants

technology is designed to be adaptive. Cogenerative learning may be treated as the overarching philosophy. This lends the iterative angle to the IS design approach.

The overall approach has been illustrated in Fig. 6.9.

Figure 6.9 indicates a normative approach for healthcare IS as informed by the SAST exercise. The insights that have been discussed in the above paragraphs are pertinent in the context of UK public sector health care. These insights were conceived by professionals working in a wide range of roles within the NHS. Hence, these insights and the resultant normative model for healthcare IS can be important inputs for health informatics designers and planners in the context under consideration.

Next, I will spend some time reflecting on this exercise.

6.4.2 Reflections on the SAST

As a facilitator, I found this exercise immensely helpful in bringing together two opposing factions and bringing in a synthesis through a healthy and inclusive debate. The groups were able to highlight some very sensitive aspects aided by the tools that were brought in, which would otherwise have not been possible.

The interesting part noticed was that the non-competitive nature of the platform made it easy for team members to even critique their own assumptions. For instance, some members of the management-led approach could openly share that they were not sure of clinicians were consulted adequately during the process, although they

believed this was a necessity. They highlighted their fears of inadequate IT literacy amongst clinicians in front of the opposing faction without any hostility. The clinician-led faction was also able to talk about the shortcomings of their own viewpoint by stating that administrative staff, patients and clinicians might not be sufficiently IT literate to work with the new system. This could also have led to resistance to the change process, creating more challenges for the project. Prior to this SAST exercise, these factions did not come together face-to-face in such an environment where they could put down their own guards and express themselves openly and in a non-intimidating platform.

In several occasions, the groups seemed to come closer realising that it was often government agenda that created the factions rather than worldviews of the participants in the system, who were just trying their best to do their jobs. For instance, when it came to the discussions on the “choose-&-book” feature of CfH, both factions realised that this was probably not a priority at the on-ground level as patients always wanted care close to their residence; but due to the focus from the DoH, they had to implement this feature with great aggression. As an unintended consequence, SAST enabled the factions to “sympathise” with each other that eventually made the synthesis stage easier and comfortable.

The normative approach to healthcare IS that was collaboratively developed was a fair testimony that professionals are able to come to consensus and create models that work for them without expert interventions. None of the participants were system designers and as a facilitator, I was no expert on healthcare systems design. But it was common understanding, experience and a desire to make things work that made us come together to create a normative approach for healthcare IS enabled by a platform offered by SAST.

Midgley (2000) calls SAST as reflection of a “second wave” of systems thinking where the discipline started offering a platform to build constructs through aided understanding, intersubjective connection and constructive critique.

6.4.2.1 Weaknesses of the SAST

Along with the strengths realised in the SAST exercise, there are also few gaps that come with this methodology.

First, the methodology starts with the identification of participants into two diametrically opposing groups. However, it is not always necessary that even though participants are divided into two opposing groups, they will need to have radically opposing viewpoints. As this exercise shows, although there were two opposing groups, there were numerous instances where members of one group closely identified with the viewpoints from the “opposing” group. The whole idea of maximising divergence of perspectives between the groups may be context dependent. Hence, although SAST aspires to unearth assumptions, it itself starts with an assumption that viewpoints of members from the two groups will always be radically opposing. This introduces a fundamental critique of the whole methodology.

Second, SAST has been portrayed above as an “ideal type” approach for management decision-making, which has been aptly applicable in the context of healthcare IS. However, when it comes for the actual implementation of the approach in real life, SAST is best only as an “ideal type” approach. It has the limitation of optimistic simplification. Jackson (2000) notes that the methodology assumes that if the people’s attitudes change, so will the social system. This indicates to the methodology’s simplistic assumption that social systems are readily adaptable to human systems. However, given the tremendous complexity that gets incorporated into social systems once alterations and new structures are introduced, it may not be very simplistic to alter the same social systems. In the “ideal-typical” approach taken above for the formulation of a health informatics model, SAST has not allowed these challenges to be surfaced.

Third, the SAST approach does not pay due attention to the influence of power relations in the environment in which the exercise takes place. It presumes that in the Dialectical Debate stage every participant in the teams will present arguments and defend their own stands equally competently to arrive at an understanding. However, if participants come from a different set of hierarchy in the organisation, certain members may be reserved about their participation. In the current case study, debating on the situation and arriving at a consensus in spite of radically opposing viewpoints was certainly possible. However, under what conditions this was made possible is also to be scrutinised. This stems from the feedback that was received after the exercise was conducted. One of the participants said that their inputs and vocal arguments were possible because they already knew the rest of the participants very well and felt comfortable to share her opinion; however, if the group were different, their involvement could have been very different. A similar feedback was shared by another participant as well. Hence, the whole dimension of power and repression in the overtly consensual atmosphere needs to be considered. This may introduce a Foucauldian dimension of power into the methodology, which SAST very clearly does not consider.

Fourth, arrival at consensus in this particular exercise should not give the impression that consensus is a definite outcome of SAST. There may be cases where no consensus is arrived at even after extensive deliberation, and that differences widen instead. This can happen due to a variety of reason including lack of enthusiasm of participants, power relations or simply because the methodology is not situated for that particular context. Dash (date not available) cites his experience of an instance where he applied SAST with two opposing groups, but could not reach a consensus. As he notes: “Despite attempts at assumption negotiation and modification, it proved impossible to arrive at any overall synthesis during the final stage of the methodological process” (Dash date not available). However, the whole idea of consensus is overplayed in the methodology and it gives an impression that a single or repeated deliberation of SAST will certainly lead to a consensus of opinion. Therefore, the idea of consensus at the end of SAST should be regarded with some criticality and it should be recognised that consensus is context and situation dependent.

6.5 Strategic Convergence

Two prominent systems methodologies were leveraged to bring about a strategic convergence between differing professional factions in the NHS—SSM and SAST. The Merriam-Webster dictionary defines strategic as an act of “great importance within an integrated whole or to a planned effect” and convergence as an act of “moving towards union or uniformity”. I narrated how I delved into some of the most pressing issues in the system from aspects of structure, technology, engagement, personas and rationality (some reference of which have been detailed in Chap. 4). I did not consider conflict and differing opinions at face value but understood the same at the level of root causes that were shaped by worldviews and rationality. Conceptual models addressed delving into mental structures that enabled discussions on deep-seated values. This holistic appreciation of the system led me to critically evaluate the substantive rationality and establish a common vision through SSM, which further led me to address procedural rationality by collaboratively coming up with a normative approach for healthcare IS through SAST.

As a systems facilitator, my intent was to achieve an integrated planned effect through unification that I call strategic convergence. I highlight the following imperatives of strategic convergence:

- **Intent:** Having the intent to take a decision or to converge is at the crux, without which any effort would not lead to desired results. In this case, it was evident from the beginning that the two factions wanted to come together. Clinicians and managers needed each other for various reasons as articulated earlier in this chapter. Whilst creating the root definitions, it was clear that both the fractions wanted to achieve the same outcome, but their approaches differed. Being able to share their intent brought the teams together to work towards a common understanding. But had the intent not been there, there would have been severe resistance even to come together at the first place.
- **Worldview:** This is an important imperative that shapes how people think and perceive, process information, and how they wish to see the situation evolve. Worldviews also shape personas. In this case, systems modelling enabled participants to express their worldviews with near clarity in an inclusive and non-intimidating manner. Strategic convergence is only possible if there is an amalgamation of worldviews at a fundamental level. Creative tools and inclusive platforms have the power for worldviews to surface, clash and possibly converge, as we have seen in the intervention presented here.
- **Action orientation:** Strategic convergence needs to be action oriented to be meaningful. When it comes to a complex subject like healthcare IS that touches multiple stakeholders, cuts across various regulatory bodies, involves various perspectives and needs to be supported by socio-technical systems, it is important that actions are well thought through and well guided. The normative approach to healthcare IS developed here collaboratively with the opposing factions in the system can serve as a roadmap for action to bring this vision of an integrated healthcare knowledge management service to fruition.

Strategic convergence involves going beyond the obvious of seeking fact-based agreements to aspiring for values-based consensus. This requires deeper intervention where the parameters of intent, worldview and action-orientation become important.

Flexibility in thinking and action remained paramount as I walked through this intervention in practice. Understanding of a socio-technical system is itself required drawing in from various disciplines as we saw in this chapter. It was not a linear simplistic technology development project, but I brought in understanding of professional baggage, rationality, personas, technology and government affairs to arrive at the strategic convergence. Strategic convergence, as I explained, requires one to be open to challenge one's won fundamental mental models and lay bare one's own value systems to be critiques. This requires tremendous amount of flexibility of thought process and openness.

As a facilitator, adaptability to the situation let me move from the stage of resolving substantive rationality to procedural rationality; this required foresight, risk-taking and an integrative mindset. I also employed SSM flexibly by bringing in the questionnaire survey and interviews to qualify my interactions and further strengthen the problem articulation and comparison/discussion stages of the SSM. Flexibility also needed to be demonstrated at the logical level when we were working with stakeholders from different walks of life and where everyone was a busy professional.

Strategic convergence with the success imperatives of intent, worldview and action orientation may not be easy, but can be rewarding and present a win-win situation.

6.6 Conclusion

In this chapter, I discussed my journey of bringing about a strategic convergence between clinical and managerial factions in the UK NHS. I narrated the journey of how I applied SSM and SAST to bring about this convergence.

I began the chapter by introducing the context that included a discussion on the interpersonal dynamics in the system and inherent professional clashes that led to the surfacing of two factions in the area of healthcare IS. This led to a problem structuring to address the substantive and procedural rationality in the situation; the former through the aid of SSM and the latter through the aid of SAST. I led the reader through a discussion on the philosophy of both the methodologies and how they were deployed on ground. I explained the emergent need of addressing the procedural rationality once the substantive rationality was addressed. Each step of the methodologies was discussed through a narration of the experiences from the on-ground deployment. The methodologies led to the creation of a normative approach to healthcare IS.

Along with the advantages of the methodologies, I also introduced a critique for both of them. Reflections presented for both SSM and SAST hinged on both the philosophical and practical levels, and also included a critical appreciation of the role of the facilitator.

At the end, I defined what I mean by strategic convergence and how this case narration qualified as an example of strategic convergence brought about by holistic thinking and flexibility.

References

- Checkland PB (1981) *Systems thinking, systems practice*. Wiley, Chichester
- Checkland P, Holwell S (1998) *Information, systems and information systems: making sense of the field*. Wiley, New York
- Checkland P, Scholes J (1990) *Soft systems methodology*. Wiley, Chichester
- Chowdhury R (2005) The politics of information integration: investigating the UK National Health Service. In: Kotsis G, Taniar D, Bressan S, Ibrahim IK, Mokhtar S (eds) *Proceedings of the seventh international conference on information integration and web-based application & services*. Austrian Computing Society, Vienna, pp 1171–1179
- Churchman CW (1968) *The systems approach*. Delacorte, New York
- Clarke S (2001) *Information systems, strategic management: an integrated approach*. Routledge, London
- Cooper A (2007) We haven't got a plan, so what can go wrong? Where is the NHS coming from? In: Bali RK, Dwivedi AN (eds) *Healthcare knowledge management: issues, advances and successes*. Springer, New York, pp 221–231
- Dash DP (Date not available) Strategic assumption surfacing and testing (SAST). http://www1.ximb.ac.in/users/fac/dpdash/dpdash.nsf/pages/CP_SAST. Accessed 16 March 2007
- Davies HTO, Hodges CL, Rundall TG, Kaiser HJ (2003) Views of doctors and managers on the doctor-manager relationship in the NHS. *Br Med J* 326:626. https://www.bmj.com/content/326/7390/626?jkey=700d68a9ab87b686ba93674caee99f35939d30d0&keytype2=tf_ipsecsha. Accessed 13 July 2008
- Edwards N, Marshall M (2003) Doctors and managers. *BMJ* 326:116–117
- Elden M, Levin M (1991) Cogenerative learning: bring participation into action research. In: Whyte WF (ed) *Participatory action research*. Sage Publications, Newbury Park, California
- Gasson S (1994) The use of soft systems methodology (SSM) As a tool for investigation. <http://cci.drexel.edu/faculty/sgasson/Vita/UseOfSSM.pdf>. Accessed 02 Nov 2018
- Houghton L, Ledington PWJ (2002) The evolution of confusion: soft systems methodology and social theory revisited. *Australas J Inf Syst* 9(2)
- Jackson MC (2000) *Systems approaches to management*. Wiley, Chichester
- Jackson MC (2003) *Systems thinking: creative holism for managers*. Wiley, Chichester
- Kimble C (2008) *Blended methodologies*. University of York
- Mason RO, Mitroff II (1981) *Challenging strategic planning assumptions*. Chichester, John Wiley & Sons
- Midgley G (2000) *Systemic Intervention: philosophy, methodology and practice*. Kluwer Academic/Plenum, New York
- Mumford E (1995) *Effective systems design and requirements analysis*. Macmillan, Basingstoke
- Rosenhead J (1987) From management science to workers' science. In: Jackson MC, Keys P (eds) *New directions in management science*. Aldershot, Gower, pp 109–131
- Simon HA (1976) From substantive to procedural rationality. In: Simon HA (ed) *Models of bounded rationality, vol II. Behavioural, economic and business organisation*. MIT Press, Cambridge, MA, pp 424–443
- Thomas A, Lockett M (1979) Marxism and systems research: values in practical action. In: Ericson RF (ed) *Improving the human condition*. SGSR, Louisville, pp 284–293

Chapter 7

Building Systemic Capability in An NGO Setting



7.1 Introduction

Non-Governmental Organisations (NGOs) are important agencies nestled between formal legislative authorities and the civil society that work to bring about positive change in the society by mobilising financial and technical resources from a competitive common pool. Building systemic capability ensures long-term sustenance for the NGO and also equips them to make the desired impact it sets out to.

In this chapter, I will offer a critical reflection of how the Interactive Planning (IP) approach was used in an NGO setting in India to build its systemic capability. The case in point was the Universal Team for Social Action and Help (UTSAH), an NGO that works in the field of child rights and child protection. I was a consultant with between October 2013 and December 2013. UTSAH was in existence for over two-and-half years then. It was at a stage of self-transformation in order to surface as an agency in social action and as an effective voice in the child rights advocacy space, for the future. In order to realise this vision, I worked closely with the organisation to develop a child protection framework to inform its work and put in place a governance structure to enable its service delivery.

I first published this case in 2015 with an attempt to describe the intervention undertaken highlighting its participatory and inclusive nature (Chowdhury 2015). Here, I will explore how the element of strategic flexibility was reflected through the process of this intervention and in the framework that was its outcomes. I will also discuss how the approach aligns with the Theory of Change. An emergent critique is also presented that offers a retrospective appreciation of the approach and the framework in the context of holism and flexibility.

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Deliberations presented here are believed to be beneficial and informative for both academicians and practitioners of systems thinking, and for professionals working in the social impact sector.

7.2 About UTSAH

This section describes the thought behind the organisation leading to the birth of UTSAH in 2011. It also describes the key initiatives and successes that shaped the formative years for the organisation.

7.2.1 Birth of UTSAH

The birth of UTSAH was steered by its founder, Miguel Queah. Inspired by the idea of affirmative action to benefit and empower the community, Miguel was driven to adopt a proactive approach since early days of his education. He was determined to act as an active agent for social change through the medium of, in his own words, “affirmative action to *help* people in need of care and protection”.

Miguel founded UTSAH in March 2011 with co-founders, Pallavi Barua and Shankardev Chowdhury, in Guwahati, a city in the state of Assam (North-East of India). UTSAH stood for United Team for Social Action and Help. However, “Utsah” in the ancient Indian Sanskrit language has a deeper meaning—enthusiasm or drive. Apart from the executive team, the organisation additionally had a team of active volunteers, aiming to work for the betterment of the society. Miguel Queah was unanimously appointed Chairperson to lead the organisation. The team of the three co-founders constituted the Executive Committee. The organisation was registered a Non-Governmental Organization (NGO) with the registration number KAM(M)/240/A-26/787. The organisation started operations supported by an extended seven-member Governing Council and a team of dedicated volunteers.

The initial framework was a basic services model offering a viable solution that would help in socially bettering the conditions of people living in deprived areas of the city through a participatory approach. The focus was on making the communities “safe for its children”. To this end, the organisation created the UTSAH Child Safety Chart (UTSAH Handbook 2011) that covered essential elements for children including child rights, education, health, nutrition, sanitation and safety.

7.2.2 The Formative Years

The first project for UTSAH in March 2011 was in a vulnerable community—Hafiznagar—situated in the heart of Guwahati city.

7.2.2.1 About the Hafiznagar Community

The Hafiznagar community had been an informal settlement for more than 40 years then, along an unsafe land stretch next to a functional railway line without any barrier. Initially, the area had more than eight-hundred settlers, most of them migrants from nearby villages, who had come in search of better livelihood opportunities. However, since the residents had settled along a railway track, the railway authorities would evict the establishments each year by breaking and burning down the shanties, only to have the residents re-settle back in that same area due to lack of viable alternatives. Year after year, the same eviction drives, coupled with the stress of dealing with abject poverty and social isolation resulted in the people losing faith in any kind of organised living. This unrelenting vortex of insecurity of tenure along with social discrimination turned the entire area into a ghetto (UTSAH Report on Community Needs Assessment 2011). Ghettoisation gave rise to robbery, alcoholism, gambling, substance abuse, and other kinds of anti-social activities. There were transactional attempts carried out in the past by other NGOs. These were limited to distribution of food, blankets, medicines and other essentials. Hence, they failed to make any transformational and sustainable changes in the community and the mindset of the residents.

The UTSAH study of 2011 also revealed that in spite of the dire state of existence of the community, some of the residents were aware of the importance of health and hygiene, clean surroundings, education, sanitation and other basic requirements that contribute to the overall health and well-being of people. They also had a desire to be self-sufficient by growing their own fruits and vegetables, and raise poultry for themselves, and earn a decent livelihood through organised economic activities. They also had hopes of education for their children and felt that by improving their overall standard of living, their families would benefit.

7.2.2.2 UTSAH Intervention in the Community

Since it was founded, UTSAH's approach was grounded in community action. From the very beginning the team worked alongside the residents of Hafiznagar and involved them in all activities in order to win their trust and confidence. Key aspects around child rights and protection were identified, and concerted action was undertaken to resolve problem areas with the help of committed volunteers and few key influencers in their panel. The funding was initially mobilised from individual donors. Following were the salient features that defined the character of the UTSAH interventions in the formative years (during 2011 and 2012):

- *Gaining trust:* The team started with making frequent visits to Hafiznagar and speaking to individuals who showed interest in making a change in their lives. Natural leaders emerged from the community, who were at the core for the UTSAH team to partner with and make their inroads into the community.

- *Community drive*: Two participatory subcommittees were formed, from the residents of Hafiznagar itself, representing men and women in respective committees. These subcommittees were trained initially on addressing basic concern areas like health, nutrition, hygiene, violence and abuse.
- *Communication and awareness*: The UTSAH team started conducting daily visits to Hafiznagar and with the help of the committees, frequent and regular communication—both individual and collective—were started on various issues and topics that would arise. Regular communication around how their actions, behaviours and living patterns negatively affected their children were listened to and acted upon, wherever possible, with sincerity.
- *Addressing deviance*: Specific community norms were noted and shared with the residents on acceptable social conduct. Specific corrective action and counselling in case of flouting the community norms were introduced.
- *Stakeholder involvement*: In order to deliver impactful affirmative action, key stakeholders were sensitised of the initiatives and were taken into confidence. The UTSAH team started doing regular visits to the Indian Railways, local administration, police, health agencies (both private and government), small businesses, neighbouring localities and the media. Sensitisation also involved key communication and negotiations with the Indian Railways and the police.
- *Streamlined Funding*: The UTSAH team started reaching out to potential donor agencies to streamline their funding and reduce dependence from individual donors. In early 2012, SMILE Foundation, a leading organisation working in the field of child development, started its partnership with UTSAH as part of their integrated child development programme (Smile Foundation 2012). This ensured a predictable and sustained funding for UTSAH's programme in Hafiznagar.

Supported by SMILE Foundation, within 2 years of the partnership between UTSAH and the Hafiznagar community, a range of affirmative drives were implemented touching education, health and hygiene, housing, nutrition and adolescent help (ANI News 2013). In the area of health, camps and awareness campaigns were organised where health records of every resident were created and maintained. Water supply was regularised with access to running water (The Assam Tribune 2012). At the community self-help level, the concept of systematic living was introduced, whereby all houses were organised in a row, specific areas were allocated for defecation, and space was introduced in front of groups of households to have a kitchen garden for self-supply of fruits and vegetables. Counselling workshops for adolescent girls were introduced where the UTSAH team brought in trained volunteers to conduct such sessions from time to time.

The UTSAH interventions, over the formative years, were fundamentally geared towards creating conditions in the community that would build safe spaces, where children can be provided with a better atmosphere where they can be developed and nurtured (The Times of India 2013).

7.3 Emerging Requirements at UTSAH

By early 2013—2 years through its inception—UTSAH realised the need to give more structure to its community partnership approach and aspired to develop a robust framework for its community-centric initiative.

UTSAH approached me in mid-2013 to explore a collaboration whereby a comprehensive framework could be developed that would give a definitive way forward for the organisation. There were several rounds of discussions between the UTSAH Chairperson and me. On finalisation of the engagement, I penned down the overall emerging requirement with the Chairperson—articulating and enabling the vision of UTSAH through the development of a child protection framework that is comprehensive, measurable and sustainable. This was to be substantiated by a programme delivery model that will give life to the framework. A project team was constituted that included the three founding members of UTSAH and myself.

7.4 The Methodology Chosen

The emerging requirements at UTSAH demanded creating a strategy that would support the organisation shape up as a professional and sustainable entity for the future. Being an NGO, it was considered that this strategy had to be realistic and created understanding available resources and environmental constraints. Also, operating in the community sector, it was crucial that the target beneficiaries were involved throughout the process.

The project team attempted to arrive at an approach that would think from the target population and facilitate creating a system that would be effective and efficient. The principles that drove this understanding included

- Intent to give to the community what it is in need of,
- Need for a system that ensures control and observable impact and
- Requirement to develop an operational model that can enable execution and sustainability.

Flexibility was an important consideration for me whilst I worked on the strategy based on the above principles. I looked at flexibility from the following perspectives:

- **Strategic participation:** I understand strategic participation as the process where key stakeholders are brought in through the entire process of design and implementation. It is not just about looping in stakeholders in the context setting stage to capture expectations. Rather consider stakeholders as integral to strategy creation and partners in the execution process. This happens by building in confidence and capability in different groups who we wish to involve and trusting them to deliver on the strategic expectations of the organisation.

As a consultant, I was cognisant of strategic participation and wanted to enter the field by weaving in stakeholders through the programme. The requirement was to

put in place governance structures and enablers with an endeavour to institutionalise a system where the organisation does not lose sight of strategic participation. Strategic participation enables openness and a richer perspective for programmes, as a purely management-led approach can be restrictive and myopic.

- **Continual learning:** Learning from experiences and incorporating the same in work practices is an important element for all organisations, and more so for a new organisation.

The development sector presents numerous challenges including lack of funding, expertise and time commitment. UTSAH was also the first structured initiative for the three founders and the need to continually learn and incorporate best practices was not an option. I must highlight that the hunger to learn was apparent with the founders and their very interest in approaching me to support them in their journey was itself a sign of the same.

Structured monitoring and review play an important role in taking stock of work progress and undertake course correction. The need was to build in periodic review mechanisms across set parameters to undertake such reviews effectively.

- **Adaptive capability:** Incorporation of learning means the ability for an organisation to adapt itself to changing internal and external circumstances so that it is viable in the long run.

I needed an approach that would bring home the importance of adapting to new requirements of the larger system. These included changes in funding patterns, team dynamics and regulatory guidelines.

- **Dynamic resource allocation:** Flexibility and adaptiveness also means that budgetary allocation should not mean watertight financial compartmentalisation. But with proper guidelines and informed decision-making, organisations need to take a dynamic approach to budgets and their allocation, specifically considering the unpredictable nature of small organisations in the development sector. This can also be true for allocation of other resources including fixed assets and infrastructure.

With the above understanding, Interactive Planning (IP) emerged to be a preferred approach for the situation at hand.

7.4.1 Interactive Planning

Interactive Planning (IP) was developed by management Guru, Russell Ackoff, who, on his death, was referred to as the Einstein of problem-solving (Brant 2010). Ackoff (1977) notes three kinds of planning: Reactive, Prospective and Interactive. As the name suggests, reactive planning is undertaken on retrospect when issues arrive that are undesired or unplanned. This is the most common kind of planning where the issues addressed, unfortunately, have the tendency to become transactional. Reactive planning often lacks the ability to unravel the roots of the problems and has the danger of ending up appreciating issues at the surface level. On the contrary, prospective planning is futuristic and draws references from learning from past occurrences and

ongoing events. Prospective planners are driven by scenario planning of what may happen with the assumption that there are environmental factors that are external and beyond control of the planners. Ackoff (1977), however, aspired for a highly evolved approach in the planning process where he desired to encompass environmental constraints and uncertainties into the planning process. He proposed to achieve this by envisioning the desired ideal state in the current scenario in an attempt to change the mindset of planners to think in terms of an *ideal-seeking achievable* within the current circumstances. This was a revolutionary thinking that almost attempted to make the impossible happen by understanding the operational environment in a way that brings in factors, often considered uncontrollable, come under control by virtue of systemic appreciation and deliberation.

Ackoff renders great emphasis on what is possible in the current environment. By this, he attempts to internalise factors within the frame of planning that is often considered external and out of control, which impinges upon the effectiveness of the planning process. Ackoff (1977) refers that failures in plans are often attributed to factors beyond one's control, rather than the planners' failure to account for the same factors as part of the real world they operate in. Hence, Ackoff advocated an approach, whereby planning encompasses a systemic perspective that considers all stakeholders and probable constraints, and envisages a desired state that is realistic and achievable as of the current time—within a well-identified framework where possible derailers can be included within the gamut considered (rather than attributing externality and hence looking at them as beyond control). Ackoff proposed a perspective in which the planner's mindset is shifted from looking at individual problems in isolation, to look at how problems interact with one another. He advocates that problems are created by the mental framework that planners operate in, at the first place. Hence, the way forward lies in the ability to look at organisations and problem situations as a system in interaction, rather than external occurrences triggered by factors beyond those involved in resolving the problem situation.

By virtue of this thought, his approach enables planners to constantly bridge the gap between what the reality is and what it should be in the current times, as he believes that an organisation's future depends as much on what is done to bridge the gap between what is ideal and real in current times, as on what is done in order to reach its ideal state in the future. In his own words, planners are better off by directing their energies to “the design of a desirable present and the selection or invention of ways of approximating it as closely as possible” (Ackoff 2001; p. 3).

Ackoff (2001) subjects IP to two constraints—Technological Feasibility and Operational Viability—and one condition—Learning and Adaptation. The constraints set a clear boundary for the planners to deliberate on solutions that are achievable and attainable within current technological or resource realities. At the same time, solutions that are operational and viable within the existing environment. In other words, it should be able to exist in harmony within the current ecosystem. The condition of learning is crucial so that it ensures that the current system is adaptive to changing requirements from internal and external stakeholders. It also mandates that it is susceptible to its own redesign with learning from the successes and failures that

it encounters in its lifetime. Hence, Ackoff advocates a system that is well defined, which, at the same time is not static, but open to change and adaptation.

As Lumbo (2007) notes, IP brings the following advantages to the table: realistic, holistic, participative, empowering, creative, action-oriented and flexible. IP can be categorised under the interpretive paradigm. This paradigm lends the perspective that social systems can be understood when one immerses themselves into the situation of the target group and looks inside-out (Burrell and Morgan 1979).

However, it is to be noted that I consciously chose not to wear blinkers whilst working under a preferred paradigm or approach. Learning and tools from various other perspectives and methodologies were borrowed through the intervention as per relevance and applicability. I introduced a complementarist angle in the approach, which has been prevalent and popular in systems science (as discussed in Chaps. 2 and 3).

At this stage, I would like to talk about the synergy of IP with a popular model in social impact work that is called Theory of Change (ToC).

7.4.2 Theory of Change

The Theory of Change (ToC) articulates long-term goals for the system and creates a map to work backwards for design and planning, resource optimisation and contingency planning, and monitoring and evaluation. Creation of causal linkages is central to the ToC where each stage can be considered in terms of interlinking flows of information and control mapped in an “outcome pathway” (Clark and Taplin 2012). The interlinking flows articulate outcomes for defined steps within the stages that establish the importance of achieving certain milestones before the following step is embarked on. In any consulting mandate where there is a contracted agreement between the client and the consultant, the contract usually sets out expected deliverables and timelines. Although it may not be easy to establish such clarity in case of social impact, these are limitations that consultants will need to work under. ToC can come handy where objectives and activities can be planned out with clarity in advance, along with preparing for alternatives with adequate scenario planning and resource allocation. Chains of command and contingency response mechanisms can be articulated in advance and stakeholders can be sensitised with adequate preparation.

Once implementation strategies are agreed on, outputs, outcomes and impact are clearly articulated. Output is the immediate visible effects or results of specific programme activities. Outcome is medium term and refers to the desired effects that the outputs result in. Impact is the overall change in the narrative of reality.

IP, when used in systems design, has five broad phases. Each of these phases has been introduced at a turn in the following sections along with a discussion of the intervention that was undertaken. I will make reference to how this intervention aligned with the Theory of Change in its essence and model building.

7.5 The Intervention

The IP approach has five distinct phases: (1) Formulating the mess, (2) Ends planning, (3) Means planning, (4) Resource planning, and (5) Design of implementation and control. Considering that the system design needs to incorporate the learning character in its model and be open to accommodating changes within and outside the system, each of these phases may not be considered to be exclusive, but as interconnected and evolving. As Jackson notes, "... none of the phases, let alone the whole process, should ever be regarded as completed" (Jackson 2000; p. 236).

I will pick up each of the above phases in turn, in the discussion below, along with a reflection on how they align with the Theory of Change (ToC).

7.5.1 *Formulating the Mess*

Although, as the name suggests, the first phase is about the "mess", this essentially involves appreciating the situation in-depth. This phase is about comprehensively understanding the organisation from possible factors that affect its functioning, impinge upon its effectiveness and efficiency, and influence its future direction. The ToC is a holistic model that focuses on the long-term and the ecosystem in which we exist; this appreciation helps us understand the constraints and risks. Immersion in the community is a crucial factor in this process.

As the first phase, I facilitated two individual interactions with the chairperson, two interactive sessions with the executive committee and four immersive field visits in the Hafiznagar community in November 2013. The objective was to understand the prevailing situation and its future direction from the UTSAH management and appreciate the perspectives of the residents of Hafiznagar. Immersive field visits with the community were conducted where I sat alongside the resident committees and probed specific aspects of their life and the change they have observed through open-ended exploratory pointers.

Insights from the above interactions can be classified under the following broad parameters.

7.5.1.1 **Current Situation Through Leadership Perspective**

UTSAH was then a two-and-half year-old registered voluntary organisation, a crucial time in its history. In that particular time span, it recognised that its focus is on child rights and protection. All the founding team members came from different backgrounds and none had a related background in social work. The diversity brought in several strengths to the team—whereas the Chairperson (Miguel Queah) was the strategist, the deputy chairperson (Pallavi Baruah) was the executionist, and the chief spokesperson (Shankardev Chowdhury) played the role of the treasurer

and led external communications. Along with the support of the Governing Council and the extended team of volunteers, the team identified certain key success factors and involved themselves in leveraging the same: organisation management, onsite implementation of plans, fundraising, public relations, external networking and government liaison.

In the Hafiznagar community itself, UTSAH successfully brought about visible and impactful change that included organising of houses in a pattern and sequentially numbering them, regularised water supply, health camps, setting up of a community centre, opening of a non-formal school in partnership with SMILE Foundation (a large NGO), and giving all children an opportunity to education, and reduced incidences of deviant behaviour. Funds were also mobilised successfully from the government and private philanthropists to aid operations (Web India News 2012).

However, the team's strategies and approaches were shaped by personal learning and on-the-field experience. The team leveraged on successes and learned from what did or did not work favourably. This meant that at times successes were not institutionalised and the learning curve was gradual.

7.5.1.2 The Organisation's Ecosystem

As part of understanding the situation, it was important to understand the wider ecosystem within which UTSAH operated. To this end, a stakeholder analysis was carried out to appreciate the touchpoints for the community and the intervening agency, and understand their impact. Discussions with the Executive Committee and the community leaders from Hafiznagar highlighted specific factors that could act as opportunities, and also those that could pose challenges as derailers. Some of these are mentioned below.

- **Civic bodies:** The local municipality, water supply, sewage disposal agencies and other civic bodies play a key role in maintaining a healthy and hygienic living environment. Often, many of these services are inaccessible to deprived and vulnerable communities leading to an environment that is not conducive for healthy living.
- **Healthcare agencies:** Local healthcare agencies—both public and private—play a proactive role in ensuring a healthy life for the residents—in particular, women and children. Unfortunately, the residents were found to be generally unaware of health services in the vicinity, or the local agencies were not proactive enough to come forward to the community to offer their support.
- **Police:** The police plays an important role as custodians of law and order in the community and the surrounding area. Due to unfortunate circumstance of the lack of regular income, many of the residents fall prey to crime and anti-social behaviour. It is the responsibility of the police to restore peace and lawful existence of the community. However, at most times, the police also resorts to rude and unacceptable behaviour against suspects. This creates a continual sense of distrust between the police and the community, resulting in an ever increasing gap.

- **Education bodies:** Education is the cornerstone to make the child future-ready, and hence education bodies play a crucial role in enabling the same. Local schools, colleges and vocational institutions are important stakeholders who can act as partners to impart training and education to children in the community, in a commercial or non-commercial basis.
- **Local industries:** Local industries can impart relevant training to the adults and guardians of children and facilitate various employment opportunities for employable adults and make the children employment-ready for the future. This directly contributes to regularising income and towards the overall economic well-being of the community. Their funds can also be leveraged under their corporate social responsibility commitments, and directed to enabling various community development projects that have been planned for.
- **Funding agencies:** Designated national and international funding agencies mobilise funds and allocate the same for social and developmental causes, based on merit and eligibility. These agencies can make a substantial impact by channelising funds for defined time periods for focused interventions. These have the potential of being made more regularised, based on impact measurement and target achievement.
- **Child right bodies:** There are a range of national and international child right bodies that can act as strategic partners to mobilise affirmative action in the community, and by virtue of their authority and recognition, can make a significant impact in protecting and upholding the rights of the child.
- **Civil society:** The civil society can impact child-centric developmental initiatives in a significant way. From coming forward as active volunteers to deliver programmes, to creating far-reaching awareness and mobilising funds, the civil society can act as the agency for action for the organisation and the community. The community exists in the same space as that of the civil society, and by building effective bridges between the two, perceived gaps between the community and civil society can be overcome, which can itself act as a catalyst for change.
- **Government:** The government is the most critical stakeholder in bringing several of the above initiatives to life, by acting as an effective facilitator. Providing timely clearances to civic bodies, opening up the right sources of funds, enabling access to pre-approved dues for children, giving timely clearances to projects and approving the right partnerships, the government can effectively facilitate seamless functioning of the system. However, bureaucracy and red tape remain a significant challenge for many of the initiatives to be realised.

7.5.1.3 Identifying Challenges and Opportunity Areas

The leadership interactions and the stakeholder mapping surfaced several issues centring around the key success factors. I integrated the feedback and led a deliberation with the wider Governing Council of UTSAH on the articulated ecosystem and identified opportunities and derailers associated, during which a reference projection was made where it was considered how the situation for UTSAH would emerge in the

future if no change was made in the way it is operating. Based on the same assumptions, the discussion revealed several parameters that could lead to its own destruction if proactive and corrective action steps were not undertaken.

The following key opportunity areas were identified as crucial for UTSAH.

- *Overall direction:* The organisation had a noble intent and the team appeared committed to the same. However, the leadership was still fuzzy on articulation of the core mission they were working towards. The Executive Committee had not gone through a formal direction setting. This resulted in many of the interventions to happen by default, rather than by design. The team was learning on the ground and by virtue of experience. Although the intent of creating safe and conducive spaces for children was well understood, it was not articulated in clear terms of deliverables, resulting in a situation where the cascade of the intent to the larger team was often “lost in translation”. A key opportunity area identified was to set the overall direction for the organisation.
- *Clear set of objectives:* Following from the above point, success of the interventions was incidental. The team was driven by implementation, rather than planned action. This resulted in a situation where every action was a success, and where measuring success itself lacked objective criteria. Hence, objective setting for the interventions was identified as a clear need for UTSAH. Along with this, it was agreed that objectives need to be driven by the SMART thinking—specific, measurable, assignable, realistic and time bound.
- *Operating principles:* It was realised during the deliberations that UTSAH leadership was driven by the thought of enabling a just and rights-based society with the essential elements of a helping attitude at its centre. The team adopted an approach that had community action as its core and adopted a working model. Articulating its operating framework and defining the guiding principles were identified as opportunities for UTSAH that would instill the right spirit and attitude in whoever associates with the organisation.
- *Identifying drivers for success:* Reflection on the various challenges posed by the operating model and the wider ecosystem led to the understanding that the team needed to take a proactive approach to be prepared for the same so that it can work on an action plan on the drivers for success. Identifying and working on a set of key enablers emerged as an opportunity area.

7.5.1.4 Immersion in the Community

I conducted four immersive interactions in the Hafiznagar community.

The first interaction involved a half-day visit in the community. I was greeted by the natural leaders from the community, who then led him for an interactive visit through the site. I also had the opportunity to meet key individuals in the community and understand their perspective of the UTSAH intervention.

The second and the third interactions were focus group discussions (FGD) with men’s and women’s groups. Representative groups of ten men and ten women were

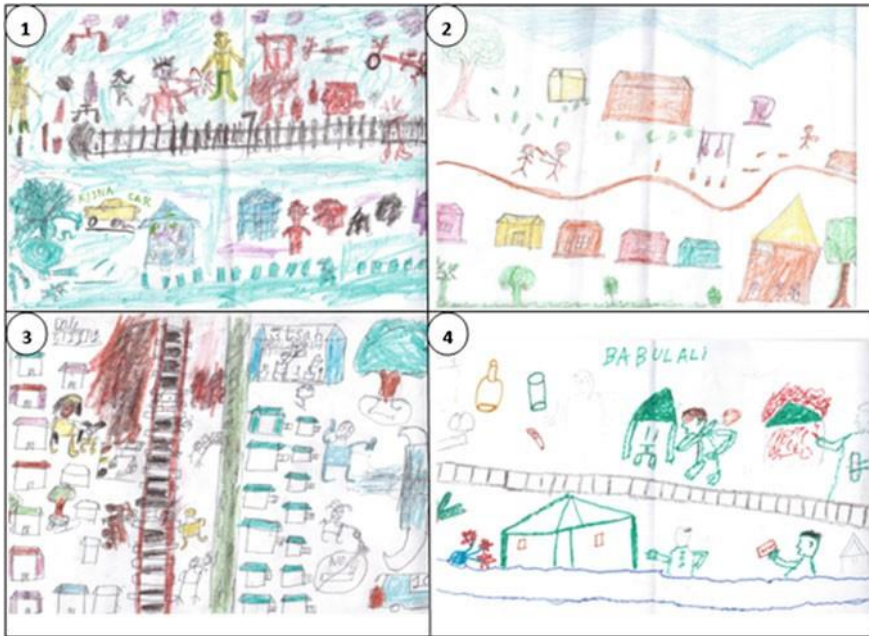


Fig. 7.1 Select illustrations of “River of Life” drawings

formed and were met with individually as two groups. I used an open-ended discussion guideline to delve into some of the key insights and understanding of the community. The discussion guideline covered the following broad areas:

- Change observed since UTSAH came in,
- What worked well,
- What could be done better and
- What support they needed going forward.

In the fourth immersion exercise with the community, I engaged with the children in a creative dialogue to appreciate the change they experienced and letting them share what they would like to see for themselves in the future. For the creative dialogue, I borrowed the concept of “River of Life”, a tool that was used by Wanless (2013) in Africa to enable certain tribes to depict their life pictorially like the flow of a river. This is a powerful tool that unleashes the creativity of the respondent in expressing their perspective on change, which they may be otherwise unable to express in words. As part of the interaction, I brought together seven children in the community and explained them the concept and instructed them to draw their life since UTSAH entered the community, in a flow of time. The children were selected by the UTSAH volunteers, based on their creative merit. Figure 7.1 is an example of a “River of Life”.

Through the above depictions, the participants depicted the changes their lives went through, in the two-and-half years since UTSAH came in. I discussed the meaning of the drawings with the participants and it was understood that there was significant change in the above time span. The narration suggested that earlier the area was dirty and unhygienic to live in, resulting in widespread prevalence of diseases and infections. Many of the children were addicted to smoking and alcohol, and substance abuse was widespread. The exposed railway track posed a significant safety hazard and accidents and deaths were common. To make the situation worse, the police would regularly harass residents and children, and the community witnessed periodic evictions. The changes depicted in the drawings point out how the spaces became cleaner and safer for children, and that life became much better for everyone. Access to healthcare facilities was made available, children quit smoking, there was the presence of school for the children, house numbers were assigned to every house, no robberies took place and children had stopped using foul language.

I conducted individual interactions with the seven children on what they would like for themselves in the future. Key messages were captured around support required with education, infrastructure and careers.

7.5.1.5 Weaving it Together

I presented the key understanding and insights from the above steps to the UTSAH executive team, and led a discussion in order to agree at a proposed solution for the way forward. The solution included developing an Operating Framework and associated programme delivery model for UTSAH. Interactive sessions were designed and scheduled between the Executive Committee and myself from mid-November to mid-December, 2013, to design the same. It was understood from the various leadership discussions that the guiding philosophy was the overarching right to life, and whatever initiatives the team would undertake within that philosophy need to centre around community empowerment and sustainability.

IP enabled me to involve organisational leadership and stakeholders in a structured manner. The formalised process paved the way for a realistic subsequent ends planning phase. Similar structure of work has been documented by Lumbo (2007) in his reference to the IP-based work with ALCOA, Tennessee (USA), where structured teams were formed considering a wide array of influencers to work on realistic solutions to address the company's capital investments to improve operations.

7.5.2 Ends Planning

This is the second phase of IP, which seeks to work towards identifying the end state that needs to be pursued. In this engagement, it was clear that UTSAH required articulation of a clear direction, operating framework, and programme delivery model. I led targeted workshops with the executive committee to address the emerging

requirements. The following discussion elaborates the process and the outcome for addressing each emerging requirement.

7.5.2.1 Philosophy, Vision and Mission

In order to give direction to the organisation, the philosophy, vision and mission needed to be articulated. This was done in a one-day workshop setting with the Executive Committee. Through the various interactions with the organisation leadership, the very idea of the right to life surfaced on numerous occasions as a driving philosophy for the team. The Chairperson was inspired by the right to life, which has found various interpretations in the United States Declaration of Independence, the Universal Declaration of Human Rights, the Constitution of India, the European Convention of Human Rights, and in the International Covenant on Civil and Political Rights (Right to Life 2014).

As part of the focused discussions, various interpretations of the right to life and their implications in practice were presented and deliberated upon. The team unanimously agreed on framing the UTSAH philosophy of existence as:

[We are] driven by the philosophy of an unrestricted Right to Life that has freedom, dignity and meaning.

Articulation of the above philosophy drew inspiration from the various sources mentioned above. Attempt was made to identify specific meaning with every term used. “Unrestricted” relates to free will of people and their “freedom” to live life as per their wish. The word “dignity” points to the understanding that life goes beyond customary existence and every life deserves a just and equitable plane in the society including access to education, health, security and a means of livelihood, so that an individual is able to derive “meaning” out of their existence.

Once the philosophy was articulated, my endeavour was to build focus in the team and towards this end, I facilitated deliberations around a vision and a mission. A vision is an overall direction that serves as a lighthouse. It communicates the purpose and values of the organisation. For articulation of the vision statement, I asked all the three members of the Executive Committee to individually reflect on the keywords that inspired their involvement and work. Insights drawn from the immersive interactions with the community were shared with the team. It is noteworthy to share at this stage that when UTSAH initially came into formation, child protection was not the identified focus; the child surfaced as the centre point as the work and involvement progressed. During its formative period, the organisation had a wide range of areas it was working on, including youth, culture, environment and old age, apart from children. Hence, the words that came out during this discussion were beyond child protection. This spirit of keeping the scope of work open was passionately discussed, and the team agreed that they needed to keep their space open to work on critical areas in the future apart from children too. The vision statement that was articulated was:

The achievement of a just and equitable society where all its people are empowered to live and thrive.

In the vision statement above, thrust was given on “equitable” rather than “equality”; the team is driven by the idea to create conditions in society that can facilitate equitable access for individuals to realise their right to life that has freedom, dignity and meaning. At the same time, the team strongly believed in an approach that can “empower” people so that they are can “live” and optimise the conditions to “thrive”.

Once the vision was established, as the next key step, it was important to set the way forward for UTSAH in terms of its reason for existence and achievable aspirations. Whilst a vision is directional, a mission is aspirational. Considering the above parameters, a detailed deliberation was held in order to arrive at the following mission statement for UTSAH:

Creating safer spaces that ensure survival and protection, and fosters the development of children who are in need of care and protection.

The mission articulated was driven by an aspiration of what could be achieved in the foreseeable future considering the prevalent opportunities and challenges. Safer spaces here not only referred to physical space, but also to emotional and psychological spaces that can be optimised by creating effective conditions in which the child can grow and develop.

Philosophy, vision and mission provide direction to overall impact as articulated in the ToC model. At first glance, this may look idealistic. However, it is not individual efforts of one particular organisation that creates impact, but a systemic effort of several organisations working together to realise collective impact as envisioned through the vision and mission in the case of social impact interventions.

The next section discusses how the mission was drilled down into specific actionables, so that the organisation is able to realise its aspiration.

7.5.2.2 Specifying Objectives for UTSAH

The team was then in a stage where it had a guiding philosophy, a directional vision and an aspirational mission; the next step was to further drill this down to actionable objectives that are aligned to the same. Driven by the idea of community-based action for child protection and based on research of the work already carried out and on similar developmental work in other parts of the world, the consultant presented a long list of objectives within the parameters of rights, education, shelter, livelihood, health and hygiene. Given that the organisation was still in its formative stage, and resource mobilisation was a significant challenge, the guiding factor here was to set objectives that were manageable, realistic and achievable, yet are able to make an impact. In order to achieve this, I adopted the approach of space–time compression, where deciding on the objective was guided by the understanding of what could be achievable in the current scenario by compressing the space and time since the organisation’s inception till the time the current initiative was being carried out. This

meant that the team was led to internalise the challenges that it faced since it was founded; yet at the same time reflecting on what had been the lacunae that could have been eradicated if they were cognisant of the same and had taken proactive steps to address them. Considering these factors led forming of a mindset where the team could think in terms of specifying “the properties that they would like the organisation and its actions to have” (Jackson 2000; p. 236), and whereby “the closest approximation of this design that is believed to be attainable” (Jackson 2000; p. 238) is formulated. This is guided under the principles of idealised design that directs planners to think of the ideal system that can be realised *right now* considering known challenges are addressed, and the design is guided by the factors of feasibility and viability (Ackoff 2001).

The team prioritised and selected the most critical objectives for the child in a vulnerable community from the long list presented. Following were the select list of core objectives for the child (in any residential community that UTSAH would partner with):

- Protecting The Child,
- Education For All,
- Healthy and Hygienic Living Conditions,
- Access To Water,
- Adequate Documentation,
- Livelihood Platform For Guardian and
- Effective Living Environment.

Every core objective was then drilled down to three–four specific goals and every specific goal had four–five target actions. An example is given in Table 7.1.

Articulation of the specific goals and target action aligns with the ToC model of outcome and activities, respectively. Specific goals, as outcomes, provided direction of work; target action, as activities, provided clarity of action and accountability.

It was also important to appreciate those factors that may act as influencers or derailers for every initiative. Based on this understanding, Critical Success Factors (CSF) were identified for every core objective for the child. It is to be understood that some CSFs were overlapping between the various core objectives.

A detailed document on core objectives, specific goals, target actions and CSFs were agreed and closed with the UTSAH team. It was made sure that every initiative is aligned to the philosophy, vision and mission of the organisation.

7.5.3 Means Planning

If end planning is about the “what”, means planning is about the “how”. This phase seeks to open a deliberation on the enablers that are required in order to realise the objectives and on the approach that needs to be adopted in order to successfully deliver on the programme.

Table 7.1 Elaboration of the core objectives—an illustration

Core objective: education for all	
Specific goals	Target action
Literacy for every child	Initiating education programme in the community
	Educating parents about importance of the child’s education
	Providing stationery items (books, bags, pencils, shoes)
	Training parents on managing funds and saving for child education
	Mobilise all children to attend the education programme
Value education	Develop set of good practices to secure the best interest of children living in the community
	Value education workshops by external organisations on identified subjects
	Workshops by external agencies on life skills development
Mainstreaming	Transitioning children to formal schooling, based on merit

7.5.3.1 Articulating Guiding Principles

I worked alongside the UTSAH Executive Committee to articulate specific guiding principles for the team. These were like the spirit of UTSAH that anyone who is associated with the organisation would be expected to demonstrate. I facilitated a detailed deliberation to arrive at the following guiding principles:

- *Rights-based Approach*: Fostering the fundamental right to a dignified life. This approach is also epitomised in the driving philosophy of the organisation.
- *Helping Attitude*: The inherent attitude to help anyone in need, especially those who are vulnerable to exploitation.
- *Non-Discriminatory*: No discrimination on grounds of colour, race, ethnicity, religion, sex, sexual orientation and identity, and nationality.
- *Community Action*: Adopting and implementing consequential action that is based on community drive and empowerment.
- *Creating Change Agency*: An approach that believes in “teaching how to fish” rather than “fishing and passing on the fish”. This ensures sustainable impact.
- *Boundary Critique**: Constantly questioning one’s assumptions and worldviews so that boundaries are continually challenged, introducing the element of critical inquiry in one’s own perspectives and works.

- *Everyone as Child Protector*: An aspiration that every citizen in the society has an obligation to be a protector of the child.

*The term *Boundary Critique* has been borrowed from Ulrich (1983).

It was agreed that anyone working with UTSAH at any level of association must display behaviours to uphold the above guiding principles. These were also agreed to be formed part of induction of all members including employees, advisors and volunteers for the future.

7.5.3.2 Reflecting on Enablers

The discussions, during the previous stage of ends planning, where the core objectives were set, also deliberated on challenges or roadblocks to the various initiatives since the organisation's inception. Operating under the principles of idealised design, the consultant led the deliberations towards identifying constraints and solutions that could be identified by compressing time and space, as discussed above. The focus was on identifying what would enable the objectives to be realised.

As a result of the deliberations, the following emerged as the key enablers for UTSAH that the team would need to leverage on, for future success:

- *Successful fundraising*: Specific initiatives that will attract predictable flow of funds from identified sources in order to enable smooth implementation of planned activities.
- *Programme delivery models*: Implementation of planned initiatives, pillared on robust and comprehensive delivery models that are comprehensive and replicable.
- *Effective communication*: Sharing key messages internally and externally through planned media strategies in order to achieve desired scale and impact.
- *External partnerships*: Identify and create requisite partnerships with external stakeholders, optimising opportunities and overcoming bottlenecks.
- *Government mobilisation*: Mobilise the right departments and bodies in the government machinery in order to ensure hassle-free developmental operations.
- *Effective advisory council*: Constituting an effective advisory council with members who are key influences in the ecosystem where the organisation operates.
- *Research and advocacy*: Generate quality research and perspectives in the area of work to emerge as an influential advocacy body in the national stage.
- *Committed change agents*: All the above to be made real by a team of highly committed employees and volunteers working as change agents to make a difference.

The UTSAH framework for child protection through community action was agreed and finalised. This is represented in Fig. 7.2.

Given the guiding principles and key enablers were identified, it was then imperative to deliberate on the resources and tools that could facilitate the implementation. This was taken up as the next phase of the exercise, discussed in the following section.

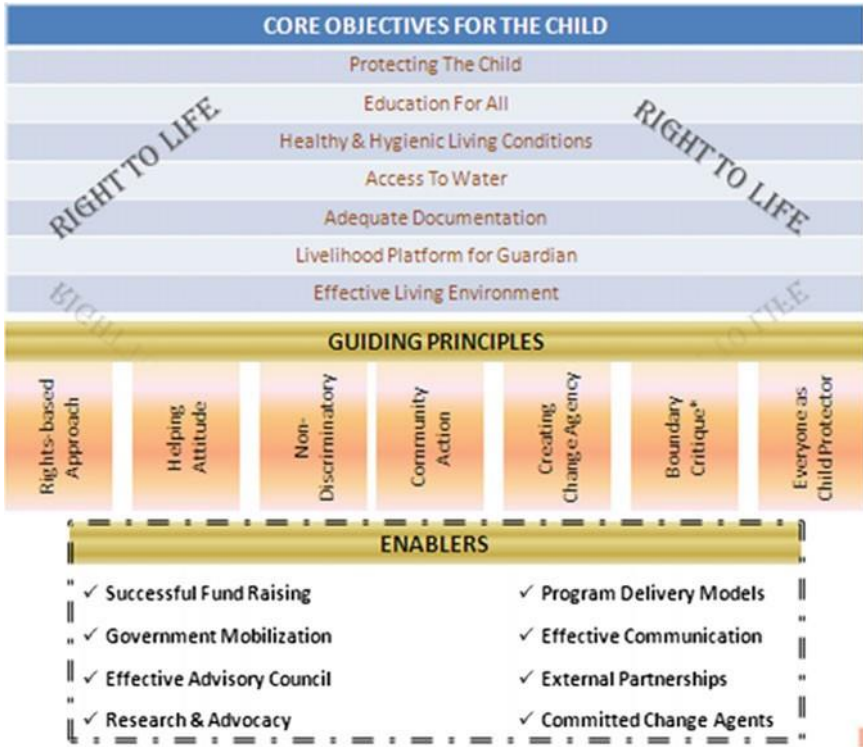


Fig. 7.2 UTSAH framework for child protection

7.5.4 Resource Planning

This phase is regarding anticipating and forecasting on resources—including approaches, tools, information and knowledge—that enable implementation of plans on the ground. This is also about understanding excesses and deficiencies that could hamper optimising the means to the end.

During deliberations between the consultant and the UTSAH team, it became clear that a robust programme delivery model needed to be worked on. This needed to delineate exact steps that would lead the initiatives towards the core objectives for the child. To this end, I organised an action planning session that resulted in framing a programme delivery model and outlining focused initiatives for the enablers. This is discussed below.

7.5.4.1 Programme Delivery Model

The programme delivery model is a clear stepwise intervention methodology for the team to partner with a specific vulnerable community. This involves the following nine steps:

- *Identification of vulnerable community*: This is the first step that would demarcate the specific geographical areas in which the development model can be initiated. Indicators of a vulnerable community were defined.
- *Appreciation of the community*: Involves appreciating the intricate social patterns of the community that give shape and form to the visible rubric of life.
- *Identifying key stakeholders*: Carrying out of detailed mapping of the contact points of the community, and identifying contributive and opportunity areas, along with challenges and derailers with each community.
- *Immersion in the community*: This step is to gain trusted access in the community through icebreaking intervention that is sociable in character. Measures to be undertaken for successful access to the community were highlighted.
- *Detailed information gathering*: This is about key demographic information collection on the community towards creation of a detailed database. This information is to be gathered through door-to-door interviews with individual households.
- *Public issues forums and action planning*: This is a critical step involving focused discussions on collecting qualitative feedback and perspectives on the community concern areas from targeted groups. Public forums to be constituted to arrive at priorities, responsibilities and implementation timeline.
- *Action-oriented participatory committees*: Involves transferring the responsibility of change to the community itself, facilitated through representative participatory committees.
- *Implementation of the action plan*: This step is action-oriented involving setting the right targets and implementation of the action plan in a solution-based first response mechanism.
- *Stabilisation and sustainability*: Stabilisation is achieved through a strong 3-year engagement between UTSAH and the vulnerable community. This involves capacity building in the community with specific focus on participatory committees. In order to ensure sustainability, post the 3-year engagement, parameters of association of external bodies with the community were well laid out along with review parameters.

As part of the delivery approach, salient features for every step were articulated that also included definitions and terms of engagements. Specific tools were created to implement the salient features of every step. Finally, this was recorded along with information sources duly indexed. This served as a resource toolkit for any UTSAH associate to pick up and work on the field.

7.5.4.2 Focused Initiatives for Enablers

As part of planning for resources each of the eight enablers previously identified were taken up in turn for deliberation. The UTSAH team first individually charted out three strategic initiatives each for every enabler. I then facilitated a session where each of these initiatives was discussed as a team. I relied on the Importance–Certainty matrix of Mason and Mitroff (1981), where each initiative was plotted in four quadrants of relative importance and certainty. The Importance–Certainty matrix is borrowed from Strategic Assumption Surfacing Testing (SAST) that is discussed in detail in Chap. 6. Three initiatives each for every enabler were finalised by the team to be carried out, in order to mobilise resources towards fulfilling the core objectives for the child.

Oversight of assumptions and risks was central to means planning and resource planning stages that are clearly articulated in the ToC model. Assumptions and risks help us stay grounded and realistic, and enables the team to focus energies and leverage strengths to achieve desired outcomes. This helped in creating the “outcome pathway” for the intervention.

Further details on the above cannot be provided as they form confidential part of the UTSAH resource planning.

7.5.5 Design of Implementation and Control

This is the final phase of IP that seeks to create adequate structures and systems to facilitate execution. Implementation is geared to the right track by periodic review and corrective action through well-defined tracking parameters and metrics. Effective control is setting the right networks of information flow within the system and setting in place the right decision matrix in order to deliver the programme efficiently and as per design.

In the intervention under discussion, effective implementation was incorporated in the step of Stabilisation and Sustainability (highlighted above). Active engagement was achieved through a strong 3-year engagement between UTSAH and the vulnerable community. This involves capacity building in the community with specific focus on participatory action committees. Monitoring mechanisms were set in place measuring both effectiveness and efficiency to ensure the rigour introduced. In order to ensure sustainability, post the 3-year engagement, monitoring mechanisms were set and defined for key outcomes with oversight from UTSAH. Periodic audit and reporting on specific outcomes by external stakeholders on predetermined parameters were also defined.

In order to ensure effective control, a future-oriented organisation Governance Framework was put in place that would ensure setting the right networks of information flow within the system and setting in place the right decision matrix. It was agreed that the Governance Framework would have the following six broad constituents:

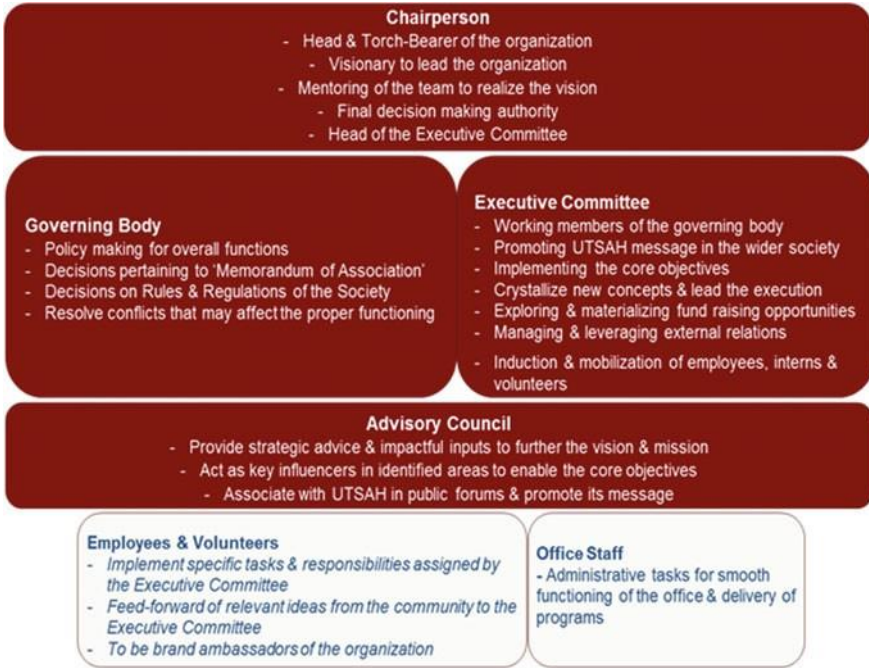


Fig. 7.3 UTSAH governance framework

- **Chairperson:** Responsible for overall direction setting of the organisation.
- **Executive Committee:** Key working group to achieve the core objectives and promote the organisation.
- **Governing Council:** Overall policy-making and conflict resolution.
- **Advisory Council:** Timely strategic advice and to act as key influencer in the society.
- **Employees and Volunteers:** Execution of on-the-ground initiatives.
- **Office Staff:** Responsible to carry out administrative functions.

Further details of the governance framework are provided in Fig. 7.3.

It was agreed that the future-oriented Governance Framework would be a learning entity and would evolve as per requirement of UTSAH. As the organisation would move forward and introduces new dimensions in its commitment to the community, so will the operating model evolve. In order to address effectiveness and efficiency of the evolving system, the design of the Governance Framework was kept dynamic.

Implementation enablement is crucial in any consulting-based projects. Emphasis on implementation and control with IP as an approach has been documented to result in highly valuable tangible results in various cases, including at DuPont where performance of the Safety, Health and Environment (SHE) function improved by 50% as a result of application of IP design (Leemann 2002).

7.6 Reflection

This intervention surfaced several important observations about IP. I would like to bring in the element of how this experience aligns with flexible thinking. This has been elaborated in the following discussion.

7.6.1 *Planning that Is Realistic and Practical*

Adopting an IP approach brought about a realistic perspective to the intervention. It is usual in planning exercises to be driven solely by the organisational vision and falls prey to idealistic scenarios. In such exercises, constraints are often overlooked or externalised. Hence, planners fall into the trap of over-ambitious target setting or pessimistic restrictive goals. IP, on the other hand, begins by “designing the system with which we would replace the existing system *right now* if we were free to replace it with whatever system we wanted” (Ackoff et al. 2006; p. 37; italics mine). Hence, the whole focus shifts to the current. Through the interactive deliberations with the UTSAH team, I attempted to compress time and make the team reflect on achievable results and missed opportunities of the elapsed time and undertake the planning, as if it were done for the current time. The objectives that were identified, for every community that UTSAH would partner with, were designed to be achievable and possible, instilling a sense of confidence and conviction in the team. Hence, planning was not for the distant utopia, but for the realistic future, under the current circumstances.

IP offers the platform that internalises factors that are usually considered external in a planning exercise. The planner automatically needs to challenge their blinkers and flexible embrace a variety of considerations of the future in the present. Our planning deliberations with the UTSAH team brought in factors from a variety of stakeholders to make the discussions outside-in. Whereas a rigid process would have limited discussions for and by the management team, IP enabled our immersive experiences with the community and built-in variables from the environment.

7.6.2 *Principles that Build a Foundation for the Future*

The above perspective, although may seem like overbearing on the present, is not necessarily short-term focused. As Ackoff et al. (2006) note, the focus on “right now” is crucial as “we know that where we say today we would like to be five years from now is not where we will want to be when we get there. Things will happen between now and then that will affect our goals and objectives. By focusing on what we want right now, we can eliminate that potential source of error” (p. 37). Through my numerous objective-setting deliberations, I attempted to compress the elapsed

time for the organisation, where the team could have achieved desired objectives, and use this as the base for practical future planning by duly setting objectives by internalising probable constraints and challenges. Hence, although the approach may seem present-focused, it was aptly used in the intervention to create a strong foundation for future projections.

A flexible mindset allowed us to go beyond our comfort zone. As a facilitator, it was challenging for me to break down a complex model like IP for easily consumable steps and processes that would not confuse the team, but would allow the participants to seamlessly share experiences, get into the blend of the discussions to let me elicit what I wanted to as a facilitator. The participants also had to go beyond their own comfort zones and they took time in doing so. However, as the discussions progressed, I managed to navigate the deliberations for me to address the pointers that were necessary to build a child protection framework for UTSAH considering current realities and future projections. This was achieved with patient, grit and effective navigation of the conversations that was a speech act in Habermas' parlance (speech act is discussed at length in Chap. 3).

7.6.3 Building a Learning Organisation

A key message borrowed from the IP approach was to incorporate the learning character in the framework. It was understood by the team that there needs to be enough agility in the system so that it can respond to changing circumstances and emerging demands in the environment. This led the framework to include a set of critical success factors (CSF) against each objective that would be treated as dynamic inputs towards the achievement of the core objectives. As Ackoff et al. (2006) note, "the way of dealing with more contingencies than can be planned for separately is to design into the organisation or institution enough flexibility and responsiveness so that it can change rapidly and effectively to meet whatever it encounters" (p. 54). Regular review of the CSFs would surface continuing or emerging constraints, which could be in turn used by the team in their planning and implementation. It was also important for UTSAH to learn as it operated, and with this in view, a Governance Framework was put in place that identified responsibilities and accountabilities of key members, including audit and reviews. Mechanisms were put in place that would assess impinging threats and periodically incorporate changes as demanded by the internal and external environment.

Learning ability is at the crux of flexibility, as we discussed in Chap. 2. Incorporation of learning means adaptiveness and being open to change. Learning and adaptiveness also help organisations remain agile and nimble at the time of unforeseen circumstances and any exigency.

7.6.4 An Approach that is Participative, Deliberative and Accommodative in Design

The intervention was designed to be participative, deliberative and accommodative. A range of stakeholders was included in the exercise wherever possible. Apart from the core team members of UTSAH, volunteers and employees of the organisation also played an active part in meetings, focus group discussions and thinking sessions. The Hafiznagar community was consulted in a proactive manner in order to understand their requirements and challenges. This was enabled through various participative working committee deliberations with different groups—women’s, men’s and children’s groups—where broad-based discussions were held in order to arrive at a comprehensive understanding of development areas that finally impinge upon the well-being of children. Children were involved in the formative understanding and expectation setting phases, and through the “River Of Life” exercise, they were proactively engaged in the situation appreciation of the key target group.

7.6.5 An Outcome that is Holistic and Comprehensive

The outcome of creating an overall framework for child protection through community action was a key strength. The methodology called for a practical, participative and deliberative approach from the beginning that resulted in the emergence of key pillars in the framework—core objectives, guiding principles, enablers—founded on robust action points, execution tools and identified critical success factors. Whilst the core objectives brought in an intent and a focus, the guiding principles seek in graining a DNA for all members of the organisation. At the same time, the enablers help cultivate the conducive factors that can fuel the machinery to function and deliver results. Efficiency and effectiveness are brought about by the execution tools directed to reap the identified action points, contingent on the articulated critical success factors.

7.6.6 Thinking Sustainability

The element of sustainability is core to the operating model, brought to life by a defined 3-year partnership between UTSAH and the community, to be carried forward by capability building, awareness and systemic review mechanisms put in place post the 3-year engagement. Participatory Action Committees were designed as self-directed teams to sustain the desired change. Audit indices were put in place for external stakeholders to be reviewed based on their commitment to the community.

A systemic mindset supported the team to think success, not only in terms of efficiency but also effectiveness. Whilst efficiency is about doing things right, effectiveness is about doing the right things.

In order to measure efficiency, specific targets were allocated for every action point and periodic performance measures across each action point were identified in terms of quantity, quality, cost and time.

The main thought driving effectiveness measure was to ensure that the programme engagement made a difference in the life of the children living in the community. In order to ascertain effectiveness of the interventions, I relied on the Resilience model of Daniel and Wassell (2002). Resilience is defined as “the capacity to transcend adversity—may be seen as a guiding principle when planning for young people whose lives have been disrupted by abuse and or neglect and who may require to be looked after away from home” (Gilligan 1997). The Resilience model itself is a comprehensive one covering the overall psychological and emotional development of the child by measuring a set of defined metrics through three evolving spheres—(1) the child, (2) family relationships and (3) the wider community. However, considering relevance and practicality, only the Self-Esteem dimension was arrived on, as an indicative measure to ascertain effectiveness of the programme. Self-Esteem is defined as an “internal sense of work and competence” in the resilience model (Daniel and Wassell 2002). Through a researched-backed set of questions, the self-esteem of the child is assessed before a partnership with a community commences, and when it draws to a close after 3 years. This model was introduced to ascertain effectiveness in the future programmes of UTSAH.

The above indices to bring in efficiency and effectiveness into the framework can be seen as crucial factors to bring in sustainability for the system, during and beyond the 3-year programme engagement. It was also impressed upon the team that periodic reviews allowed for revision of targets and revisiting of success criteria. The creation of frameworks at UTSAH did not mean rigid directives, but they were directive in nature always open to change and adaptation.

7.6.7 Focus on Community Action

One of the strengths of the framework developed is that it is underpinned on community action. The community stands at the core of the model to ensure sustainability of impact through collaborative assessments and facilitation, even beyond the defined 3-year engagement—enabled by identified participative action committees. This facilitates greater buy-in and ownership of the initiatives undertaken.

Similar sentiments have also been noted by Jimenez (2009) with his experience of using Ackoff’s approach in rural planning in Mexico. In his words, “Ackoff’s model of participatory planning has proved to be very useful in applications in rural communities, permitting not only community-level input in design, but innovation, adaptation, and modification of the learning experience to permit further local control of resources” (Jimenez 2009; p. 415).

7.6.8 *Complementarity in the Approach and in the Framework*

Creative application of IP as an approach allowed complementarity both in the approach undertaken and in the emergent framework itself. Reflecting on the approach, although it falls under the broader umbrella of interpretive thinking, I introduced elements of structure, systematic evaluations and predictable processes in the intervention. This was reflected in continually leading the discussions to let the team come up with control variables in order to keep track of both efficiency and effectiveness in the system. On one hand, the nature of accommodation, stakeholder participation and articulation of guiding principles as fundamental pillars, reflected interpretive characteristics. On the other hand, introduction of specific objectives, setting targets, prioritisation matrices in action planning, efficiency measures, effectiveness measures through numeric rating, and setting up of a Governance Framework to ensure adequate control points in the system, reflected functionalist characteristics in the system. I brought in tools such as the River of Life and Importance–Certainty matrix (from SAST) from completely separate branches to enrich the approach. This is akin to the “full integration of techniques” that Sushil (1994) talks about (different types of integration are discussed in Chap. 3). As better articulated by Jackson (2000), “One of the undoubted strengths of Ackoff’s approach is that he does not see systems-age thinking as simply replacing machine-age thinking. Rather, he sees them as complementary and allocates space for the solving and resolving approaches within his basically dissolving orientation to social systems science” (pp. 243–244). The case under consideration aptly exemplifies this statement.

Jackson (2000) summarises the overall strength of IP as “continuous, holistic and participative and has, at its most original element, the idea that the phases of the planning process should be centred on the design of an ‘idealised’ future. It is a methodology that effectively realises the insight of “plan or be planned for” by endorsing it in its philosophy and providing a set of practical procedures through which the philosophical message is empowered” (p. 243).

7.7 Conclusion

In this chapter, I presented a discussion on how Interactive Planning (IP) was used as an approach to create a community-centric child protection framework and programme delivery model for an NGO in India. I started with a brief background on child rights and child protection in India, leading to an introduction of the background of UTSAH. Following this, the emerging requirements in the context were discussed, followed by a deliberation on how IP emerged as a preferred approach for the intervention. A detailed discussion of the intervention followed. The intervention reflected the essence of the Theory of Change model. Having introduced the model, I shared my perspectives on the same as I walked through the stages of the IP exercise.

Finally, I shared my reflections on the intervention both in terms of the process and the experiences through the same.

Emotionally, it was an exciting opportunity for the UTSAH team and me to participate in this exercise that involved conceptualising a framework that could create conditions that facilitate equitable access for individuals to realise their right to life that has freedom, dignity and meaning—especially focusing on children as its core. To give shape to this thought, a community-centric child protection framework was created with core objectives, guiding principles and identified enablers. Leadership and execution responsibilities were clearly identified by constituting a Governance Framework. Stakeholder participation and involvement was facilitated guided by the tenets of critical systems thinking. One of the key strengths of this framework stems from the fact that the community was considered to be at the centre of the implementation model with the belief that child protection and community action are inalienably interlinked—all this aligned to the overall vision and mission that was articulated in the very beginning of the intervention.

References

- Ackoff RL (1977) The corporate rain dance. *The Wharton magazine*. Winter 36–41
- Ackoff RL (2001) A brief guide to interactive planning and idealised design. IDA Publishing. <http://www.ida.liu.se/~steho/und/htdd01/AckoffGuidetoIdealizedRedesign.pdf>. Accessed 03 Sept 2013
- Ackoff RA, Magidson J, Addison HJ (2006) *Idealized design: creating an organization's future*. Prentice Hall, NJ
- ANI News (2013) Education for underprivileged children in Guwahati. Visited: 10 July 2014
- Brant SG (2010) Russell L. Ackoff 'Einstein of problem solving', has died, 2009. Cited 09 Aug 2009
- Burrell G, Morgan G (1979) *Sociological paradigms and organisational analysis*. Heinemann, London
- Clark H, Taplin D (2012) *Theory of change basics: A primer on theory of change*. New York, Actknowledge
- Chowdhury R (2015) Using interactive planning to create a child protection framework in an NGO setting. *Syst Pract Action Res* 28(6):547–574
- Daniel B, Wassell S (2002) *Assessing and promoting resilience in vulnerable children*. Jessica Kingsley Publishers, London
- Gilligan R (1997) Beyond permanence? The importance of resilience in child placement practice and planning. *Adopt Foster* 21(1):12–20
- Jackson MC (2000) *Systems approaches to management*. Wiley, Chichester
- Jimenez J (2009) *Surutato: an experience in rural participative planning*. In: Choucroun J, Snow RM (eds) *Planning for human systems: essays in honour of Russel L. Ackoff*. The Bush Center, Wharton School, Pennsylvania, pp 407–416
- Leemann JE (2002) Applying interactive planning at DuPont: the case of transformation of the safety, health and environmental function to deliver business value. *Syst Pract Action Res* 15(02):85–109
- Lumbo DA (2007) Applications of interactive planning methodology. http://repository.upenn.edu/od_theses_msod/3. Accessed 07 July 2014
- Mason RO, Mitroff II (1981) *Challenging strategic planning assumptions*. Wiley, Chichester
- Right to Life (2014). http://en.wikipedia.org/wiki/Right_to_life. Accessed 15 Nov 2014

- Smile Foundation (2012). http://www.smilefoundationindia.org/p_utsah.htm. Accessed 07 July 2014
- Sushil (1994) Flexible systems methodology. *Syst Pract* 7(6):633–652
- The Assam Tribune (2012). <http://www.assamtribune.com/scripts/detailsnew.asp?id=apr0412/state06>. Accessed 12 July 2014
- The Times of India (2013) NGO focus shifts to slum kids. <http://timesofindia.indiatimes.com/city/guwahati/NGO-focus-shifts-to-slum-kids/articleshow/20374557.cms>. Accessed 12 July 2014
- Ulrich W (1983) *Critical Heuristics of social planning: a new approach to practical philosophy*. Haupt, Berne
- UTSAH Handbook (2011). *UTSAH child safety chart*. UTSAH: Guwahati (India)
- UTSAH Report on Community Needs Assessment (2011). UTSAH: Guwahati (India)
- Wanless M (2013) *Theatre for a change: a project evaluation of the child protection program*. University of Edinburgh, <http://www.tfacfrica.com/cms/data/files/what%20we%20do/monitoring%20and%20evaluation/CP-report-for-website-from-Megan.pdf>. Accessed 02 Jan 2014
- Web India News (2012) Assam CM lauds NGO's work for underprivileged section. <http://news.webindia123.com/news/articles/India/20120329/1955411.html>. Accessed 07 July 2014

Chapter 8

Organisational Collaboration in a Professional Services Firm



8.1 Introduction

Organisational collaboration facilitates team engagement, boosts innovation and enhances productivity. Collaboration, as much as it is a function of attitudes and personalities, is equally about the formal and informal structures that an organisation puts in place to operationalise its business. In this chapter, I will share my experience of the application of creative systems thinking and approaches to introduce an organisation structure to facilitate collaboration and more effective leadership practices in a professional service firm in India.

At the very outset, it is to be noted that for this intervention, systems methodologies were not used in its purest form, but the systems paradigm was applied to inform the context under consideration to facilitate creativity, inclusiveness and holism in intent and in form.

The intervention was undertaken in a Public Relations (PR) firm, Potential PR (pseudonym used for anonymity), keeping in mind productive collaboration within a set of geographically spread out teams to support the organisation's fast-paced growth. I first published a case study of this intervention in 2011 to highlight key insights from systems thinking that were used in designing and leading the intervention, and key messages that surfaced during and at the end of the intervention (Chowdhury 2011). A range of methodologies in a mix-and-match manner was incorporated with a diverse set of management tools threaded by a system mindset. In this chapter, I will delve into the flexibility aspect of the intervention and discuss how the concept of Requisite Organisation applied in the intervention aligns with systems thinking. Further, I will take the reader through the new initiatives undertaken post the intervention is seeking to enable greater competitiveness of the firm.

Parts of this chapter have appeared previously in "Organizational Design and Firm-Wide Collaboration: Retrospective Appreciation of a Change-Led Consulting Intervention in India within a Systems Thinking Paradigm" authored by Rajneesh Chowdhury (2011). *Systems Research and Behavioral Science*; John Wiley & Sons; 29(4); pp. 402–419. Reprinted with permission from the publisher.

8.2 Organisation in Focus

Potential PR was established in the year 2000 and had witnessed rapid growth with offices in Bengaluru, New Delhi and Mumbai. At the time of this intervention in 2008, Potential PR had 75 employees, who came from a wide variety of backgrounds apart from PR that included journalism, IT, defence, law and engineering. The firm prided over its niche services and value relationship with its clients developed through trustful proximity with them, driven by committed and collaborative teamwork.

The firm's core approach to PR was stakeholder relationship management. Apart from this, it also introduced several value-added services over the years including managing internal communications, crisis communication and leadership development.

In the recent years preceding the intervention, Potential PR witnessed some steady changes in its own character as an organisation and the nature of employee interactions. This was a result of the organisation's evolution from being a small boutique firm to being a mid-sized concern with about 50% of its headcount added during 2006–2008. The team consisted of forward-thinking career-driven professionals led by a highly capable CEO who saw an increasing need to re-emphasise and re-establish the firm in a strong public light in the dynamic Indian PR industry.

The firm started with five people in the year 2000 in Bengaluru, and by the year 2008, the firm grew rapidly in headcount and revenue and saw a spate of highly successful corporations added to its list of prestigious clientele, including India's foremost company operating in the field of Information Technology and Information Technology-enabled Services (IT and ITeS). As the firm made its way forward, two more regional offices were set up in Mumbai and Delhi to cater to clients in the respective geographical areas and further expand its services in those regions. An increasingly diversified portfolio of clients and nature of work also began to emerge following which the company identified three areas of expertise: Technology, Healthcare and Consumer.

Potential PR operated a location-based structure for its management purposes where the three offices catered to the three respective geographies—Bengaluru for South, Mumbai for West and Delhi for North. Although cross-functional expertise existed across the three offices, there was an emerging tendency for employees to club under their own respective offices. As the firm grew, this was becoming a challenge as employees were also beginning to lose the personal touch and rapport they used to have with one another when the firm was small. As a result of this, their collaboration and informal networking for productive results were also facing a challenge.

As time passed, Potential PR recognised the emerging competitiveness of the Indian PR market and realised that if it had to establish itself as a successful national player, it had to reconsider its nature of teamwork, management and market development, with a certain degree of immediacy. Therefore, the leadership team of the firm was going through a radical shift in its own mindset. It did know that the firm had to transform radically to be competitive and capitalise on its own success, but

realised that the siloed working of employees where limits were being defined by regional offices would not support its ambitious objectives.

In the wake of the above developments, the leadership team of the firm decided that they needed to bring in an external consultant who would be able to lend an objective and expertise view on the intended change process of the firm. The leadership team comprised of the seven senior most members of the firm and included the following: CEO, Principals (four) and Account Directors (two). This team was responsible for leading the firm from the front as a face to the external world, support business growth and sustenance, ensure that systems and processes are established, and develop the firm to face the exigencies of the future.

8.3 The Consulting Mandate

The mandate for this intervention was awarded in November 2008, to be undertaken in a period of 3 months. I was a key member of the consulting team that leads the design and implementation of this intervention.

The objective of the mandate was to redesign the organisation structure to make it more effective in order to sustain the rapid growth of the firm through collaborative working, along with supporting the leadership team in developing its people skills so that they were equipped to lead the organisation to its future of growth and transformation. We (the consulting team) agreed a scope to critically appreciate the as-is organisation structure and values, and arrive at a more appropriate structure to support higher collaboration. It was agreed that unique roles would be profiled, the leadership team would be assessed and mentored on behavioural skills, and a communication process to support the change would be facilitated. Finally, the change impact in the firm would be audited.

It was agreed that the organisational values identified during the process would support enhanced proximity between the team and the firm that would in turn enable creating and sustaining the change momentum. Due to the nature of the industry, the ability of the team to be nimble and agile was an unsaid need.

8.3.1 Thought Driving the Programme

The mandate for this intervention from Potential PR was to bring about a desired change in the “way things work around here” through and with the intent of enabling organisation-wide professional collaboration. This involved not only restructuring the firm but also bringing about a behavioural transformation amongst the team to support the change in a sustainable manner, along with energising the team members to contribute proactively for the ambitious future of the firm.

The importance of professional collaboration in organisations has been well documented in management literature. Rhoten (2002), borrowing from the Drucker

Foundation, defines organisational collaboration as “relationships that provide opportunities for mutual benefit and results beyond what any single individual, discipline, programme, team or other sub-organisational unit of work could realise alone” (p. 5). Collaboration entails widening the horizons and perspectives of the mind, leading to creation of new ideas and opinions, crucial for a creative industry like PR. Some authors have also associated collaborative attitude with the sense of proximity that professionals have in their work situations. For instance, Schamp et al. (2004) refer to organisational proximity as that “between employees of a multi-plant firm who identify with each other as a result of belonging to the same firm and of their knowledge of firm specific routines” (p. 609). Geographical proximity brews familiarity between team members due to regular conversations in both formal and informal situations. Others have also addressed the concept of proximity taking the criterion beyond a physical proximity-based definition to address other forms like institutional proximity (Kirat and Lung 1999), organisational proximity (Meisters and Werker 2004), cultural proximity (Gill and Butler 2003), social proximity (Bradshaw 2001) and technological proximity (Greunz 2003). Professionals may develop proximity as a virtue of working within the same set of values and guiding principles, the same organisation, a similar socio-cultural affiliation, and by and through technological associations facilitating greater virtual identities. Such proximity creates stronger grounds for professionals to collaborate and display integrate thinking for enhanced organisational and business results.

Organisational values have a considerable influence on employees being able to identify with the specific professional context and thereby build in organisational proximity. Organisational values link to competencies and therefore hold great significance when we are talking about collaboration-led change initiatives. According to Gorenak and Ferjan (2015): “The concept of linking organisational values to competencies is linked with organisational culture, as organisational values are a part of it and as such they attract people with similar value principles and knowledge, skills and abilities. In other words, certain competencies influence how organisational culture is created” (p. 69). It has been documented by scholars like Bryson (1989), Kaufman and Herman (1991) and Simmerly (1987), that articulation and clarification of values form a key part in organisational and strategic planning.

Although a collaborative spirit may commonly exist without a formal recognition of the same in start-up organisations, this may tend to fade away as team sizes increase due to greater geographical spread or specialisation in specific areas of work, or due to mistrust that may appear as people come in from diverse and unfamiliar backgrounds. Nokkala (2007) notes that “barriers to collaboration include a lack of trust between parties, difficulties in relinquishing control, the complexity of joint projects, and different ability to learn new skills” (p. 6). Similarly, Powell et al. (1996) talk about leadership, size and position, technological affiliation, resource availability and professional alliances as factors that may determine how professionals choose to collaborate. These may be reasons that instigate teams to form silos and restrict interaction with other teams in different geographies, specialisations and functions. Therefore, there needs to be considerable emphasis given to value-driven collaboration with the thought that identification with a common set of core beliefs

and values would facilitate the employees to overcome organisational barriers that could exist.

In the context under consideration, there were multiple factors emerging that needed to be addressed in order to bring about an impactful change. These factors included the following:

- **Organisational Structure:** The as-is geography-based structure was creating a silo environment at Potential PR. The problem structuring surfaced the need for creating an organisation structure that would not only be solely focused on driving business, but also driving collaboration and team synergy.
- **Capability:** Given the rapid transformation the organisation was going through, it was required to realign the right leadership capability in the right direction; capability identification and enhancement were clearly called out as needs. In addition, teams needed to be brought together in a process of self-appreciation and capacity building to brace themselves for changing times, greater challenges and more exciting work.
- **Collaboration:** This was the stated need when we (the consultants) received the mandate from Potential PR. Collaboration is key in a professional services firm; collaboration enables innovation, teamwork, pride and employee morale.

I realised that our intervention had to address all the above key aspects to support the organisation leap into its future of promise. Given the multitude of factors to be considered for a people-driven industry, the systems perspective came as our overarching guiding principle.

8.3.2 *Systems as the Overarching Guiding Principle*

Approaching the problem situation from the System Of System Methodologies (SOSM) (Jackson and Keys 1984) framework (discussed in Chap. 3), the three areas of intervention aligned with three different positions in the matrix. We required an objective lens to arrive at an organisation structure that catered to the vision of Potential PR—the inspiration here was drawn from the simple-unitary cell, where the Viable System Model (VSM) fitted well. Inspiration of Beer's (1972) Viable System Model (VSM) was drawn to appreciate that there should be differential value creation at different levels within an organisation. In an organisation structure, value needs to be contributed at the levels of Implementation (those who do the job), Coordination (those who coordinate between teams and functions), Control (those who establish checks and balances), Development (those who gather and infer from external environment), and Policy (those who drive the strategy). Talking about collaboration, we required to take into consideration human relationships, interpersonal dynamics and team synergies, apart from the surface-level aspect of geographical isolation. The requirement in this case was more suited for the complex-pluralist cell of the SOSM. Hence, inspiration was drawn from Soft Systems Methodology (SSM) that fitted well to aspects that had pluralist perspectives for both simple and complex situations, as

in the case of a professional services firm. Influenced by Checkland and Scholes' (1990) Soft Systems Methodology (SSM), we selectively used Rich Pictures and CATWOE as informative tools. Rich Pictures are pictorial depictions of people's individual perceptions of current and future states of affairs as they see it, within an environment of interrelationships. CATWOE stands for Customers–Actors–Transformation–Worldview–Owners–Environmental Constraints, the themes that ought to be considered to bring about a viable change. Talking about capability and collaboration, we had to understand who the organisation is designed for and whose purpose it was serving. Capability is a complex aspect to handle; understanding power dynamics become important in such situations as well. Hence, we resorted to drawing inspiration from Critical System Heuristics (CSH) that caters to understanding complex and coercive relationships that fall in the simple-coercive position in the SOSM grid. The philosophy of Critical System Heuristics (CSH) (Ulrich 1983) was considered, wherein, driven by a sense of purpose for the profession and its people, well-being and emotional upliftment of employees were of utmost importance.

With this understanding, we initiated the design and implementation of their intervention. We applied the concept of Requisite Organisation for the case under consideration. In the following section, I will introduce Requisite Organisation.

8.3.2.1 Requisite Organisation

The term Requisite Organisation (RO) was coined by Elliott Jaques and it brought to life the concept of Stratified Systems Theory for organisation design and restructuring. RO is a systemic effort to rethink organisational structure and leadership practices in terms of work complexity and human capability in order to enhance business alignment and effectiveness. Accountabilities are clarified and measurement metrics can be aligned to both expectations of the role and the organisation. RO enables the alignment of human capability with the requirements of the role and creates workflows for efficient flow of information both vertically and horizontally with adequate control being retained. Articulation of leadership roles, which can often be fluid, is eased with adequate understanding of what can be expected as per the requisite level of respective organisations, depending on the level of impact of the organisation. Credible assessment methods to assess talent and understanding of leadership potential help organisations to hire, place and develop the desired people to contribute towards organisational effectiveness.

Dutrisac et al. (2007) talk of RO as one of the most researched and validated management concepts that link several aspects of the organisation in a holistic manner that ensures right organisation structure, right people, right accountabilities and right leadership practices (Dutrisac et al. 2007; p. 28). Dutrisac et al. (2007) go on to say that implementation of RO has recorded significant positive value for organisations including increasing profits, enhanced growth, cost reduction, improved productivity and increased market share. It has also seen improvement in customer relations and greater employee satisfaction (Dutrisac et al. 2007).

The concept of organisational strata is central to the work of Elliott Jaques. Jaques says that very often organisations put in place several levels as part of its structures that create unnecessary hierarchy and added bureaucracy. Levels need to be created to cater to a successive level of work complexity. These levels need to be filled by managerial leadership that is progressively higher as the manager moves from one level to the next. Jaques' (Jaques and Clement 1991) extensive research backs him to advocate that an organisation needs to have a maximum of seven levels to cater to any form of complexity (the seven levels are discussed in further detail later in this chapter). Effective communication and control within these levels and with the outside environment, if managed well, can take organisations towards greater performance. He says that organisations need to be guided by strong values and principles to make it "requisite"; all work processes within the organisation need to flow from its values and principles that give rise to the organisational culture. At the same time, organisations need to be flexible and adaptive to cater to changing needs of the dynamic marketplace.

The levels of work have a set of key dimensions that shape each level. These are as follows:

- **Value Contribution:** Every level has a specific value that the job holder is expected to contribute in his or her role. As one moves up the ladder, the value contribution is expected to go higher with respect to dealing with complexity, future orientation and more outside focused.
- **Resources:** A job holder needs access to resources like people, technology, budgets, skill set and knowledge in order to deliver to the complexity of his or her role. As one moves up the ladder, the requirement will be for more sophisticated or enhanced resources.
- **Problems:** Every level comes with a set of problem situations that need to be addressed. Whereas at lower levels problems are visible, clear and identifiable, at higher levels problems are ambiguous, discrete and unclear. Hence, more sophisticated modelling and problem-solving methods are required as one moves up the ladder.
- **Discretion:** This is about the autonomy a job holder receives to innovate and make changes at his or her level. At lower levels, discretionary powers may involve bringing about an improvement or changing specific work processes. At higher levels, discretionary powers entail bringing about breakthroughs and completely new thinking in one's area of work or in the industry.
- **Collaboration:** This refers to the extent to which the job holder needs to interact and collaborate with teams within and outside their departments laterally. At lower levels, such collaboration is confined to just within one's team or department. At higher levels, collaboration is organisation-wide and has no boundaries.
- **Context:** Involves the extent to which the job holder has to interact with the outside environment including customers, suppliers, partners, regulatory bodies and civil society organisations. As one moves up the ladder, the scope of external interaction increases and moves beyond one's immediate geographical boundaries and across nations.

- **Time Horizon:** This is about the time over which decisions of the job holder can be seen to yield result. Accountability and time frames are shorter at lower levels, but at higher levels, the time horizon extends significantly.

We led the intervention in a highly participatory mode so that concerns of all sections of employees were taken into consideration. We drew reference from Critical System Heuristics that is described in the next section.

8.3.2.2 Critical System Heuristics

Critical Systems Heuristics (CSH) is an approach that offers an understanding of the core, intermediary and peripheral roles stakeholders play in a system, and appreciate the social and personal worlds of the situation. Driven principally by the philosophy of Kant, Habermas and Popper, CSH is an approach expounded by Ulrich (1983) which puts the position and activity of the involved and affected people in planning into scrutiny. To be critical means “to discern or to judge carefully” (Ulrich 1983; p. 19) the very norms and values one is situated within. Kant renders criticism an absolute status “to which everything must be subjected” (cited in Ulrich 1983; p. 20). Ulrich’s conceptualisation of systems is again heavily drawn from Kant, where he says that Kant “understands it [systems] as referring to the totality of relevant conditions on which theoretical or practical judgements depend, including basic metaphysical, ethical, political, and ideological a priori judgements” (Ulrich 1983; p. 21). This follows the concept of the “whole system”, which is always to be regarded critically as it is not possible to comprehend the totality of a whole system, because boundaries of systems are always changing. Heuristics, according to Ulrich (1983), is the art of discovery—the art of the usage of “problem relevant knowledge” to problematise the problem itself—an art which is beyond the scope of “rational inquiry”. As Ulrich (1983) comments “Accordingly, by heuristics we understand not a collection of prototypical problem solutions or problem-solving techniques, but rather the art of making ‘the problem’ the problem” (p. 22).

CSH is typified by asking a set of 12 questions in the “is” and the “ought” mode. For example, we can elicit and understand the difference in answers when we ask the question, “Who is the actual client of the systems design?”, and “Who ought to be the actual client of the systems design?”. The questions are further presented in Chap. 13.

The 12 polemical questions of CSH may be used to explore fundamental elements of social and personal aspects of stakeholder dynamics in implementation of any social intervention, and to also understand how stakeholder knowledge is defined and codified.

This perspective offered valuable impetus from our intervention in terms of appreciation of internal stakeholder positions and expectations.

Having introduced the consulting mandate and the thought driving the intervention, I will now turn to sharing our experience as we went about the process.

Table 8.1 Stages of the intervention

Diagnosis and design	Analysis and recommendation	Execution and change management
Expectation setting with top management	Review as-is organisation structure	Design and implement communication plan
Levels of work audit	Dialogue with top management to evolve to-be structure	Facilitate offsite workshop
Assessment of individuals	Evolve to-be structure	Change impact assessment

8.4 The Intervention

The intervention was initiated in the following three stages: Diagnosis and Design, Analysis and Recommendation, and Execution and Change Management. Refer to Table 8.1 that articulates the key aspects of every stage.

I now discuss the three stages in detail below.

8.4.1 *Diagnosis and Design*

This primary stage was meant to understand the problem areas of Potential PR and accordingly inform the design of the two stages that followed. This was a highly participatory stage where employees representing various levels, functions and locations were met and interacted with. This stage consisted of the following steps.

8.4.1.1 Expectation Setting with Top Management

This involved appreciation of expectations of the top management from this intervention and how it would support the firm’s vision of the desired future. The top management constituted the CEO and one of the senior most Principals, who had been a key driver of the growth and strategic direction of the firm. We held one-to-one interactions with the top management covering various areas including the current state of the business, organisational and human resources problem areas, revenue differentiation, business and management challenges, strengths and weaknesses, future direction, and strategic objectives. The interaction also involved deciding on resource requirements and the matrices for measuring success in this intervention.

Cues were drawn from the CSH approach of Ulrich (1983) that meant that these interactions were facilitated with an intent to understand the desirable state of being for all levels of employees, as perceived by the top management. The questionnaire guideline was designed to explore not only the journey that the firm made and how it wanted to move forward, but also to critically explore the then-current state and how

it differed from the intended state. CSH also informed the questioner to be constantly probing of the internal and external stakeholders who were actively or not actively involved and affected by the intervention. This included employees across levels (career progression lines would be touched) and the clients (the service delivery model would be impacted).

The top management highlighted several drivers that needed to be considered for arriving at various options for the restructuring. These were considered under the CATWOE framework to facilitate thinking about a wider range of variables. CATWOE is a mnemonic that stands for “Customers, Actors, Transformation process, Worldview, Owners, Environment” and forms part of the Soft Systems Methodology that was developed by Checkland and Scholes (1990). In this case, the understanding centres on the following:

- C—Customers for which the firm existed—both internal and external. Any intervention had to offer customer value as the main intent.
- A—Actors, who actually carry out the work in the organisation; in other words, all employees.
- T—Transformation process that receives inputs and converts them to desired outputs.
- W—Worldview that drives all belief systems and actions behind the system.
- O—Owner(s), who have the formal power to take decisions.
- E—Environmental constraints including resources limits and operating within ethical considerations.

A range of customers (both internal and external) was proactively articulated and impact of the firm’s employees service delivery was discussed to understand client impact through the transformation process that the firm’s services would entail in the new structure schema. Given the dynamic nature of the employees, their perspectives and worldviews were explored, and their aspirations and career progression options were understood. Respective ownership for operations, value creation and client management were clearly articulated. With the advice of the top management, all change drivers and recommendations were placed on the table to create a new structure schema that would potentially raise the bar of PR in the boardroom through distinctive client value creation and influencing change.

This led to the identification of the organisation drivers for the firm, which were as follows:

- Scalability and growth,
- Intra-firm collaborative spirit,
- Process efficiency and
- Organisational integration.

8.4.1.2 Levels of Work Audit

This stage was about ascertaining the then-current state of operation of the roles and the relative value contribution that employees had in their respective levels. The

framework used here was Levels Of Work (LOW) that was developed by Elliott Jaques and Gillian Stamp, as a result of some of the most extensive research work carried out in the Human Resources field. The LOW framework was adopted to be in sync with the VSM model of Beer (1972) that meant that we explored differential value contribution to different levels in the organisation. With the systems perspective in view and the influence of Beer, we endeavoured to understand the key aspects of organisation sustainability from the cybernetic principles of communication and control. As defined in the VSM model, the key driver for flexible organisational sustenance and sustainability is effectively intervening with the internal loci of communication and control. The LOW framework enabled the use of various tools and approaches in order to have this appreciation through a series of defined and focused comprehension questions and critical examination. This enabled the understanding of where internal control balances lied and how the schema existed in a recursive fashion in the organisation. Areas of repetition and duplication of work were surfaced and noted for change as a result of this study.

The LOW framework considers how an incumbent handles available resources, timeframe of decision-making, discretion, organisational collaboration, their value contribution, problems and environmental context, in their day-to-day situation. This framework advocates that as people move through their career, their capability of handling these factors undergoes a shift; professionals transition from a state where the relative “complexity” increases from a state where these factors are highly predictable and straightforward to where these become highly unpredictable and uncertain. Jaques and Clement (2002) note that “complexity is a function of the number of variables operating in a situation, the ambiguity of these variables, the rate at which they are changing, and the extent to which they are interwoven so that they can be unravelled in order to be seen” (p. 22). According to Jaques, as the incumbent rises up the organisational ladder, he or she invariably has to face greater complexity, for which more resources including workforce are required. Hence, his or her span of control also gets wider. This expansion of resources in turn also adds to another level of complexity for the manager. Therefore, moving up the organisational ladder invariably entails moving up the cognitive capability to handle greater complexity. As a manager moves up the ladder, authentic flexibility becomes a core trait as often decisions need to be taken in ambiguous situations and the same need to be revisited from time to time due to constant dynamism in market realities. Internal relationships keep changes both from talent and budgetary perspectives and manager–leaders need to stay agile and resilient in such circumstances.

Juxtaposing this schema with Beer’s model, we understand how different levels of control points can be associated with different structural levels in the organisation.

The framework advocates the following seven Levels of Work:

- **Level-1 Quality:** The incumbent is expected to do specific work within clearly defined quality, quantity, time and resources, within a concrete environment with known and measurable variables.

- **Level-2 Service:** The incumbent is expected to support the Level-1 job holder whenever called for to manage problems and issues, taking into consideration the organisational ethos and values.
- **Level-3 Practice:** The incumbent is expected to implement organisational systems and processes in their area of concern, and take decisions for particular units taking into consideration how it will impact on the other units and departments.
- **Level-4 Strategic Development:** The incumbent is expected to bring about changes in products or services in the organisation or with outside relationships, structures or systems that would ensure that the organisation stays competitive.
- **Level-5 Strategic Intent:** The incumbent is expected to establish a strong connect with the larger socio-economic environment and bring about strategic changes in the organisation that would ascertain the long-term viability of the business.
- **Level-6 Corporate Citizenship:** The incumbent is expected to establish and sustain strong local, regional and national presence successfully integrating and aligning human sensitivities, cross-cultural needs and global economic transformations.
- **Level-7 Corporate Prescience:** The incumbent, by virtue of their insights and opinion, could redefine value systems at a global level that would shape current and future generations.

We deployed royalty-based proprietary tools to conduct Levels Of Work Audit (LOWA) across all the as-is roles at Potential PR. These included CEO, Principal/Account Director, Manager, Supervisor, Senior Executive and Executive. To obtain a comprehensive appreciation and establish the reliability of the tool, a random sample of 25 role holders were interviewed across the locations and levels. Each interaction spanned around two hours and explored various work aspects including: summary of the job, job purpose, key accountabilities, resources available, challenges faced in the role, the discretion that comes with the job, internal collaboration, association with the external context, timeframe for decision-making and finally, the “feel” of being associated in that role in the firm. The LOWA tool has specific pointers and questions to guide and direct the interaction in a specific and intended manner. The LOWA questionnaire cannot be shared due to licensing regulations.

The role interactions also involved comprehensive appreciation of the organisational culture and values from the employees’ point of view. This was captured by exploring with the role holders about their everyday lived-in experience at Potential PR.

8.4.1.3 Assessment of Individuals

Two specific online assessments—Modified Career Path Appreciation (MCPA) and Linked Psychometric Assessment (LPA)—were administered to all seven members of the leadership team. These tools are based on the LOW framework and have been accredited by the British Psychological Society. MCPA assesses the individual’s current capability of dealing with complexity, and how this develops over time. It also helps identifying how the individual’s current capabilities match with the

complexity they face in their role, based on various dimensions mentioned earlier. LPA is an integrated competency assessment tool that combines six expert psychometric elements: Conflict Handling, Team Orientation, Personality, Learning Style, Work Style and Managerial attribute.

These tools were mandated to be used by Potential PR in order to gauge the capability and competencies available in the leadership team, and accordingly counsel and mentor the team members so that they may deliver on the expectations set on them to drive the changes that would be brought about by this intervention.

Being able to manage change and lead the organisation through its qualitative transformation were key traits of leadership effectiveness that were assessed. This included the ability of manager-leaders to sense and respond in a timely and effective manner to contingencies without any evident manifestations of resistance or road-blocks. Remaining flexible and adaptive along with displaying calm and composure are hallmarks of such leaders. A leader needs to be able to extend his or qualities to influence and control their surroundings including their own teams (Fielder 1967). This requires a high degree of cognitive maturity and emotional intelligence (Atchison and French 1967).

Post the assessments, all the seven individuals went through a mandatory two-hour interaction with an accredited consultant from our team. The purpose of these interactions was not only to offer feedback to the incumbents, but also validate the answers and observations that they would have shared at the time of taking the tests.

8.4.2 Analysis and Recommendation

This was the second stage of the intervention that entailed detailed review and analysis of the data and knowledge assimilated in the first stage, leading to customised solutions for the firm. This stage included the following steps.

8.4.2.1 Review As-Is Organisation Structure

We met with key staff members to review the as-is (current) organisation structure. This involved study of correlation between the structure and the LOWA outcomes arrived at in the previous stage. The variables that were considered in this stage were the business environment, organisational culture and power dynamics, views of the leadership team and key internal stakeholders. Existing organisation strategy and business objectives were understood and alignment with its current structure was sought. A thorough study of the performance measures and key processes was undertaken. Cues that emerged on the organisational values from interactions in the previous stage were kept as a context for inference in this step.

There were six roles identified as “unique”, meaning those that are involved in the same nature of work and value contribution. These roles were

- Executive,
- Senior Executive,
- Supervisor,
- Manager,
- Director,
- Principal and
- CEO.

These roles were analysed in a detailed manner taking into consideration the following aspects: Purpose of the job, Key Results Areas (KRA), Duties and responsibilities, Value contribution, Capabilities and competencies required to perform, and Fitment of the profiles of the leadership team members with their as-is roles. The profiles of the members of the leadership team emerged from the MCPA and LPA assessments that were carried out. The roles were found to be operating through three progressive levels in the LOW framework: Quality, Service and Practice.

The following observations and key challenges emerged as a result of the analysis:

- The as-is location-based structure and reporting mechanism was creating an artificial divide between the employees in the three offices. Employees were being segregated based on the geography rather than on skills. This was leading to collaboration taking a toll in the organisation.
- The location-based structure limited information flow within specific offices. For instance, circulation of crucial HR information was done within the office itself rather than across the organisation. This was leading to a lack of cohesion in the organisation, and communication and collaboration being initiated only within specific offices.
- Various roles within the organisation including leadership roles demonstrated a strong transaction focus. This was also taking leadership focus away from strategic value contribution and the key people dimensions of development, bonding and collaboration.
- There were significant overlaps in expectations, roles and responsibilities between the various levels and locations. It was found that at times the roles across the hierarchies were cramped in the same level or gaps in structure leading to senior staff being pulled down to perform work of the junior staff. There were also considerable ambiguities within the set up about responsibility of business operations and location-wise administrative responsibilities.
- People were being promoted across the levels without significant change in their role, leading to perceived sense of stagnation. This was also resulting in a situation where good performing staff was being promoted, but they did continue to perform similar work as in their previous roles.
- Location-based structure was somehow limiting cross-functional flexibility across teams across geographies. Specific team members in one location could be interested in working with a client or in a specific solution in a different geography, but the way the organisation was structured, did not allow them to do so.

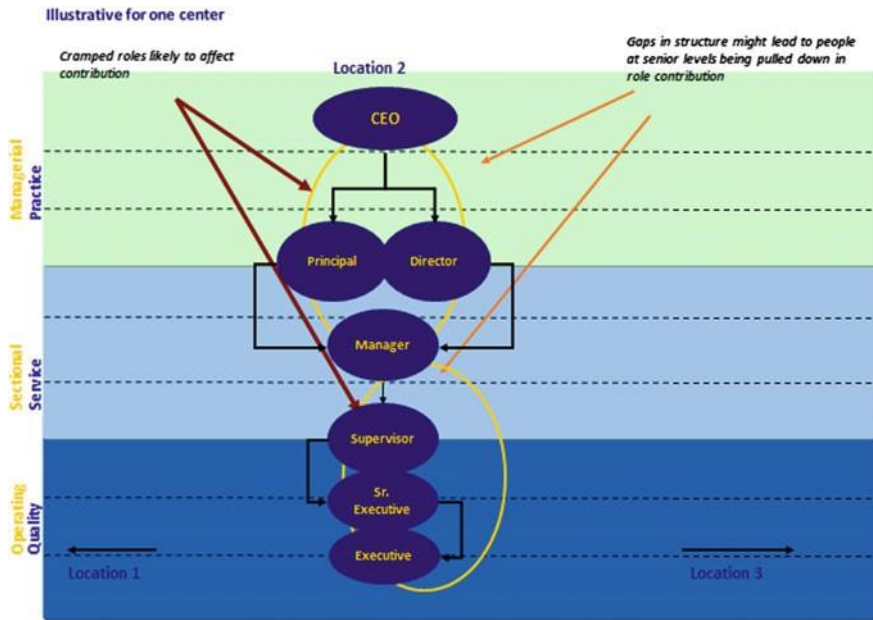


Fig. 8.1 As-Is organisation structure

Figure 8.1 is a depiction of the as-is organisation structure that was arrived at, based on the study and on the LOW framework.

8.4.2.2 Dialogue with Top Management to Evolve To-Be Structure

The understanding that emerged out of the above analysis was shared with the top management for dialogue and validation, and obtain inputs for the new structure. The facilitation of this dialogue was influenced by a Critical Systems Heuristics (CSH) perspective where we encouraged the top management to think on new structure dimensions not only in terms of business growth but also in terms of warding off factors that were hindering a positive and collaborative environment in certain pockets in the firm. This therefore involved “sweeping in” (Churchman 1968) of considerations of the “involved” and “affected” (Ulrich 1983) parties within the organisation. There were multiple dialogues on clarity of roles and expectations, career paths, communication fora, transactional HR issues, superior–subordinate relationship and employee mentoring across the board. These dialogues were prompted by the indicators from CATWOE that guided us.

The following design variables were identified for the new structure:

- **Relationship Management:** This term denotes the nature in which internal and external relationships would be managed at Potential PR. It emerged that a key management requirement of the firm was to nurture a healthy relationship with its team within the firm and external stakeholders, including clients and service providers. Keeping this in mind, it was agreed that the new structure would be designed in a manner in which there would be an underlying theme of collaboration through the firm; professional teaming for effective client delivery could not be let to suffer due to geographical distances created by the organisational structure. Client relationship and interaction would be seen as a unique skill and task that would be handled by certain unique role holders, and vendor relationships and other administrative responsibilities would be managed by an administrative designate in each location. Hence, strategic and transactional functions were to be clearly delineated. Moreover, to maximise and foster internal relationships, the structure would be evolved in such a way that critical interactions like grievance redressal and performance appraisals were handled by specified unique and capable role holders.
- **Industry Focus:** This term denotes the specific industry (or industries) that Potential PR would want to serve. As the firm grew, there were three specific industry areas that emerged. These were Healthcare, Technology and Consumer. In the due course of the analysis, it emerged that as the firm grew and developed, it made more sense for teams to be organised around specialist verticals rather than locations. This could also address the issues that created impediments in collaboration due to a geography-based structure.
- **Geographic Spread:** This term denotes the geographic focus and structure that Potential PR would want to adopt going forward. It emerged that the current organisation was structured with a focus on the location. Staff in all the three locations reported to a Principal, who was also heading that particular location administratively. However, as the specialised vertical-based structure would take shape, it was agreed that one senior person in every location would be responsible administratively for that location, but staff would report only to their specialist service vertical, irrespective of their location. This was believed to enable superior client delivery and developed better skill set to support growth of the organisation, which would be a separate focus from administrative support for the locations. This was also expected to bring in cross-location collaboration at work.
- **Value Contribution:** This term denotes the unique value that each unique level in Potential PR would be expected to contribute. It was deliberated that with every level, there needs to be a differential value contribution. To support the firm move into its planned trajectory in the future, it was envisaged that the organisation could be designed in three superior levels, given the stage at which the firm was in, as per the LOW framework; these are Service, Practice and Strategic Development.
- **Decision Control:** This term denotes what decisions would be taken at what level at Potential PR. To overcome ambiguity and confusion in the authority and responsibility in the firm, emerging out of overlapping hierarchy levels and reporting

relationships, this aspect was considered as a key factor to influence the organisation design. It was agreed that decisions relating to staff evaluation, appraisals, developmental interventions and career paths would be handled by the reporting managers. Decisions relating to administrative support and seamless functioning of the branches would rest with the designated administrative support official. The role of HR was agreed to be that of facilitating the new structure, driving collaborative engagements, suggestions of improvement of people policies and ensuring their implementation as an effective support function.

8.4.2.3 Evolve To-Be Structure

Based on the design criteria evolved and considered in the previous steps, we pillared the new structure with a view to merge the existing location-based structure and evolve a vertical-based structure. Three specialised verticals (Healthcare, Technology and Consumer) were clearly delineated, to be headed by individual Principals, who would report to the CEO. In order to support the transition of the organisation to the anticipated future, the position of Principal was sculpted higher to Director, with the identification of clearly differentiated roles spaced as per value contribution across the levels. It was agreed that being in the specialised service industry, the firm required to operate at Service–Practice–Strategic Development levels in the LOW framework.

Figure 8.2 depicts the proposed structure.

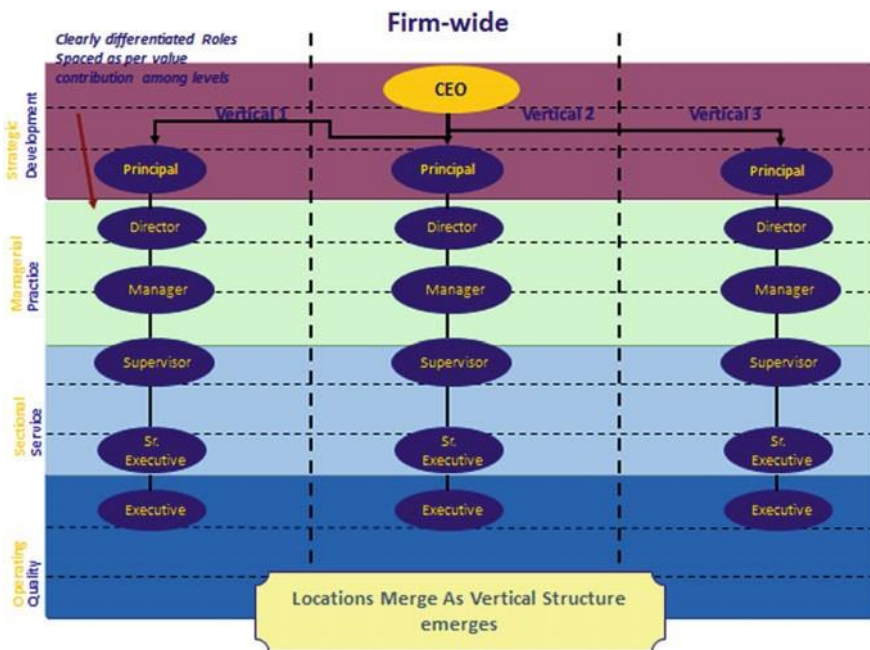


Fig. 8.2 To-Be organisation structure

The following seven unique roles were redefined as per the organisational and business requirement, and based on the LOW framework:

- **Executive:** Provide operational support to Senior Executives in tactical and transactional execution of PR activities for the client.
- **Senior Executive:** Engage in primary client deliverables by execution of mandated work.
- **Supervisor:** Assist the Managers in client relationship management and drive day-to-day tactical/operational PR activities for an account and focus on execution, as planned for and expected by the client.
- **Manager:** Manage the overall management of client deliverables and all PR execution activities for allocated accounts through effective understanding of client needs and distribution of accountabilities to junior members in the team. Exceptional issues would typically be escalated to the Director/Principal.
- **Director:** Relationship contact for the client and ensure business sustainability through effective management of resources in the team. To provide broad-based strategic PR counsel for the vertical/client and to provide inputs for building expert knowledge within the team and in setting up of processes/systems in the firm.
- **Principal:** Build, grow and expand the firm as a credible communications consulting company in the specified vertical by widening reach, client base and redefining approach to PR. To manage the growth of the vertical internally by setting up new processes, systems and mechanisms to ensure high quality of delivery by building effective teams and strategies.
- **CEO:** Build the brand of the firm and make it the torch bearer of the PR fraternity, leading the cause of emphasising the credibility and importance of PR in the corporate boardroom. To be a consultative partner for the clients by adding value to the PR offerings. Equipping the organisation with the requisite values and vision.

The six unique roles were mapped to four Levels of Work catering to the current and future strategy of Potential PR. The principles of communication and control were drawn from Beer's model to design the new schema in a manner that distinctive accountabilities were set in distinct levels and value creation is clearly identified as one moves up the organisational ladder. To live the structure, clear detailed role descriptions were created for every role, based on the above parameters that articulated the expectation, deliverables, performance measures, internal and external collaborations, discretion, timeframe and resources for the roles as per the LOW framework. The new structure was then validated with the leadership team after several rounds of discussions. The key lesson drawn from soft systems thinking was that inspiration from the VSM model was not used as a lifeless design tool for immediate replication in the situation. Rather the same was dovetailed into the business and cultural context of the situation, and lived and translated through the LOW framework and tools. This approach not only helped customise the solution to the client requirement but also facilitated greater buy-in by the team at Potential PR.

8.4.2.4 Convergence Workshop with Leadership Team

Once there was an agreement with the top management on the to-be structure, it was realised that this needed to have an equal collaborative buy-in from the leadership team, so that implementation of the new system amongst the larger audience across the company could be carried out with minimal resistance. With this in mind, we conducted a one-day workshop where all members of the leadership team were present in the month of March 2009. The workshop was designed keeping in mind the following characteristics:

- **Dialogic:** Enabling participants to present their views and engage in a dialogue in the process, so that the workshop did not seem like an information download exercise, but a collaborative knowledge sharing platform.
- **Participative:** Design and facilitation of the workshop in such a manner that the team was involved in various activities like benefits analysis, anticipating challenges, debating options and exploring possibilities. Rich Pictures were drawn by the participants to depict their perceptions of the change and how they saw this intervention impact the firm in the future. The concept of Rich Picture was borrowed from SSM (SSM is discussed in detail in Chap. 13).
- **Integrative:** Apart from communicating the new structure to the leadership team, it was also our mandate from the top management that this workshop needed to achieve an integrative spirit in the firm at the level of the leadership team. Therefore, the modules and exercises were designed in such a manner that it enabled the participants to see the Potential PR team as one entity, with own character and personality, rather than a discrete set of professionals clubbed together. The emphasis on firm-wide collaboration was maintained throughout the workshop.

8.4.3 Execution and Change Management

This was the final stage of the intervention, which focused on executing the agreed structure and managing the change keeping in mind the concerns and challenges that the employees had surfaced with regard to this intervention. This stage consisted of the following steps.

8.4.3.1 Design and Implement Communication Plan

This was seen as a critical step in the change process. There were already considerable confusion and questions in the minds of employees regarding what the outcome of the intervention would be and how they would be personally affected as a result of this. The communication plan was designed in a manner that such concerns could be resolved satisfactorily. For this to be achieved, the following was carried out:

- A one-day workshop was organised in each location to orient the staff on the new structure and unique requirements of the new roles designed. These workshops followed the tenets of being dialogic, participative and integrative as discussed in the previous section.
- Contact details of the consultants (including mine) were shared with the teams across locations and they were given open access to us for any queries and clarifications.
- One designated member from each location was specially trained on the change intervention and made the change champions for their respective locations. The role of the change champions was to play the go-to person at the specific locations to address any doubts or concerns. They were to work closely with the Vertical leads and the CEO.

8.4.3.2 Offsite Workshop

It was realised by the leadership team that posting all the individual location-based workshops, there would be a requirement of bringing the entire team together in one location and create a collective and collaborative momentum to implement and sustain the change. It was also intended that the organisational values would also be collaboratively articulated during this offsite. This workshop was facilitated in mid-2009 for over 2 days.

The design of the workshop was done in a way that it could bring about an emotional integration of the team with the larger intent of Potential PR. To enable this, right through the project, individual stories were collected, out of which common themes were derived. These themes were presented in various formats to explore, reflect and debate during the two days. Rich Pictures were used to facilitate unhindered representation of thinking. Facilitation of both the days was done by the CEO and our team with a focus and emphasis on how team collaboration needed to be fostered and nurtured in the firm as it delved into a new form as a result of this intervention. The workshop enabled the firm to clearly articulate its core values that the team thought drove them, and that got reflected in *the way things get done around here*. These core values that were articulated were

- Integrity (honesty, genuineness, commitment, humility, courage),
- Excellence (results orientation, structure and accountability, teamwork),
- Passion (Freedom/Innovation, pride, positive attitude, focus),
- Balance (work environment, interpersonal relations, empathise),
- Trust (suspend judgment, empathy, walk the talk) and
- Entrepreneurship (leverage diverse perspectives, try new things, innovate, challenge people, reward merit, actively develop people).

These values were further used to reflect on stories that the team thought shaped their thinking and association with the firm. Intense emotional experiences were shared that contributed to the team's cohesive identification within itself and this provided an onus to work collaboratively into the future.

A phased implementation plan was presented for roll-out of the new structure during the workshop.

8.4.3.3 Change Impact Assessment and Audit

It was advised by the top management that a formal audit process be put in place so that the change implementation was sustainable, and that any discrepancies could be detected and corrected as and when they occur. It was agreed that a one-day review every 6 months for two sessions be conducted after the project was over.

This intervention was primarily initiated to facilitate integration and enhancement of collaboration across locations and teams at Potential PR, driven by a practical and feasible organisational structure to enable the firm leap into its next orbit of growth. As a result of this exercise, the firm was braced to break away from its conventional work style of siloed location bases to an environment where collaboration was designed to flow across locations and being spearheaded by capable team members at the senior level. As the audits were carried out in late-2009 and mid-2010, following were the organisational changes that were noted:

- Employees were found to be more interactive across the offices resulting in enhanced inter-location collaboration. This was a direct outcome of the intervention design.
- There was increased familiarity of employees across locations due to greater interaction and new initiatives been carried out like blanket information sharing on HR updates.
- The new vertical-based structure created different loci of expertise of professionals with specialised skills and interests. This resulted in greater client satisfaction.
- The momentum generated through the workshops and offsite was sustained by the employees supported by the leadership team. This resulted in greater organisational, cultural and professional “proximity”.

As a result of the new “proximity” that was forming at Potential PR, value addition at work and knowledge forming and sharing were emerging in various ways; this was apart from the intentional formal ways of periodic business updates or review fora. This was the informal collaborative spirit that was forming from which the firm was benefiting in more ways than what was intended at the start of the intervention. We may refer to Gibbons et al. (1994) and connote this form of knowledge as “Mode-2” knowledge, which is often found to be more powerful and relevant than formal forms of knowledge creation and formation (Nokkala 2007).

Post implementation of the new structure, there were also various challenges that surfaced for Potential PR for the top management of the firm. These challenges appeared at the levels of soft skills of people, the organisation’s systems viability to sustain the change, and even the leadership team’s ability to relate and lead the larger team through the new environment of dynamism and growth. As a result, the

top management further mandated our team to intervene in the situation to address these challenges, as part of a different intervention (some reference is provided in the discussions that follow).

8.5 Appreciating the Intervention from a Systems Perspective

The overall intervention was carried out under a systems thinking perspective to introduce a new organisation structure that would enable collaboration at Potential PR. Inclusiveness and flexibility were important drivers for the programme. Although the overall thinking that drove this intervention was based on the systems paradigm, no systems methodology was used in its entirety, but in mix-and-match with one another, more as an influencer. Our approach also set the tone for the organisation in a specific direction to enable collaboration and cultural proximity that was to be internalised as its future unfolded.

I will present an appreciation of the case from two lenses—methodological and organisational.

8.5.1 *Methodological*

As consultants, we were able to apply a range of methodologies that were pertinent to the intervention. Amongst the three-member team from our side, I was the only team member who was trained in systems approaches. However, all the three of us were trained in applying the Levels Of Work (LOW) framework that is a licensed from the Brunel Institute Of Social Science (BIOSS). I was able to bring in the systemic perspective to our approach in alignment with the LOW framework and through the change management process.

Table 8.2 summarises how systems approaches were used in this intervention and to what impact. It is to be noted that this is not an index to relate tool to usage and impact, but it is only a schematic representation of how the overall systems thinking framework trickled throughout the intervention, due to a conscious effort.

The mix-and-match approach has been prevalent in the systems domain. Various academicians and practitioners have documented the benefits of this kind of an approach. I have discussed this in detail in Chap. 3.

Being influenced by the Critical System Heuristics, it was always the endeavour that both the involved (consultants, CEO and leadership team) and affected internal stakeholders (employees) were engaged through the transformation process. It was a conscious decision that any key conclusion about the current state of affairs or any future change recommendation would be made by a collaborative process and without neglecting crucial inputs from employees across the levels. The sense of

Table 8.2 Application of creative systems thinking in the intervention

Perspective	Insights drawn for the intervention	How it was use	Impact
Critical system heuristics	Inclusion of stakeholders involved and affected in an intervention	Intervention design to make the process inclusive using participatory techniques to embrace the involved and the affected	Greater buy-in of the recommendations across the organisation
		Fair representation of employees across levels in the design and implementation phases	Creation of trustful relationship between employees of the firm and the consultants
		Design of questionnaires exploring critical areas of organisational context and culture	Recommendations closer to the organisational realities to make an actual difference
Viable system model	Differential value creation across organisational levels	Analysis of the organisation to understand as-is levels and value creation	Detailed analysis exposing repetition of tasks across levels resulting in senior management time loss
		Application of Levels of Work framework in order to create a practical and adequate new structure	Objective assessment resulting in significant role changes in the new structure with identified value creation in different levels
Soft systems methodology	People involvement to enable enriched collaborative appreciation of the context	Use of Rich Pictures to appreciate employees’ perspectives in a creative manner	Employees to behave in a more natural fashion overcoming their inhibitions
		Use of CATWOE tool to prompt the consultants in regular routine interactions	Obtain a real picture of what could work closest to the situation under consideration

Underlying theme: Enhanced organisational collaboration

collaboration received a new high by the specific workshops conducted at various stages of the intervention, targeted to create an atmosphere where the employees could express themselves in an inclusive and non-intimidating environment.

The conclusion on the specific levels in the new organisation structure or the role description for every level was arrived at, there was thorough engagement with select employees in the organisation across the levels and functions. The momentum and spirit that was generated during the exercises were sustained throughout the intervention. This sense of apolitical engagement led to an unseen interest in collaborating professionally in formal and informal manners during the intervention.

Methodologically, this intervention achieved the following for the people it touched:

- Inclusion of the involved and affected parties in the transformation process,
- Recommendations being made keeping in mind key inputs from employees and
- Trust being explored by consultants to enhance internal engagements and overcome personal differences between certain employees.

As a team, they were able to demonstrate flexibility from a methodological perspective to offer maximum value to the client. The systems and BIOSS platforms were able to accommodate flexible thinking and leverage tools in an integrated manner that could embrace the involved and affected parties through the intervention.

On the flip side on the methodology, our personal interactions also meant that certain employees expressed highly confidential details about their opinions with the current state of affairs, and how they expected that the situation would change as a result of the intervention. The danger with this being that many of such expectations were outside the scope of the project. These included initiatives like team building, executive coaching, conflict management, etc. The very fact that some employees disclosed certain specific information, they expected that we would address all the issues; but that was not feasible. As a result of this, there were certain employees who continued to approach the leadership team with enquiries for resolution of issues that were surfaced during the interactions, and many of such issues were not being immediately addressed. Therefore, there were certain scarce instances where certain employees felt that the intervention did not help them. However, what was missed out was that this intervention was intended to be organisational, and not personal.

Overall, from the leadership team and CEO's point of view, this intervention was deemed to be a successful one. This ensured Potential PR to come back to us to support the firm with a range of initiatives including focused trainings, leadership assessments and organisation effectiveness, as a second stage. I was also looped in a year later to conduct a leadership development workshop with 25 emerging leaders of the firm.

8.5.2 *Organisational*

Here I reflect on how this intervention touched the organisation at an overall level and its impact on the nature of collaboration through and beyond the intervention. Right after a year of concluding the assignment, I engaged in a dialogue with a senior Principal of the firm (who was part of the top management) to obtain their view on the intervention and its impact.

Prior to the intervention, it was observed that collaboration occurred between team members specifically at the location level, which was largely due to physical proximity of the people. This proximity was also used to be the primary factor considered in client delivery that was again segregated as per locations. However, as a result of this intervention, collaboration was established across the three locations.

The intervention exposed the need for more geographical mobility across the offices. As clients of specific industries were now being managed by teams across the offices, it meant that professionals from one office needed to travel to other locations if there were clients in the same industry that were being served, and if there were no local expertise in that particular geography.

As a result of the above, the leadership team felt that new joinees would benefit if they spent specific number of orientation days in different locations as a part of their induction in the firm. This practice also took off later; the incumbents started having a higher degree of comfort and association with professionals across the locations and this led to enhanced belongingness to the firm.

Due to the need for greater collaboration at all times, there was also greater use of technology such as video conferencing facilities. These facilities were increasingly used in weekly update calls, for the CEO's messages to the team, conducting recruitment interviews, and also for Vertical Leads' connecting with incumbents for performance appraisal feedbacks.

Change was being noticed in the following key ways:

- From location-specific teams to skill-specific teams,
- From basic technology use to advanced technology use,
- From limited to greater social orientation for new joinees and
- From siloed working to collaborative working.

Additionally, at an organisational level, the role of HR itself started to be looked at from a more evolved perspective. With the thrust on organisational development that was introduced with this intervention and related events, the leadership team realised that Potential PR needed a capable professional who would be able to drive and sustain the momentum brought about. Therefore, there was a move for HR from being a transactional function to being a transformational support. The firm eventually recruited an experienced HR manager. The HR manager had a mandate to enhance and sustain the collaborative spirit gained through best practices established in the firm through several new initiatives.

8.6 Current Realities Facing the Organisation

The intervention (discussed above) made the firm “future-ready” to traverse through a series of progressive changes. The firm’s employee strength reached one hundred. With more people came more complexity. The nature of work the firm was beginning to attract was beyond the traditional work of PR and was edging in the space of management consulting; this included work in the realm of research and business advisory, India entry strategy for international clients, public affairs and stakeholder engagements. With higher complexity of work, the firm required to up its talent and also attract teams from research and advisory background. There was greater diversity of services that the firm had to integrate like design, digital and content to cater to integrated solutions that its clients were beginning to demand. This created the need for better integration and more effective collaboration between creative and knowledge workers, demanding innovative approaches and new thinking.

Changing market realities led the firm to re-evaluate its organisation structure to stay competitive and align the right skill sets in the right direction. In light of the new realities facing the firm, five functions were created to direct specific focus on specific aspects as follows:

- **Strategic Planning:** A specialist function for ideation and concept creation for client servicing and campaigns.
- **Client Servicing:** Focusing on client service excellence to drive value and service quality.
- **Market Access:** External facing function for market intelligence, partnerships and business growth.
- **Human Resource:** For talent management and optimal service delivery.
- **Finance:** Financial management and prudence.

The organisation overall continued to follow the structure that was adopted as a result of our previous intervention across five levels of the LOW framework. Inspired by Senge’s (1990) learning organisation, Potential PR adopted the principle of continual learning for all team members and initiatives were put in place around internships, knowledge sharing, coaching and mentoring, and reward and recognition. Potential PR continued to attract people from a range of non-traditional backgrounds to work on projects that encompass exciting work in stakeholder engagements, public affairs and reputation advisory. Various initiatives by HR created a culture in the firm where team members operate with little supervision and constantly challenged by their seniors to display competence of the next level. This enabled the leadership to widen the span of control with an aligned organisation structure that focuses on competencies and performance.

8.7 Organisational Flexibility

Ever since my first association with the firm, I viewed Potential PR as an organisation that is flexible, accommodative and adaptive.

It was a forward-thinking move way back in 2008, when the firm approached me for a consulting intervention, being a small firm at that time. It was significant financial investment for the firm for external advisors and it was flexible enough to make the budgets available seeing the potential benefit of the intervention. The leadership team in the firm displayed openness and acceptance for the frameworks that we had introduced for the consulting intervention and eagerly embraced the changes that we had recommended from structural and talent standpoints. Through the entire intervention, team members from various levels and verticals were looped in for sensitisation, deliberations and roll-out of the new structure and articulated structure. The inclusive nature of the management enabled bringing in diverse perspectives and opinions that eventually led to better buy-in of the recommendations.

Potential PR remained in touch with me beyond the age of the intervention for various other programmes to address aspects around sustaining the initiative. We undertook various additional projects addressing performance management, employee engagement and capability development. This displayed the firm's ability to adapt to changing requirements of the industry and equip itself diligently to face changing market realities.

The adaptiveness and openness to change in the firm has always been driven at a very strategic level and this is evident in the way the management has approached the very structure of the firm itself as an adaptive system. The management structure of the firm continued to evolve to adapt and respond to changing business needs and increasing competitiveness of the industry. The firm continued to push its own boundaries and reinvent itself from time to time.

Learning and Development was also looked at flexibly in the organisation to support its evolving nature. Different tracks address different learning outcomes and aspects like reward and recognition have been aligned to such outcomes to make the learning lifecycle holistic and flexible. Again, attention to detail is also seen with adaptation of the syllabi for leadership and emerging leader levels; there is no one solution to address all issues. Everyone at every level requires its own attention and focus, and the stratified learning approach at Potential PR was a response to this need.

Flexibility of thinking, availability of flexible approaches to management and timely access to resources made the organisation evolve as a complex adaptive system to remain adaptive and relevant in the dynamic market environment.

8.8 Conclusion

This chapter presented a case study of how an organisational design intervention was carried out with the objective of enhancing firm-wide collaboration and support business growth, within a systems thinking paradigm. The Public Relations (PR) industry within which the organisation operates was introduced, along with the organisation itself. This was followed by a discussion on the emerging needs in the organisation. Following this, the approach and methodology along with the change impact were discussed. The chapter finally engaged in a retrospective appreciation of the intervention and its impact on firm-wide collaboration, using a recently developed systems framework.

This case introduces how the systems paradigm was used as a perspective, from which cues were used to inform and design the intervention, how it influenced the choice of particular approaches (such as Levels of Work) and the tools that were used to engage internal stakeholders of the firm. Such initiatives supported the collaborative spirit both during the intervention, and this was also reflected in the work and management style of the firm post the intervention. This case can be treated as falling within the soft systems paradigm, where engagement and involvement of people can be taken as the core in designing and affecting business growth through and for enhanced organisational collaboration.

I wrapped up the discussion with an overview of the current realities facing the organisation. I also presented how I see Potential PR as a flexible organisation, given its approach to change and adaptiveness through the period of time.

References

- Atchison T, French W (1967) Pay systems for scientists and engineers. *Ind Relat J Econ Soc* 7(1):44–56
- Beer S (1972) *Brain of the firm*. Allen Lane, London
- Bradshaw M (2001) Multiple proximities: culture and geography in the transport logistics of newsprint manufactured in Australia. *Environ Plan* 33(10):1717–1739
- Bryson JM (1989) *Strategic planning for public and nonprofit organizations*. Jossey-Bass, San Francisco
- Checkland P, Scholes J (1990) *Soft systems methodology*. Wiley, Chichester
- Chowdhury R (2011) Organizational design and firm-wide collaboration: retrospective appreciation of a change-led consulting intervention in India within a systems thinking paradigm. *Syst Res Behav Sci*. <https://doi.org/10.1002/sres.1139>
- Churchman CW (1968) *The systems approach*. Delacorte, New York
- Dutrisac M, Koplowitz H, Shepard K (2007) *An executive's guide to RO-based organisation design*. In: Gray JL, Hunt JG, McArthur S (eds), *Organisation design, levels of work, and human capability*. Global Organisation Design Society, Ontario
- Fielder FE (1967) *A theory of leadership effectiveness*. McGraw-Hill, New York
- Gibbons M, Limoges C, Nowotny H, Schwartzman S, Scott P, Trow M (1994) *The new production of knowledge. The dynamics of science and research in contemporary societies*. Sage, Thousand Oaks, California

- Gill J, Butler RJ (2003) Managing instability in cross cultural alliances. *Long Range Plan* 36(6):543–563
- Gorenak M, Ferjan M (2015) The influence of organizational values on competencies of managers. *Ekonomie a Manag* 18(1):67–83
- Greunz L (2003) Geographically and technologically mediated knowledge spillovers between European regions. *Ann Reg Sci* 37(4):657–680
- Jackson MC, Keys P (1984) Towards a system of systems methodologies. *J Oper Res Soc* 35:473
- Jaques E, Clement S (1991) *Executive leadership: a practical guide to managing complexity*. Cason Hall Publishers, Falls Church (VA)
- Jaques E, Clement SD (2002) *Executive leadership: a practical guide to managing complexity*, 8th edn. Blackwell Publishers, Oxford
- Kaufman R, Herman J (1991) Strategic planning for a better society. http://www.ascd.org/ASCD/pdf/journals/ed_lead/el_199104_kaufman.pdf. Accessed 12 Feb 2019
- Kirat T, Lung Y (1999) Innovation and proximity: territories as loci of collective learning processes. *Eur Urban Reg Stud* 6(1):27–38
- Meisters C, Werker C (2004) Physical and organisational proximity in territorial innovation systems: introduction to the special issue. *J Econ Geogr* 4(1):1–2
- Nokkala T (2007) Network building, motivation and learning in inter-organisational R&D collaboration projects: theoretical considerations. In: Nemo working paper 4. University of Surrey, Surrey (UK)
- Powell WW (1996) Interorganisational collaboration and the locus of innovation: networks of learning in biotechnology. *Adm Sci Q* 41:116
- Rhoten D (2002) *Organising change from the inside out: emerging models of intraorganisational collaboration in philanthropy*. The Hybrid Vigor Institute, San Francisco
- Schamp EW, Rentmeister B, Lo V (2004) Dimensions of proximity in knowledge-based networks: the cases of investment banking and automobile design. *Eur Plan Stud* 12(5):607–624
- Senge PM (1990) *The fifth discipline: the art & practice of a learning organization*. Doubleday, New York
- Simmerly RG (1987) *Strategic planning and leadership in continuing education*. Jossey-Bass, San Francisco
- Ulrich W (1983) *Critical Heuristics of social planning: a new approach to practical philosophy*. Haupt, Berne

Chapter 9

From Restructuring to Optimisation: Enabling a Sales and Marketing Function



9.1 Introduction

Changing requirements of the corporate setup lead firms to revisit their own organisations from time to time. Triggers for such changes arise from a range of factors such as cost reduction, diversification or specialisation, business optimisation, technology implementation, talent movements, mergers and acquisitions and consolidation. The organisation structure is the backbone to a corporate setup that immediately needs to adapt and/or evolve to such triggers.

In this chapter, I will present a case study of my experience of being part of team that was engaged in restructuring the Sales and Marketing function of a major manufacturing company in India operating in the iron and steel industry in 2013.

Our (the consulting team) engagement with the client was a journey where we were called in purely from the intent of rightsizing the organisation with a scientific restructuring methodology. However, our engagement made our mandate transition from a mindset of restructuring to optimisation, from rightsizing to development and from change immediacy to learning orientation.

9.2 Organisational Restructuring

9.2.1 Organisation Structure

Senior and Swailes (2010) define an organisation as an “enclosed system” where people and processes exist working seamlessly to achieve a defined business goal. However, they go beyond the simplicity of this definition and discuss organisations as dynamic entities brought to life by human interactions in a cultural climate that is driven by nominated or emerging leaders. Any system that has people involvement also has politics and emotions. An organisation structure plays an important role in how people interact in the system and the emotions it generates.

An organisation structure is the backbone for administrative management of a company. A structure defines reporting relationships, articulates roles and responsibilities, clarifies decision-making process and aligns efforts of different functions within the company to its strategic vision. The business vision informs the organisational structure and the structure also influences the culture and norms of working in the company. Organisation structures need to be agile and flexible enough to adapt to changing business priorities and the environment the business operates in. In addition, structures need to enable teams to work efficiently and effectively. Just as the right kind of an organisation structure can enable seamless information flow, team engagement and shared vision, getting this wrong can have equally disastrous consequences for the business. Several studies have previously been undertaken to understand the impact of organisation structure on efficiency and business results such as those by Glisson and Martin (1980), Ostroff and Schmitt (1993), Biloslavo et al. (2012), Boehm (2012) and others.

There are four commonly observed kinds of organisation structures that are as follows:

- **Functional:** This is the most prevalent type of structure that groups people as per their respective functions such as human resource, finance, procurement, etc. Every function is normally represented by a functional head, and all functional heads report to the head of the business. This kind of a structure creates a high level of clarity, control and predictability, but has the danger of people ending up working in silos.
- **Product-based:** This type of an organisation focuses on a specific product or a service and pulls in all efforts from different processes (or functions) aligned in a manner that the end product or service is delivered. Completely different product/service lines can be created within the same company. This kind of structure enhances high focus and quality, but can also create replication or duplication of functional processes within the same organisation if product/service lines are not streamlined effectively.
- **Customer-centric:** This type of a structure keeps the customer in mind and aligns all services and efforts towards the same. This type of a structure is normally seen in highly specialised fields. A customer-centric structure enhances quality, innovation and differential customer experience, but can make the product/service an expensive proposition.
- **Matrix structure:** This type of a structure creates both vertical and horizontal reporting relationships, with employees being part of both their own functions and specific project groups. This kind of a structure brings in people from different teams and employees are expected to behave in a mature manner prioritising their own work for the interest of the project and the organisation. A matrix structure enables cross-functional working and creativity to address complex business issues, but also automatically renders great responsibility to employees to make informed judgements about their work and priorities.

There is no one right way for an organisation structure. Structures are defined by business priorities, capability, size, technology enablement and complexity of

the situation. A large transnational conglomerate may have different structure clusters depending on its geography, business and market strategies. With technological advancement, we are rapidly seeing the rise of virtual organisations as a viable alternative to traditional structures. Team-based working and sporadic project-focused emergent teams are also seen for specialised mandates.

No matter whatever the structure is, employees need to be clear of the same. Structures are meant to enable the business, and hence it is important that they do not create restrictive tendencies and hamper innovation. The significance of informal teaming and organisational culture must never be overlooked. Above all, leadership plays the key role in setting direction, defining values and articulating expectations to steer the organisation forward.

9.2.2 Restructuring

There are various triggers that may lead management to rethink their organisations. Restructuring is the process of taking a fresh look at how an organisation is currently clustered in terms of reporting relationships to align towards delivering on its business objectives; in some cases, this may be minor adjustments or additions and deletions, and in others, it may involve a complete overhaul in the entire system leading to repercussions in all aspects of people, technology and processes. These include changes in business goals, attaining cost competitiveness, redefinition of products and services, employee capability, the intent of downsizing or rightsizing, technology introduction, and issues relating to organisational collaboration and culture (as we discussed in Chap. 8). Eby and Buch (1998) note that organisational restructuring can be triggered by a variety of factors beyond just creating efficiency and lowering costs. Restructuring may include changes in operational structure, financing structure and governance mechanism (Gibbs 2007) that although may seem like a one-time initiative, may actually be an initiative that is carried out from time to time for a business to stay relevant in its ecosystem.

For the purpose of this chapter, we will be looking at only operational restructuring that usually involves revisiting functional/divisional boundaries. However, for such initiatives to be successful, organisations need to think beyond just divisions and reporting relationships, and also focus equally on how they can be sustained through capability development, performance measurement metrics, governance structures, and finally culture and values. Well thought through restructuring initiatives can result in increasing efficiency and enhancing effectiveness for organisations.

Hirsch and De Soucey (2007) studied the term “restructuring” from a vocabulary perspective and understood how the narrative of the term has evolved through a period of time. They say that the term “restructuring” was introduced in corporate language in the 1970s and had a negative connotation during that time and was associated with economic distress. However, as time passed, the narrative around the term also underwent changes and “restructuring” became reflective of kinds of business response to the prevalent environment.

The case under consideration here is for the Sales and Marketing function of an organisation. I will spend some time on understanding marketing productivity to build a context before I come to the case.

Productivity, in general, can be defined as the conversion of input resources to output results in economic terms. Whereas input resources can include workforce time, infrastructure and capital, output results in economic terms include sales and earning (Solow 1956). Marketing productivity cannot be looked at in silo (for that matter, productivity itself cannot be looked at in silo as it is a combination of various factors contributing to one another's effectiveness). Each function adds a certain value to another that is accrued in terms of the overall value creation for the organisation. When it comes to marketing productivity, a simplistic way may be to say that it is the proportion of the combination of time spent by the marketing team (considered as a sales & marketing team for relevance in the context under consideration), investments in salary and any capital expenditure to resultant sales. Going by this understanding, higher sales can be attributed to higher productivity of the marketing team and poor sales can be attributed to poor productivity of the marketing team. But it is not as simple as that; consider the following scenarios:

- The marketing team may be highly capable and efficient, but the organisation is unable to address the complexities that come with higher sales volume both in terms of production and after-sales service, leading to backlog and eventual customer dissatisfaction.
- The product itself is a niche one or the brand itself has a dominant market share supported by strong production facilities and after-sales service, and sales happen by virtue of the novelty of the product or the brand.
- Organisation legacy where hierarchy and compartmentalisation built up over years has created a culture of complacency; strong patriarchal-natured relationships have resulted in guaranteed job security and a level of tolerance to inefficiency leading to productivity lapses.
- The team is capable and has the desire to deliver. However, the organisation has not evolved with changing times and has failed to innovate in its products and services. Also, it has not been able to adopt technology to support interdepartmental working and collaboration, leading to the team's inability to catch up with market requirements.

The above scenarios can lead to drop in productivity of the marketing team. As Sheth and Sisodia (2002) say, marketing productivity is an "added value" in the system and cannot be treated in isolation. When a scenario like the above is recognised by the organisation as a problem, the management can sponsor strategic initiatives to relook into its structure with interventions spanning across people, process and technology. This can be then referred to as a restructuring initiative.

I will now turn to the case under consideration.

9.3 About the Organisation

This case is set in 2013 with a company I call Potential Steels for the sake of anonymity. Headquartered in Mumbai, Potential Steels was one of the largest manufacturers of cold rolled steel and galvanised steel in Western India. The company's manufacturing facilities were located in the outskirts of Mumbai. The facility was strategically located near the seaports, which provided the company with easy access to imports and exports of raw materials and finished goods, apart from giving it a cost leverage on transportation. The plant had a facility of cold-rolling hot-rolled coils, with a capacity of 1,000,000 tonnes per year and galvanising of 750,000 tonnes per year. A dedicated service centre was set up to directly interface with customers for their unique requirements of sheets and coils. Presence of a well-established research and development team ensured that different steel grades were developed in regular intervals, which not only saved costs for the customer but also improved product performance.

The company had an export orientation and more than half of its products were exported to nearly 150 countries across the world. In the Indian market, the company catered to the automobiles, white goods, construction, general engineering and drums and barrels industries.

Potential Steels prided itself with the quality of its products, manufacturing excellence, customer loyalty and expanding international footprint. It was also awarded the highest exporter award by the Engineering Export Promotion Council (EEPC) of India for the previous 17 years in succession. The company believed in continuous improvements in its manufacturing processes and upskilling of its workforce to create operational efficiency. As part of its modernisation programme, Potential Steels made strategic investments to increase its production of higher value-added products with better margins.

9.3.1 *Potential Steels Problem Statement*

In early 2013, the Potential Steels management approached us (the consultants) to support the company to transform itself in the following years to be able to gear up for aggressive growth. Transformation was spelled out as accelerating the speed of business, becoming a quality focused and customer-responsive organisation, and building ownership, clarity and a culture of performance. The company wanted to focus equally on products and building its customer footprint, including being the supplier of choice to Original Equipment Manufacturers (OEMs). The Managing Director (MD) expressed his desire to build accountability at all levels to make his plans hit the tarmac. The time was right for Potential Steels to reflect on its capabilities and equip itself with the right management ammunition to gear up for the future direction. The MD perceived employees as the most important driver to achieve the organisation's goals.

For the purpose of the discussions in this chapter, I will refer to the MD and the CEO of Potential Steels as the top management. They expressed concern with the Sales and Marketing department of the organisation. They felt that the department was overstaffed, did not have the desired capability and that the team were not focusing on value-adding activities. They felt that lot of the sales of the company was happening as it had legacy customers and that the customer footprint was growing because of referrals and the product portfolio the company had in any case, and not necessarily due to the efforts of the Sales and Marketing team. The top management felt that by reducing the team size of this department, by streamlining activities and by building the right capabilities, the productivity of the team would be enhanced.

Their ask for us was to completely restructure the Sales and Marketing department with a vision to achieve the following:

- **Alignment:** The company wanted to move from its overemphasis on product to a focus on customers. This initiative was expected to align the Sales and Marketing department to the overall organisational strategy with an attention to streamlined business operations.
- **Clarity:** Establish predictability in operations by clear roles and responsibilities to eradicate replication and duplication in the system. Every role expected to have measurable outcomes in terms of defined Key Result Areas (KRAs).

This restructuring was expected to enhance the Sales and Marketing team's productivity by aligning sales delivery to business requirements, and by eliminating redundancies and introducing efficiencies.

9.3.2 Our Appreciation of the Ask

Evidently, the narrative driving the thought process of this restructuring exercise was to bring in a cost leverage through downsizing and enable collaboration and flexibility.

As much as addressing a client requirement, the responsibility of the consulting team was also to advise the client on approaching the situation at hand in a more holistic and sustainable manner. Our interest was in coming up with a solution that would approach the restructuring initiative not only to respond to the client need but also create value for the key internal stakeholders—owners, management and employees (Drljača 2015) by bringing about optimisation in the system.

I take up the nuances of each of the above internal stakeholders in turn below in context of Potential Steels. I draw from the work of Drljača (2015) to appreciate the lifeworlds of each of these stakeholder cohorts.

- **Owners:** The MD of the company, who was also the principal sponsor for this project, was the majority shareholder of Potential Steels; by virtue of this, he was the “owner” of the company. He also hailed from the founder–promoter family of the company. The MD, with the promoter family, defined the vision for the company and its long-term sustainability by supervising and guiding the management.

- **Management:** The CEO, referred to earlier as part of the top management, was a professional incumbent who was closely aligned with the MD to set the direction of our project. The management was at the intersection of the owner and the employees, who was supposed to achieve optimal outcomes for both sides. The management was responsible for smooth operations of the business in adherence to the practices of good governance, ethical practices and regulatory compliance.
- **Employees:** In this case was the Sales and Marketing team, who was expected to work as per their employment contracts in alignment with the business objectives set by management with the owner's vision in mind. They had their targets and clearly articulated KRAs which were expected to be delivered with a degree of desired competence.

I will now turn to a discussion on the consulting project and lead the reader through the experiences of going through the initiatives. I will focus on how our approach and methodology changed the nature of the initial ask convincingly for the project sponsors and how we demonstrated flexibility and openness through the process to make this happen.

9.4 The Consulting Project

We started the project in March 2013, with a 3-month plan. Our team consisted of three consultants and we were based on-site for the duration of the project. The nature of intervention required us to be close to the client and build trust with the employees we were interfacing with.

We adopted a 360° view of the situation in order to arrive at a holistic solution for Potential Steels. To do this, it was necessary for us to consider the as-is situation and understand where we want to be in the context of the business value proposition and employee promise of the company. Our consulting framework is presented in Fig. 9.1.

The as-is appreciation was about delving deep into the state of affairs of the business, the value creation process, and the challenges and opportunity areas.

The aspirational to-be state had two main imperatives: First, the business value proposition, which was about the alignment of people, process and technology with the strategic vision of the company; and second, the employee promise of the company that would address both technical and behavioural competencies of employees.

The to-be recommendations centred on added value creation for the Sales and Marketing team in alignment with industry best practices, the business strategy and keeping in mind employee relationships.

Our framework allowed for action planning to conclude the project. This was planned to be a collaborative workshop bringing together the management of Potential Steels to deliberate on the findings of the study, decide on priorities, agree on timelines and allocate specific responsibilities.

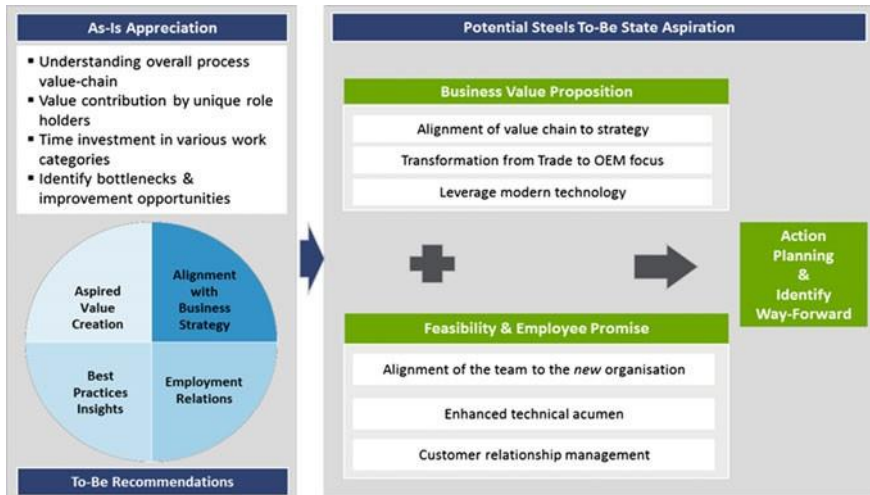


Fig. 9.1 Consulting framework for Potential Steels

Our consulting framework would touch the owners, management and employees at Potential Steels. We were also cognisant of the fact that we were not blinded by the top management brief on purely restructuring the department but approach this more holistically.

Working under the agreed framework, our project involved the following four phases:

- Project orientation and design,
- Data collection and validation,
- Analysis and gap Identification and
- Recommendations and reporting.

I will now discuss each of these phases below.

9.4.1 *Project Orientation and Design*

This phase was meant to set the tone for rest of the project. The first phase included understanding the as-is organisation structure from an overall perspective. The macro-level structure of the organisation is presented in Fig. 9.2. There were seven departments reporting to the CEO.

The Sales and Marketing department was entrusted to achieve budgeted sales keeping in mind profit margins and customer delight. Given that the focus of this intervention was specifically on this department, we started digging deeper into it. The Sales and Marketing department comprised of 78 people spread across 8 teams, represented in Fig. 9.3.

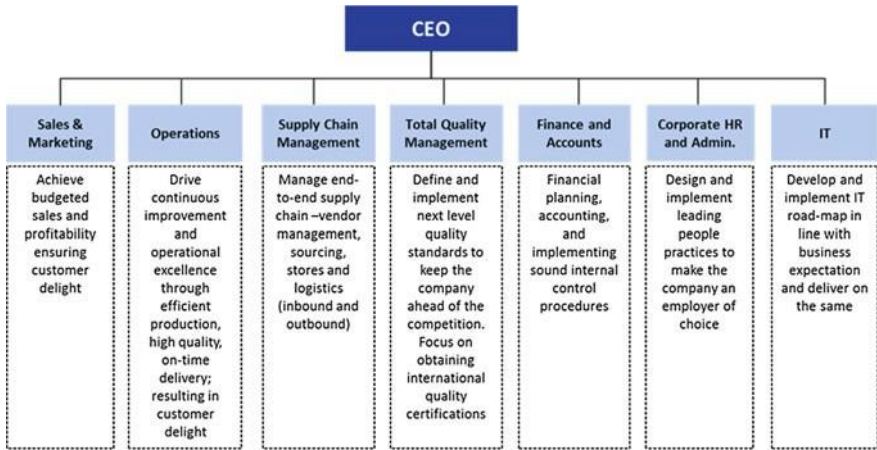


Fig. 9.2 Potential Steels organisation structure



Fig. 9.3 Sales and marketing department structure

As part of the data collection phase, we undertook leadership interviews with the CEO and the Head of the Sales and Marketing department to identify specific departmental objectives and agree on overall methodology that we had adopted. We also conducted a working session with Sales and Marketing team to understand the overall value chain of the key function of the department.

Figure 9.4 identifies the Sales and Marketing value chain at Potential Steels.



Fig. 9.4 Sales and marketing value chain at Potential Steels

9.4.1.1 Primary Stakeholder Listening

The above led us to identify four main stakeholder cohorts that had to be understood in greater detail in terms of their experiences of dealing with the team and their expectations. We held individual working sessions with these primary stakeholder cohorts. Insights from the working sessions helped us identify the key imperatives of change for the team. Some of the takeaways from these sessions are presented below.

Customers

The project sponsors had clearly articulated their interest in moving Potential Steels into a customer-focused company.

Customers spoke positively about the quality and range of products and highlighted the technical acumen of the team. They said that the company was open to challenges and had a solution orientation. Ownership and responsiveness were identified as displayed qualities of the team.

However, they also faced delays in delivery and faced challenges with non-adherence to time commitments, which they attributed to problems in internal coordination and logistics. They talked about the lack of effective MIS giving rise to internal confusions. Lack of support for the Sales and Marketing team from the plant was highlighted as a major problem. We inferred that customers perceived of Potential Steels to be working in silos separated by departments and not as an integrated team where the customer voice does not bind the processes and teams end-to-end.

When asked about the competencies they would like to see in the Sales and Marketing team, they spoke of responsiveness, regularity, consistency, approachability and transparency. Customers also highlighted the importance of the Sales and Marketing team to think laterally and not just in terms of product sales. They looked at the team interfacing from Potential Steels to offer them solutions and out-of-box thinking rather than just order booking.

Employees

Although employees enjoyed their freedom and autonomy at work and were driven by customer satisfaction, they also complained of valuable time being spent on MIS and data recording that could have otherwise been spent on customer interface. The need of more back office support was highlighted along with the need for more training on products, technology and market.

Employees talked of a lack of cooperation from the production team on timely delivery of orders, along with a lack of responsiveness from them. The plant was in the process of SAP implementation that was expected to resolve several such issues including making raw material readily available for production.

Team members highlighted specific competencies they would desire in themselves in order to deliver on their responsibilities effectively. These included responsiveness, persistence, consistency in communication, teamwork, patience and immediacy. The value-adding element was not overtly called out by the team. But it was clear from our interaction with the customers that they wanted the Sales and Marketing team to add value and think laterally rather than interfacing in solely tactical manner.

Production Planning and Inventory Control (PPIC)

The PPIC team was responsible to ensure timely production of orders as per targets ensuring optimum resource utilisation, quality management and cost savings.

The Sales and Marketing team had expressed dissatisfaction of dealings with the PPIC team, for which we had decided to interact with them to obtain their side of the story.

The PPIC team countered the complaints of the Sales and Marketing team saying that the latter needed to provide realistic delivery dates to the customers keeping in mind past orders and not bowing down to all demands from the customer. The PPIC team was of the opinion that due to pressures of achievement of sales targets, the Sales and Marketing team would agree to very short delivery timelines to the customer that would in turn put unnecessary pressure on the plant.

The PPIC team also highlighted their ongoing emphasis on On-Target-In-Full (OTIF) manufacturing and elimination of several production-related issues. They believed that the SAP implementation would further streamline the process. Streamlining for the PPIC team also meant awareness of and involvement of the whole team with the customer that included knowledge of even the first-line worker of the end product that is being produced for the end customer. They believed that poor verbal and written communication between and within the teams was a roadblock in making this happen.

The PPIC team expressed the importance of the Sales and Marketing team to have adequate technical information of the product coupled with behavioural and communication skills. They expressed the need for all teams to follow systems and processes to cut down non-value-adding activities and duplication of work.

SAP Implementation Team

Based on voices heard from various Sales and Marketing team members, an interaction was carried out with the internal SAP team to understand their perspectives and experience of working with the Sales and Marketing team. The SAP team quoted their project with Potential Steels as one of the fastest and most successful with the Sales Distribution module that had shaped up brilliantly with all processes in an embedded manner. This would contribute to creating a horizontal nature of the organisation from the erstwhile vertical nature. Minor glitches were uncovered and were regarded as usual in the process of large-scale technology implementation process.

Amongst challenges, the SAP team highlighted certain systemic issues including the absence of appropriate pricing schedules; Customer Account Managers (CAMs) needed to speak to their seniors, who in turn would have to speak to the segment head, who would eventually need to get an approval from the Head of Finance and Accounts after bouncing off the quotes from the Head of the Sales and Marketing department.

Additionally, the Sales and Marketing team was not actively involved during the SAP design phase leading to a lack of required inputs and reduced buy-in at the junior levels. The teams were stuck in existing mindset and comfort of working with old system that added to inefficiency. Change resistance was commonplace and the team expected to have reports in their own individual styles as it used to happen in the legacy system.

9.4.1.2 Setting the Tone for the Project

The leadership interviews and the working sessions with identified primary stakeholder cohorts helped us understand the qualitative shifts Potential Steels would need to make for it to be competitive in the long run. And this was just more than bringing about efficiency by rightsizing. Figure 9.5 represents these shifts as a move from transaction focus to value focus, from closed communication to transparency and openness, from task focus to people focus and finally from vertical thinking to horizontal thinking. At the core of these shifts, lied the creation of a symbiotic interrelationship between the production plant, logistics and marketing (represented by the Sales and Marketing department).

We shared our understanding as represented in Fig. 9.5 to the top management of Potential Steels to obtain a go-ahead for our project design. This engagement helped us to be aligned with the project sponsors who had initially called us in with a specific objective in mind.

Once we had the buy-in and go-ahead from the project sponsors, we developed a detailed research design for data collection.

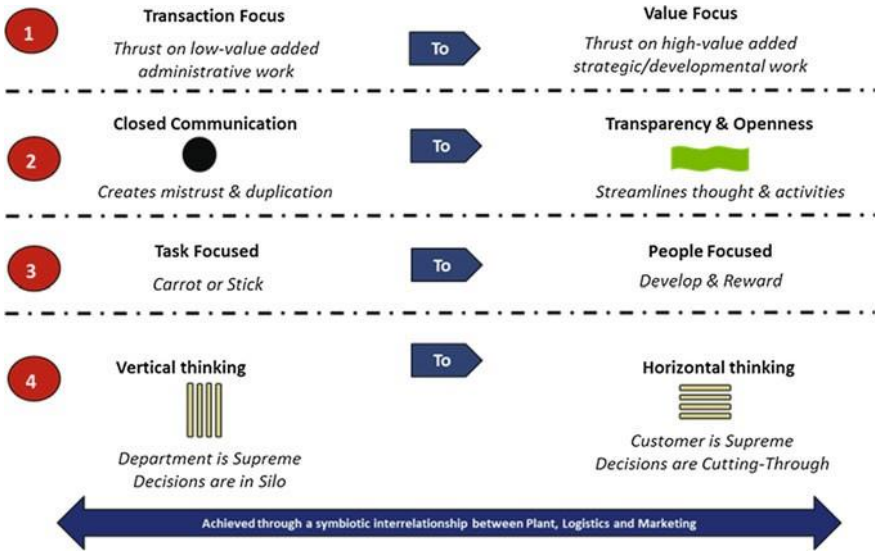


Fig. 9.5 Shift in focus required at Potential Steels

9.4.2 Data Collection and Validation

This was an intensive phase of the project that involved informed thinking and meticulous information gathering. Intuitive interactions were needed to question and deliberate on specific aspects and not to accept information that were simply presented to us. The time spent in the previous phase helped us to keep the organisational sensitivities in mind and also acclimatise ourselves to the business to carry out this phase. I will now discuss the main steps involved in this phase.

9.4.2.1 Identification of Unique Role Holders

Out of the 73 employees in the Sales and Marketing department, 24 unique roles were identified as a result of the value chain analysis and interview with the Head of the department. These were

- President and Head of the department;
- Head, Exports;
- Head, Arising;
- Head, Original Equipment Manufacturing (OEM);
- Head, Trade;
- Head, Marketing;
- Head, Branding;
- Segment Head, OEM;

- Associate, Exports Order Booking;
- Associate, MIS creation;
- Associate, Statistical Data Analysis;
- Team Member, Trade Auction Arising;
- Team Member, Customer Service;
- Team Member, Sales Accounts;
- Team Member, Trade Sales Accounts;
- Team Member, Recovery;
- Customer Accounts Manager (CAM), OEM and Trade;
- CAM, Trade;
- CAM, OEM;
- Branch Manager;
- CAM, Depot;
- Team Member, Back Office;
- Manager, Marketing Coordination; and
- Team Member, Marketing Coordination.

All 73 employees were mapped to the unique roles. We worked alongside the Head of the department to do the mapping to avoid any gaps in our organisational analysis.

9.4.2.2 Data Collection

Given that the focus of this initiative shifted from restructuring to optimising, our data collection approach was refined to move from just time-and-motion studies to aspects covering people, technology and process that would give us a holistic view of the as-is situation at Potential Steels.

Our research instruments were designed to capture the following information across the identified parameters as represented in Table 9.1.

We carried out series of individual interviews with unique role holders to understand their work across the parameters agreed. Where more than one incumbent

Table 9.1 Parameters for information capture at Potential Steels

People	Process	Technology
Number of employees	Clear documented processes	Prevalence of automation
Behavioural competencies	Alignment to business outcome	Effectiveness in design
Technical competencies	Defined Service-Level Agreements (SLAs)	Implementation efficiency
Alignment with strategic direction	Performance metrics	Integration with other platforms
Readiness for future direction	Effectiveness and efficiency	User engagement

existed for a unique role, at least two incumbents were individually met across different locations that included Mumbai, Pune, Delhi, Faridabad, Mumbai Port, Hyderabad and Bangalore. The research instrument captured data pertaining to daily time spent, process bottlenecks and improvement areas. The Levels Of Work (LOW) framework was applied to understand current capability of role holders as against desired capability levels (the LOW framework is discussed in detail in Chap. 8). In short, the LOW framework helps a consultant to evaluate value-contribution of unique roles in the context of work complexity and human capability with an endeavour to build a Requisite Organisation (Jaques and Clement 1991).

We had scheduled weekly review meetings with the CEO of Potential Steels to validate the information, collect feedback and carry out any course correction if required. In case of any difference or disagreement in the information collation, we would call for joint reviews with the CEO and the Head of the Sales and Marketing department. Several of such meetings were called for as the company was undergoing an SAP implementation during the tenure of this project and several processes were in the transition stage leading to a certain degree of confusion.

9.4.3 Analysis and Gap Identification

We undertook a detailed analysis of the data collected in line with the people, process and technology pillars. Specific nuances within each parameter were explored to let us have a holistic view of the as-is situation. These nuances were across the value chain of the department that we had already identified and presented in Fig. 9.6. To let us have an overview of the whole department, we created a heat map of where each pillar needed most focus across the value chain.

Figure 9.6 represents the value chain heat map across specific aspects of each pillar. Four colour codes were adopted to indicate four levels of maturity of the as-is parameters:

- Red for non-existent,
- Yellow for partly existent or evolving,
- Green for satisfactory or Mature

As represented in Fig. 9.6, technology enablement appeared to be the most problematic area. This was, however, being addressed with the SAP implementation that was being undertaken by the company to streamline effectiveness, efficiency and integration of technology. Process came as the second problem area, where we saw an absence of defined Service-Level Agreements (SLAs) leading to reduced efficiencies at work. Technology enablement was expected to significantly address this aspect as well as SAP would need clarity and predictability at every step anchored on defined SLAs. When it came to people, clearly the analysis showed a “green” in every aspect when it came to the number of employees staffed, but behavioural competencies were a challenge. A lack of adequate alignment with business strategy and a lack of readiness for the future was also observed in several cases.

A detailed workload analysis of the department across the three pillars of people, process and technology was also carried out in terms of three kinds of allocations:

- **Strategic:** Activities that were long-term; involved decisions that impacted the vision and business direction.
- **Operational:** Primary activities that furthered the execution of strategy; decisions that enabled business operations.
- **Transactional:** Activities that were immediate output oriented; tactical actions whose results could be directly observed.

In-depth workload analysis and validation revealed that amount of time spent in strategic work done by the senior team was far less than what was desirable. There was a wide prevalence of transactional work across levels. LOW analysis revealed that in several cases, value addition was significantly below than what was ideally expected at that level. Figure 9.7 represents the workload allocation for unique role holders.

We went on to further study the value contribution of the top team within the department in the LOW framework to understand leadership challenges. Leaders within teams play the most crucial role in defining the precedence for an organisation; hence, this level of deep dive was mandated. In the previous chapter, we discussed the seven levels of work in detail. The reader may refer to Chap. 8 if they wish to understand the levels and what they signify in an organisational context.

For the Sales and Marketing department, we mapped the three allocations of work to specific levels of work to understand value addition at every level. Figure 9.8 represents the accountabilities expected at every work level, mapped from level-1 to level-5 for the department.

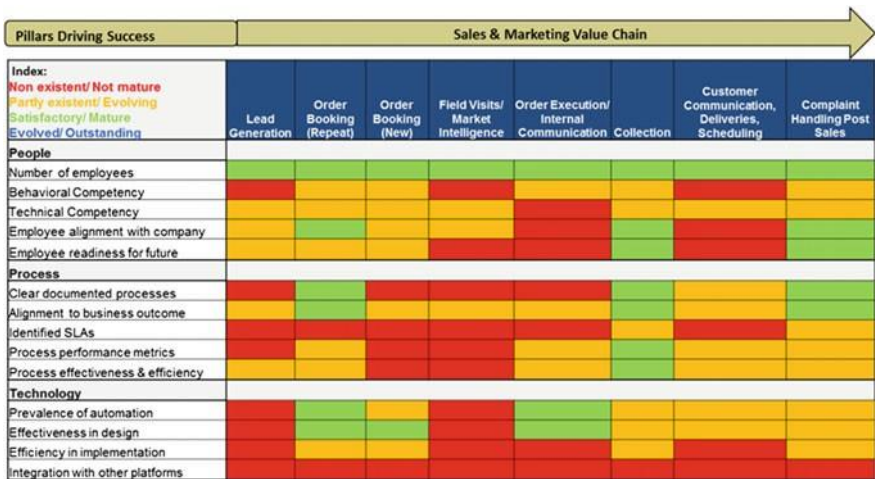


Fig. 9.6 Value-chain heat map

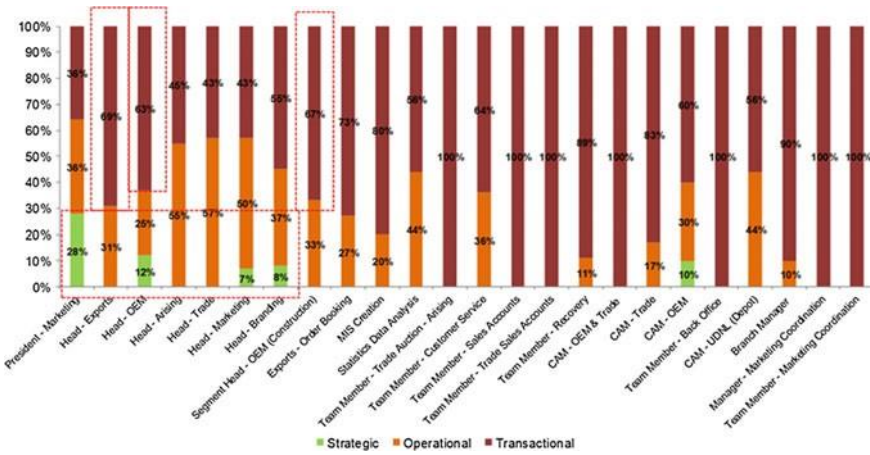


Fig. 9.7 As-is workload distribution of Sales and Marketing team

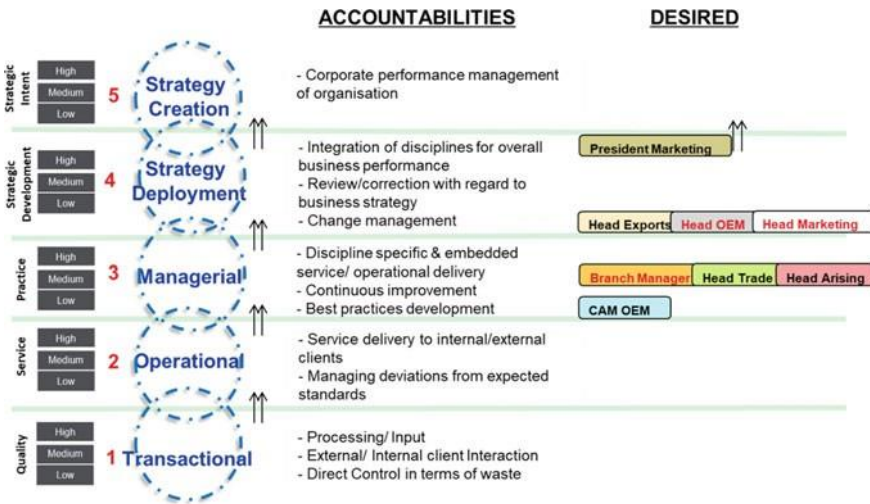


Fig. 9.8 Desired top team operating level

In Fig. 9.8, the desired level is indicated in the last column for the top team across the low–medium–high sublevels within every level. The upward arrows for the President role indicate that although the role exists in a high Strategic Development level, it should touch the low Strategic Intent level, due to the expectations of this role in context of the business direction Potential Steels was undergoing.

Mapping of the desired levels of value contribution across the top team was followed by mapping of current levels through the LOW framework. Figure 9.9 represents the comparison between the desired and current levels.

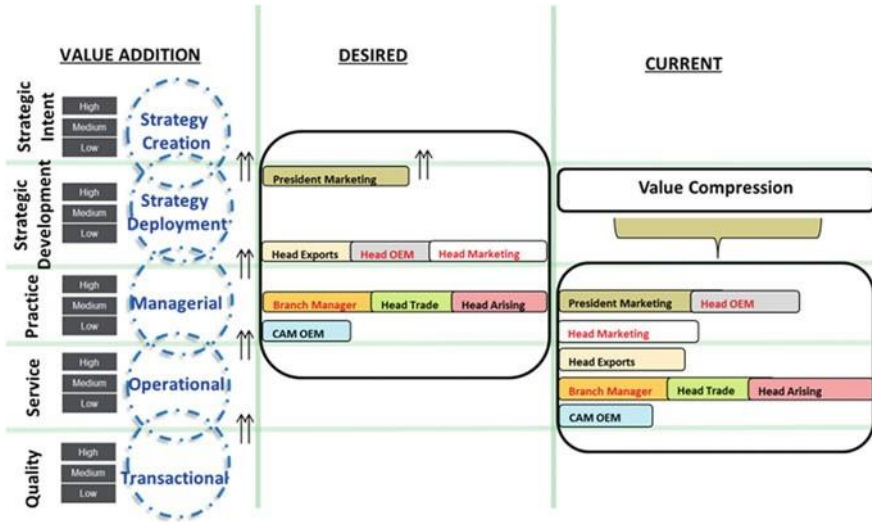


Fig. 9.9 Actual top team operating level

It is clear from Fig. 9.9 that the top team was operating one level below that was suboptimal. The most important President Sales and Marketing that was supposed to operate at a high Strategic Development level was operating at a high Practice level, which is more managerial than strategic. At a Strategic Development level, the role expectation involved aspects such as integration of disciplines for overall business performance, review/correction with regard to business strategy and change management. But at a Practice level, the role ended up delivering aspects such as departmental service and operational delivery, continuous improvement and best practices development. Similar was the case for all the top team in the department leading to a “compression” of levels.

Following are some of the areas where challenges surface due to level compression:

- **Alignment:** The team is not clearly able to understand the strategic drive and vision of the organisation. Discrepancy arises between individual goals and organisation goals leading to confusion around responsibilities and accountabilities. This also impacts the role incumbent as the individual’s potential does not get directed towards optimal value creation; salary structures lack parity and gets misaligned with the job worth.
- **Effectiveness:** Misalignment of role and level can lead to a lack of effectiveness in the nature of interface; for the Sales and Marketing team, this may mean a lack of customer focus and poor customer relationships. The misaligned organisation pyramid leads to senior people time being overspent on low value-adding work characterised by excessive follow-ups, meetings and reviews. There is also a lack of clarity on who has authority.

- **Efficiency:** Delays are observed regularly leading to a depleting sense of responsiveness and urgency. There are delays in response to opportunities, both internal and external. Overlapping work leads to lessening responsibilities. Delayed decisions lead to frustration in stakeholders that also emanates from redundancies and duplication at work. Such an environment is characterised by resource misutilisation in terms of time, financial and workforce resources.

In order to converge towards the project objectives, we began to focus on the dimensions of people, process and technology for our data analyses. We looked at each unique role and identified activities from a range of perspectives to consider how these could be streamlined to bring in more efficiency in the system and to enable desired value-added at specific levels. Some of these considerations included the following:

- Activities that could be delegated so that as employees moved up the levels of work, they could make the desired value contribution.
- Activities that could be outsourced so that non-core work did not take up much internal bandwidth.
- Activities that could be automated that could bring in speed and accuracy (lot of which was already taking place due to the SAP implementation).
- Activities that could be eliminated to reduce duplication and replication.
- Activities that could be better integrated so that customer focus was more streamlined.

The analyses were carried out at various levels from the three pillars identified across the value chain and across levels. Gaps were identified around the aspects of transaction focus, closed communication, task focus and vertical thinking. These were treated as opportunity areas to arrive at integrated recommendations for Potential Steels to move towards value focus, transparency and openness, people focus and horizontal thinking. I will discuss the salient features of these recommendations in the next section.

9.4.4 Recommendations and Reporting

The first aspect of our recommendations considered how employees could move into more value-adding roles to deliver at their desired levels. We analysed and reported on how every unique role could be enhanced in terms of people, process and technology so that the concerns surfaced from the primary stakeholders during the first phase of the project could be addressed. Detailed nuances of every aspect were explored to report on how strategic and operational time spent in the top team could be increased and how transactional time spent could be reduced. It is also to be noted that all roles did not need an increase in strategic time spent and were just fine with their as-is focus on operational and/or transactional time spent. Such roles were left as they were. In addition, we understood the shift in mindset and leadership qualities required for this to be enabled.

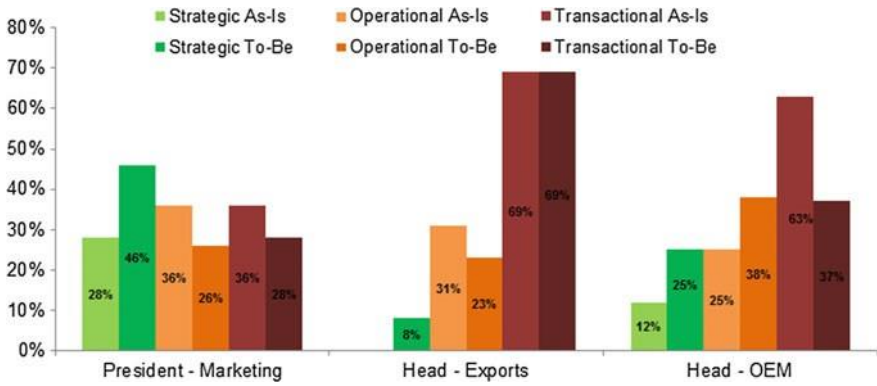


Fig. 9.10 Shift of roles for top team (I of II)

I will cite the eight top leadership roles here as examples.

Figure 9.10 represents how the as-is levels for three top leadership roles could be made more value adding to deliver at the required level. For the President Sales and Marketing, a strategic shift was required by changing the business mix and creating high-value relationships. For this, there needed to be a change in role expectations (shift away from daily transactional duties) and also corresponding upgrade on capabilities. For the Head Exports, an incorporation of a strategic focus on building the customer base was required. For this, there needed to be a reduction in some of the simpler operational aspects of order booking, such as sales order authorisations, which could be delegated as per a revised approval matrix. For Head OEM increase in strategic activities to build the OEM business, an increase in operational support to branches was required. This could be done through reduction in transactional activities such as troubleshooting and follow-up, and ensuring knowledge transfer to branches.

Figure 9.11 represents how the as-is levels for the remaining five top leadership roles could be made more value adding to deliver at the required level. The Head Arising required increased focus on operations and value adding for scrap, through less focus on physical follow-up and approvals. Head Trade required a role shift from transactional follow-up to valuable customer relationships through capability upgrade. Head Marketing required a change in role focus from transactional to a combination of strategic and operational through greater ownership of business planning and more reliance on market intelligence. Branch Manager required increasing strategic focus on customer management. Finally, CAM OEM required increasing focus on operational aspects of the job and reducing transactional activities.

Our recommendations also included aspects of process efficiency through elimination, delegation and automation that led us to understand how departmental bandwidth could be freed-up. We recommended higher value-adding activities in line with the business direction of the company to make each role more substantial. Unnecessary approvals and passage of files through different levels in the hierarchy were

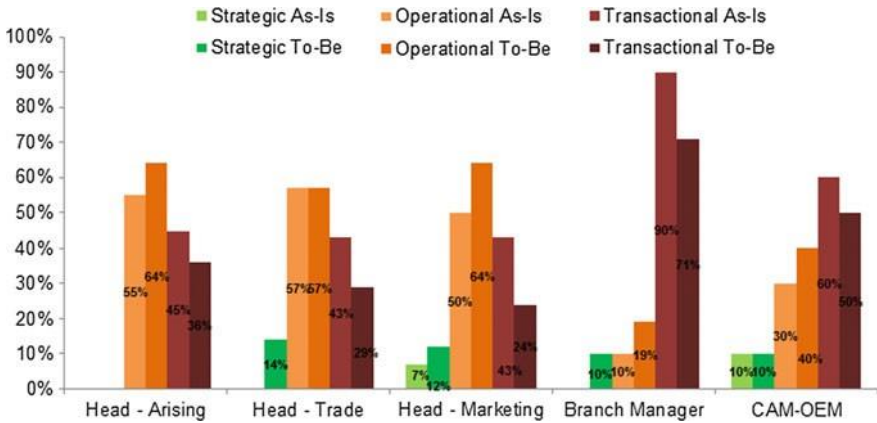


Fig. 9.11 Shift of roles for top team (II of II)

eliminated. A horizontal view of the department was focused on with the customer at the end of the tunnel, rather than the departmental hierarchy. Our recommendations also focused on specific qualitative inputs for the SAP team that would bring about greater integration between the Sales and Marketing department and PPIC with a shift from vertical linkages to horizontal linkage. We had to keep in mind that processes created also needed to address the concern that the customer saw in the Sales and Marketing department and Production as two separate entities with inadequate communication between them. For the customer, a “one face” of Potential Steels had to be created and our recommendations articulated nuances across all the three pillars of people, process and technology with the value chain in mind.

A snapshot of how shift in time allocation could be created as a result of the execution of our recommendations is presented in Fig. 9.12 for all unique roles.

As presented in Fig. 9.12, the yellow bars represent the as-is time spent by the current role holders across the strategic, operational and transactional allocations. The yellow bars represent the as-is time spent. The green bars represent the anticipated reduced time spent after streamlining of activities. The blue bars represent the recommended time spent after the addition of value-adding activities in accordance with the desired contribution at the respective levels. The suggested increase in the recommended time spent was mostly for activities such as customer management, market intelligence and order booking. Our forecasting calculations revealed that by streamlining the as-is operating environment, non-value-adding work equivalent to over 130 h per day could be reduced.

Our endeavour was to achieve a reduction of non-value-added activities like removing bottlenecks, eliminating redundancies, balancing out overlaps and streamlining workforce numbers. We focused on increasing activities that contributed towards greater value creation, capability building, aligning workforce to strategy, incorporation of best practices and competitiveness, and finally establishing an atmosphere of customer delight.

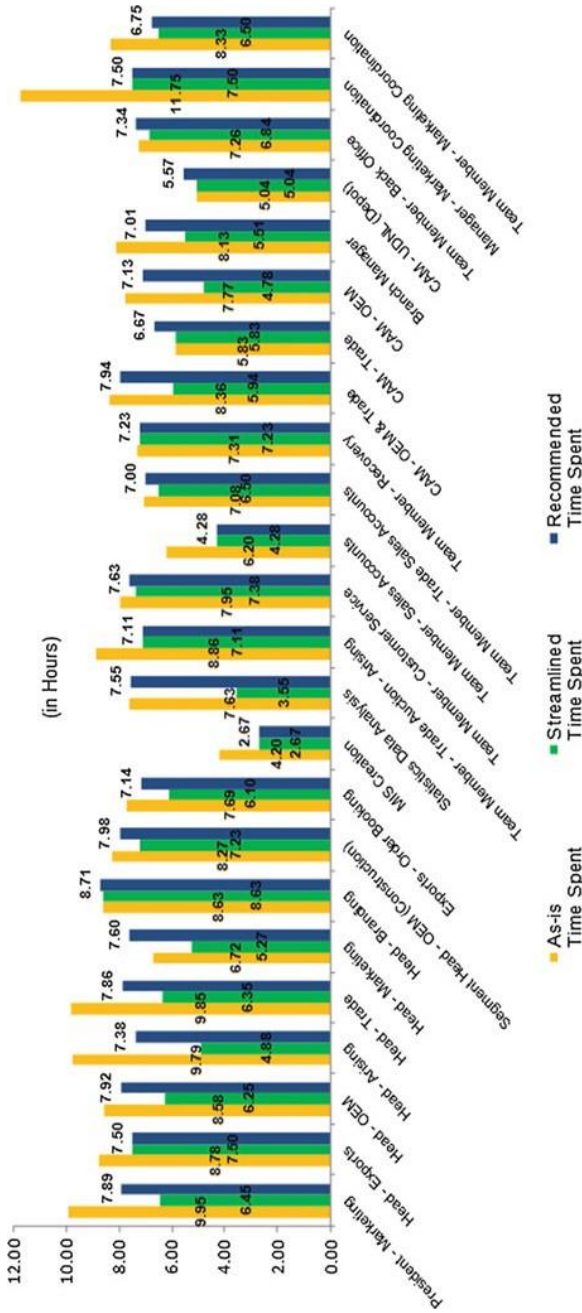


Fig. 9.12 As-is, streamlined and recommended time spent by unique roles

We realised the change in the balance could only be possible if adequate focus was diverted to capacity building of employees. The team had to think laterally, take stretch and look at innovation in every step to build a sustainable customer-focused organisation. With this in mind, we articulated behavioural competencies for the Sales and Marketing department that were informed by the leadership vision, extensive listening workshops carried out with the diverse stakeholder cohorts and industry benchmarks. Behavioural competencies are the knowledge, skills and attitudes that are required for professionals to deliver effectively on their job. The behavioural competencies were balanced under three clusters:

- **Thought:** representing cognitive abilities to think differently, and anticipate stated and unstated requirements.
- **Action:** representing ability to take charge of situation and act in order to make desired change happen.
- **Relation:** representing relationship and collaboration with internal and external stakeholders to create strong partnerships.

Select competencies tied back to address concerns that were surfaced during the first phase of this project. We heard concerns around product knowledge, communication efficiency and managing interdepartmental differences that were addressed through specific behaviours that were articulated to be required in the competency framework. Continual learning and capability development were treated as central elements for the team to be equipped with to catapult Potential Steels into its future direction; for this learnability was introduced.

Articulation of the competency framework shifted our focus from rightsizing to development. We recommended the framework as the reference point for developing capability of employees so that freed bandwidth could be leveraged for higher value-adding work. We looked at freed-up bandwidth not as an opportunity to downsize but a leverage for the organisational business alignment. We recommended employees to be taken through structured assessment and development programmes (Development Centres) to understand where their as-is competencies rested and where they would need to be for better business leverage.

To conclude the project, we made a top management presentation articulating the as-is state of affairs in the organisation along with our recommendations. Given the fast-paced growth and promise of the organisation and the role the Sales and Marketing department had to play in this path, our recommendations were centring on streamlining activities, incorporating best practices and capacity building, rather than a departmental overhaul in terms of structure and workforce numbers.

We followed this up with an action planning workshop with the Sales and Marketing team with the details of bottlenecks, streamlining recommendations and industry best practices for each unique role across the value chain. Our advisory saw a shift from change immediacy that was the tone of the client brief to that of a learning orientation that will place the organisation in good stand in the short- and medium-term.

9.5 Reflections

Here, I will deliberate on the salient features of this project and talk about my experience of working as part of the client engagement team.

I refer to Drljača's (2015) reference of two types of restructuring to locate our project from a business imperative point of view and I will then discuss how our approach navigated the complexities associated with the same. The first type of restructuring is defensive restructuring where the driver is financial calibration. This is done as a reactionary response to unfavourable business results. These are normally impromptu decisions to cut costs by employee downsizing. Impact is partial and short-term. The second type is strategic restructuring where the driver is future readiness. This is done with a long-term view of the business to recalibrate resources—human, capital, technology and infrastructure. Impact may take longer to be seen but is more sustainable and more positive.

It is interesting to note that Potential Steels initially reached out to us with an intent of strategic restructuring. The ask was to make the organisation future-ready with the business transition it was undergoing of moving from a product focus to customer focus and when it was at the cusp of rapid international growth. The top management realised the strategic importance of the Sales and Marketing department and therefore highlighted the need for capability development of the team. However, when the brief was given to us, the client focused on restructuring the function and emphasised on rightsizing of the team, which was more in terms of a defensive restructuring. As consultants, we did not accept the brief as it is, but took an immersive approach to hear the voices of important immediate stakeholders to understand what the real need was and where the actual challenges lied.

Our outreach to multiple stakeholders—leadership, employees, customers, PPIC and SAP team—stretched the boundaries of inclusion and exclusion of stakeholders in the approach without getting blinded to just the brief of the project sponsors. The symbiotic relationship of the Sales and Marketing team with the PPIC team and the SAP teams then work in the technology enablement and were surfaced during our stakeholder interactions that led us to include them in the design stage. This was our process of making stakeholder cohorts “sacred” as being directly involved in the envisioned change process (the systemic connotation of “sacred” and “profane” is discussed in Chap. 3).

Our ability to critique boundaries and sweep in multiple perspectives helped us articulate the vision for this intervention that was a transition from transaction focused to value focused, closed communication to transparency and openness, task focused to people focused, and vertical thinking to horizontal thinking. We came a long way from a restructuring project to an optimisation project.

Our work on addressing aspects like leadership capability across levels of work, streamlining of activities towards creating more efficiency, creating process alignments and developing people capability came as a result of flexibility of thinking in part of the consultants and also in part of the client. Our discussions with the project sponsors shifted to the tone of organisation optimisation. Khare (2006) describes

organisation optimisation at the intersection of utilisation, efficiency and effectiveness. Utilisation is the proportion of time deployed of workforce. Efficiency can be understood as parallel to productivity that is defined earlier in this chapter as the conversion of input resources to output results in economic terms. Effectiveness is the act of achieving something that was actually intended to achieve.

The recommendations we presented in this project addressed all the three aspects of utilisation, efficiency and effectiveness as interconnected aspects without treating them in isolation. Our approach from the perspective of increasing value-added activities and reducing non-value-added activities addressed both utilisation and efficiency. Utilisation because of elimination, reduction, delegation, outsourcing and automation of several activities that freed-up workforce time; efficiency, because the return on resources deployed was anticipated to be significantly higher. Alignment of processes and technology addressed the effectiveness aspect of the department. We looked at the departmental optimisation as catering to the business vision of the organisation. The organisational structure supports the business vision and systems and process enable the structure to function. Organisational processes cannot be treated in isolation from the structure and the same cannot be treated in isolation from the business vision. Our final recommendations mapped individual processes across the value chain and identified streamlining possibilities in light of how the processes interact with one another. This systems view enabled the team to understand process improvement, not just as individual corrections, but as systemic interventions. Miles et al. (1978) note that an organisation is a synthesis of its purpose and the mechanisms that exist to achieve the same. The three elements are interconnected and it is this holistic view that led us to approach the initial organisational restructuring brief not just from the standpoint of rightsizing, but from that of optimisation. Mutual connections and interactions gave rise to a new understanding of both the brief and the solution for Potential Steels that led us to make recommendations on a variety of factors beyond just workforce numbers.

Here, I draw reference from the work of Capra (1996) who talks of the relationship between structure and pattern, who says, “in the study of structure we measure and weigh things. Patterns, however, cannot be measured or weighed; they must be mapped. To understand a pattern we must map a configuration of relationships. In other words, structure involves quantities, while patterns involve qualities” (p. 81). In the case of Potential Steels, patterns were emergent out of the processes. It was the immersive interactions that gave us a glimpse of the patterns and the deep dive process mapping and value chain analysis let us understand what actually gave rise to those processes. When we spoke of organisation optimisation or the path to transform the department in alignment with the business vision, it was the patterns we had to change and the processes we had to intervene on, not so much the structure itself. Hence, our work also was heavily inclined to address patterns rather than restructuring per se, in its pure form.

Our work on developing a competency framework and recommending development centres for employees kept in mind long-term capability building of the team to take the organisation forward. Development centres were meant to be a continual process to be repeated from time to time to take stock of team capability and align the

most appropriate kinds of developmental interventions to sustain the growth journey of the individuals. This thinking aligned our work to that of a learning organisation where both the people and the organisation could adopt learning as a culture and not as an event.

Our approach was adaptive through the lifespan of the project and it catered to an optimisation mindset for the long haul towards building a Requisite Organisation. The project sponsors displayed flexibility in adapting to our approach. They were also open to the long-term adaptation we had recommended for the department creating a shift from immediate changes.

It was the conviction and grit of the leadership at Potential Steels that built their openness and confidence in our recommendations. Numerous interactions with the leaders and our ability to draw insights pertinent to the company helped them see the optimisation opportunity for the department. Flexibility of thought, risk-taking and belief in their team played a significant role in this process.

Finally, I will reflect on how this exercise corresponds to the type of structure as per the ideal types I introduced at the beginning of this chapter. The vision was certainly to align with a customer-centric structure that keeps customer value in mind and aligns all activities towards the same. But what we arrived at was a hybrid between a functional and a customer-centric structure. Being a legacy organisation and considering we did not want to create any “shock” in the system, we considered a smooth transition without creating personnel tension. Our approach to the value chain mapping and working backwards from the concern areas that emanated out of it was certainly an effort to cater towards a customer experience driven by innovation, value creation and quality with process streamlining and capacity building at the core of the intervention. However, at the larger organisational level, the typical functions were not interfered with and their umbrella existence continued within which the Sales and Marketing department was positioned.

9.6 Conclusion

This chapter shared my experience of undertaking an organisation optimisation exercise with the Sales and Marketing department in a manufacturing company in India. The discussion revolved on how being able to challenge boundaries and openness of thinking in part of the consultants, and flexibility and risk-taking attitude in part of the project sponsors shifted the project mindset from restructuring to optimising, from rightsizing to development, and from change immediacy to learning orientation.

I began by introducing the concept of restructuring. I went on to talk about the organisation in focus and the stated problem statement. I described the consultative and deliberative process that delved into the stated problems and how we articulated the inherent issues that gave rise to problems on the surface. I presented a step-by-step discussion on the main stages of the project—project orientation and design, data collection and validation, analysis and gap identification, and recommendations and reporting—based on a holistic framework that we had arrived at. I finally

presented some reflections on the project and highlighted how our outreach to multiple stakeholders—leadership, employees, customers, PPIC and SAP team—was a demonstration of how we stretched the boundaries of inclusion and exclusion of stakeholders in the approach without getting blinded to just the brief of the project sponsors.

This case study brought to the forefront key tenets of holistic thinking and flexibility that were woven through the entire project that helped it conclude with holistic recommendations and sustainable outcomes.

References

- Biloslavo R, Bagnoli C, Figelj RR (2012) Managing dualities for efficiency and effectiveness of organisations. *Ind Manag Data Syst* 113(3):423–442
- Boehm E (2012) Managers@Work: improving efficiency and effectiveness in an automotive R&D organisation: how a traditional R&D division reshaped itself into a high-performance organisation. *Res Technol Manag* 55(2):18–25
- Capra F (1996) *The web of life: a new scientific understanding of living systems*. Anchor Books, New York
- Drljača M (2015) Restructuring of the management system and the role of top management. In: *The first world quality forum, quality for future of the world*. International Academy for Quality, Budapest, Hungary. file:///C:/Users/PRactice/Downloads/817936.Restricturing_of_the_Management_System_and_The_Role_of_Top_Management.pdf. Accessed 13 July 2016
- Eby LT, Buch K (1998) The impact of adopting an ethical approach to employee dismissal during corporate restructuring. *J Bus Ethics* 17(12):1253–1264
- Gibbs KL (2007) *Accounting management and control*. John Murray, London
- Glisson CA, Martin PY (1980) Productivity and efficiency in human service organizations as related to structure, size, and age. *Acad Manag J* 23(1):21–37
- Hirsch P, De Soucey M (2007) The rhetoric of restructuring. *Kellogg Insight*. https://insight.kellogg.northwestern.edu/article/the_rhetoric_of_restructuring. Accessed 16 Feb 2010
- Jaques E, Clement S (1991). *Executive leadership: a practical guide to managing complexity*. Falls Church (VA), Cason Hall Publishers
- Khare S (2006) *Optimising the organisation: unleashing the potential of practices, processes and people*. TATA McGraw-Hill, Noida (India)
- Miles RE, Snow CC, Meyer AD, Coleman HJ Jr (1978) *Organizational strategy, structure, and process*. Stanford University Press, Stanford (CA)
- Ostroff C, Schmitt N (1993) Configurations of organizational effectiveness and efficiency. *Acad Manag* 36(6):1345–1361
- Senior B, Swailes S (2010) *Organisational Change*. Prentice Hall, Harlow
- Sheth J, Sisodia R (2002) Marketing productivity, issues and analysis. *J Bus Res* 55:349–362
- Solow R (1956) A contribution to the theory of economic growth. *Quart J Econ* 70:65–94

Chapter 10

A Holistic Approach to Employee Engagement



10.1 Introduction

Engaging with employees has always attracted a degree of mystery for corporations and management across the world. The nature of corporations and management styles has evolved over time with more sophisticated workplace understanding, technological developments, and new societal norms and trends. However, the need to touch people to keep them more engaged and eventually more productive has always surfaced newer challenges.

Not too long ago, a purely functional approach would have led management to consider employee satisfaction (rather than engagement) as a factor of monetary payouts. This later changed to the inclusion of fun and camaraderie at the workplace as contributing to creating a more satisfying and rewarding work experience. Organisations moved further on to give employees the opportunity to learn and develop as better professionals, partnering with them to give back to the society and even letting employees do what they would like to do where the organisation simply offers the most fertile soil for employees to flourish.

Despite a range of academic deliberations and management experimentations, employee engagement still remains a mystery for many.

This chapter presents the mainstream discussions and models on employee engagement. I will draw on my experience of working in talent consulting with various clients in different sectors and present a case study of an employee engagement project that I led. My arguments will focus on how we can have a more holistic approach to employee engagement considering the multitude of dimensions that are at play for an individual in an organisation. Challenges, opportunity areas and learning from real-life experience will be presented to bring home the fact that engagement is not a stand-alone concept, but is an integral element for the business.

10.2 What Is Employee Engagement

The understanding that people are an important aspect of managing a business has existed since the post-Taylor age in some form or the other. However, it was only in 1990 that employee engagement first appeared as a management concept, defined as "... the harnessing of organisation members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn 1990; p. 694). Kahn was the first to articulate a rounded approach to engagement when he said that an employee's beliefs about the organisation, alignment with values and association with leaders and work processes impact how he or she is able to perform and contribute to his or her role expectations. Strong references to emotive elements like values, leadership and culture elevated the concept of engagement from being just a state of physical involvement of an employee to that where one is emotionally involved and psychologically associated with the organisation. Meeting the right combination of physical, emotional and psychological needs of employees enables them to contribute positively to their organisations.

Catering to emotional needs of employees can create a better attitude in people and also helps them cope with any stress that is likely to appear at the workplace. Positive emotions let people think in a more open and flexible manner leading to greater creativity and energy. This can in turn lead to more efficiency and workplace productivity. In this context, Seijts and Crim (2006) talk about the importance of creating and implementing targeted plans in organisations that address behavioural change through physical and emotional interventions. Similarly, Robinson et al. (2004) talk of creation of an environment with employees at the centre, and where attributes like positive emotions and workplace pride are harboured. This, he opines, contributes to organisational performance and controls attrition.

To end this section, I would like to quote The Conference Board that defines employee engagement aptly as "a heightened emotional connection that an employee feels for his or her organisation, that influences him or her to exert greater discretionary effort to his or her work".

10.2.1 *Engagement Is Not Satisfaction*

It is common to observe the overlap in the usage of the terms engagement and satisfaction in everyday parlance. Often confusion is also observed in the literature to distinguish between the concepts. Yu (2013) studied select definitions of engagement and satisfaction, and found that "job satisfaction is more and more used as a measure of engagement" (p. 11). Yu (2013) goes on to quote that an extensive study conducted by Harter et al. (2002) where the concept of employee engagement had satisfaction measurement as its core.



Fig. 10.1 Herzberg's motivation-hygiene model

Engagement and satisfaction are closely linked but they are not the same. To explain the difference, I borrow Herzberg's (1964) Motivation-Hygiene Theory where he articulated the basic requirements in an organisation for one to carry out his or her job as against the higher order psychological and emotional factors that drive them to give their best to and be committed to their workplace. He calls the former hygiene factors and the latter motivation factors. Represented in Fig. 10.1, hygiene factors include aspects such as pay and benefits, work conditions, job security, designation, leaves and work hours amongst others, and motivation factors include aspects such as work challenge, recognition, responsibilities, growth prospects, learning opportunities and sense of achievement amongst others. Whereas hygiene factors are the minimum required for employees to be working in a stable and satisfying manner, motivation factors drive people to see meaning in their work, stretch themselves, give in the extra and feel a connect with their organisations; in other words, they contribute towards engagement.

Hygiene factors are essential for motivation factors to be realised. Therefore, employee satisfaction can be seen as a stepping stone to employee engagement. The ADP Institute (2012) articulates the difference between satisfaction and engagement with the following definitions:

Employee Satisfaction is a measurement of an employee's "happiness" with current job and conditions; it does not measure how much effort the employee is willing to expend.

Employee Engagement is a measurement of an employee's emotional commitment to an organisation; it takes into account the amount of discretionary effort an employee expends on behalf of the organisation.

As Newman et al. (2010) say, whereas satisfaction is about *satiation*, engagement is about *passion*.

The term engagement might not have been clearly distinguished from satisfaction as done clearly by the definition of Kahn (1990), but reminiscence of engagement was observed in past literature as well. Yu (2013) argues that some of the earlier researchers such as Cross (1973), Hackman and Oldham (1975), Khaleque and Rahman (1987), Scarpello and Campbell (1983), Smith et al. (1969) and Yuzuk (1961) had elements of engagement captured in their connotation of satisfaction.

Ken Oehler, global lead at Aon's Culture and Engagement practice, says:

The concept of employee engagement is often confused with satisfaction or happiness, but it's really about an employee's psychological investment in their organisation and motivation to produce extraordinary results. Companies with employees who are above average engagement levels will see better employee productivity, lower turnover rates and higher customer satisfaction scores - all factors that can significantly contribute to improved financial performance.

Research by Aon, the leading global talent-consulting firm, further finds that employee engagement levels have a direct correlation with the Total Shareholder Returns (TSR) of a company. Similarly, Maslach et al. (2001) suggested that engaged employees have vigour, dedication and absorption that directly contribute to productivity and performance. They define vigour as high levels of energy and an unwavering ability to stretch at work, dedication as a sense of deep involvement and pride and absorption as a pleasant immersion in one's own work.

Just as higher engagement leads to positive business results, lower engagement can have equally negative consequences. Kahn (1990) in his research found that disengaged employees were unable to perform to their full capacity and were simply mechanical at work without display of creativity, enthusiasm and energy. Aon's research indicates that just as organisations that have a high engagement score have a TSR of 20% above average, organisations with a low engagement score can have a TSR of 60% below average. The organisation is never able to leverage the potential of disengaged employees; they end up being a strain in resources. As found by Fleming et al. (2005), negative emotions emanating out of disengagement can cost companies upward of USD 300 Billion per year in lost productivity in the United States alone.

10.2.2 Benefits of an Engaged Workforce

An engaged workforce can bring in a range of benefits at various levels—individual, team, business and societal. I will elaborate them below.

10.2.2.1 Individual

Higher engagement has positive outcomes on the individual employee. An engaged employee displays the qualities of enthusiasm, passion and connection. Stress levels are better managed due to the emotional and psychological association of the

employee that leads to better health outcomes. Employees feel in better control of themselves and their work, and are motivated to contribute at their optimum levels.

10.2.2.2 Team

Positive individual spirits lift up team spirits. At a collective level, people are able to function healthy, perform better and create mutual value. According to Bindl and Parker (2011), engaged employees are better able to navigate change and are able to better deal with uncertainty. Engaged teams display higher maturity in uncertain situations. Knowledge sharing becomes more seamless and employees tend to grow by sharing rather than withholding information. Collaboration, and not competition, becomes more evident. This helps better tapping into tacit knowledge that rests with individuals and teams. Better team bonding helps in better alignment with organisational values and goals. This enhances team spirit and higher performance.

10.2.2.3 Business

Various studies have found that employee engagement levels have a direct correlation to business performance. The example from Aon on TSR is already shared above in this discussion. Aon further says that engaged employees are better brand advocates, stay longer and contribute more in their jobs. Gallup, another leading global engagement-consulting firm, found a strong linkage between engagement levels, and business growth and profitability (Gallup 2015).

Organisational alignment and understanding of the vision minimise the gap between people and the organisation. Higher engagement leads to greater stretch taking ability and creativity at the individual level. Team spirit is heightened, knowledge sharing is enhanced and employees are better able to navigate change. Put together, highly engaged employees are able to contribute exponentially better than the disengaged.

I quote Mehta et al. (2016) who cite a study by Towers Perrin that found the following (quoting Mehta et al. 2016; p. 7):

- 84% of the highly engaged employees are confident that they can contribute positively in improving their products and services, as compared to the 31% of the disengaged employees who lack it.
- 72% of the highly engaged employees can positively affect customer service versus 27% of the disengaged.
- 68% of highly engaged employees know that they can help in cost reduction in their job or unit compared with just 19% of the disengaged.

10.2.2.4 Societal

The long-term positive effects of an engaged workforce can also be seen in the wider societal context. An engaged workforce is likely to be less stressed at work that can create positive health outcomes for the individual. Better aligned people with the vision are able to work together as responsible teams to make the organisation work as a responsible social entity rather than just for its financial goals. Engaged employees tend to take a more proactive part in corporate social responsibility initiatives of companies and display ownership to connect with their communities better.

Needless to say that creating an engaged workplace itself is a strategic imperative for management with three drivers. The first is to create a strong employer brand that is able to attract, retain and reward the best talent. Second is to exist as a responsible social entity. Third is better financial outcome for the organisation.

10.2.3 A Stratified Approach to Employee Engagement

Employee engagement has a set of drivers and enablers that I will discuss later in detail. However, it is important to note that not the same “rules of engagement” are applicable to all kinds of employee cohorts. Different kinds of people in different professions are driven by different kinds of triggers and drivers. They have different thought processes, motivations and intellectual stimulators. They also have different worldviews that result in their motivation drivers. Here, I will discuss some overall engagement drivers specific to different employee cohorts. This is meant to be purely representative and not definitive.

10.2.3.1 Professional

I categorise professional as white-collar workers who are involved in managerial and administrative roles. These roles may spread across general management, human resources, sales and marketing, legal, consulting and so on. People in this cohort carry technical and functional qualifications and bring a specific skill to their roles. Employees in such setups are normally able to apply their skills across functions and industries.

The professional may be generally engaged by the quality of work and their ability to create value in the positions they occupy. They may prefer to work in a systematic environment that is predictable and streamlined. A push to excel and performance rewards are highly appreciated by them. They are able to stretch, given monetary rewards are commensurate to their work and contribution. They constantly look for opportunities to learn and grow and keep applying their skills at higher levels.

10.2.3.2 Service Oriented

They are people involved in highly systematic and predictable work delivery that is standardised and streamlined. Service-oriented people are typically associated with setups like outsourcing and shared services firms. Work processes are highly defined and employees are expected to work as per standard operating procedures. Deviations are not encouraged. Employees in such setups have transferable skills within the industry or across industries within their specific functions.

Employees in a service-oriented setup prefer fixed work hours and predictable deliverables. They prefer clarity in roles and expectations. Motivation comes from being able to deliver efficiently in short time spans. Quick reward and recognition systems keep morale high. Employee camaraderie is appreciated that comes along with get-togethers and entertainment.

10.2.3.3 Researchers

I refer to the scientific and academic community here that is involved in active research and knowledge creation. This community is highly qualified and individuals are experts in their own domains. They hold higher academic qualifications and often spend their lifetime on specialised areas of research and exploration.

Researchers are driven by the ability to work autonomously and flexibly. They believe in creative thinking and critical inquiry that do not do well with predictable processes. For them, contribution to knowledge is more engaging than monetary rewards. They exist within communities of practice within which there are significant knowledge sharing and value creation.

10.2.3.4 Specialists

Specialists are people such as doctors, lawyers and engineers who focus on highly specialised areas of work and have non-transferable skills and capabilities. They are highly qualified and experts in their own rights.

Specialists can be independent or affiliated to a certain organisation. In either case, they normally prefer to work in an independent setting without much interference. They normally command a monetary premium due to their specialist knowledge and skills. Specialists also prefer to work in their own terms and conditions due to the premium they command in the market scenario.

10.2.3.5 Operators

Referring to blue-collar workers in this context. Operators can be either skilled, semi-skilled or unskilled. The nature of work is repetitive, defined and predictable, and can be often menial.

Operators are driven by immediate gratification in terms of monetary returns and workplace benefits. They are normally guided by legal and regulatory frameworks that protect their rights and privileges. Community engagements form a large part of their engagement activities where families get an opportunity to mingle with one another.

Having presented the above employee types, it is important to realise that there is no universal approach to employee engagement. Different personas are driven by different needs and motivations. What is required is a stratified approach to employee engagement that will yield the most optimum outcome for the organisation.

10.3 Employee Engagement Frameworks and Approaches

Here I bring to the reader three of the most popular points of view on employee engagement from three leading consulting firms. Each of these firms bases their perspectives on decades of research and advisory with top employers internationally. Their work and partnerships have helped them build great workplaces and have furthered the field of human resources (HR).

I will begin by presenting the Gallup framework, followed by Great Places to Work and finally the Aon framework.

Each of these frameworks attempts to present a holistic approach to employee engagement touching a range of elements at the workplace. No particular framework is better than the other, but each of them brings in their own unique way of appreciating employee engagement.

10.3.1 Gallup

When it comes to employee engagement, Gallup is perhaps the most well-recognised brand. The company leverages data and analytics to offer expert advice on attitudes and behaviours of employees, customers, students and citizens for clients across the world.

Based on over three decades of research touching over 17 million employees, according to Gallup:

Engaged employees are involved in and enthusiastic about their work. They are 100% psychologically committed to their role. They are thrilled at the challenge of their work every day. They are in a role that uses their talents, they know the scope of their job, and they are more likely to look for new and different ways of achieving the outcomes of their role.

Gallup's approach on engagement study is based on 12 credible questions, Q12, that effectively measure the level of employee engagement in organisations and is able to establish a correlation with performance outcomes and business impact. Q12 was developed by researchers using data science to arrive at 12 items can measure

the strength of a workplace centering around the role of the manager. These 12 items are not exhaustive to capture all elements in a workplace, but they capture the core elements that indicate whether employees are getting their performance needs met. These elements indicate the requirements to attract, focus on and retain the most talented employees.

10.3.1.1 Gallup's Q12

The hallmark of Gallup's employee engagement study is the Q12. According to Gallup, the Q12 is based on the progression of human needs. I will discuss the 12 questions below under this progression.

Basic Needs:

1. Do I know what is expected of me at work?
This question explores if the employee has clarity over their role and expectations from the employer. If roles are not clearly defined, there is a tendency of deviation and optimal delivery. Performance metrics and success factors need to be clearly articulated so that the employee knows how he or she is being assessed as per set expectations. Role clarity brings in focus and directed energy.
2. Do I have the materials and equipments I need to do my work right?
In order to deliver on their role, employees need access to resources—knowledge, hardware, software, finances—from case to case. The organisation needs to make the right resources available to employees so that they are able to deliver on expectations. Managers need to have an oversight of requirements and address any gaps that may occur.

Management support:

3. At work, do I have the opportunity to do what I do best every day?
Addresses the issue of alignment between one's capability and the opportunity offered. The organisation needs to understand what the employee brings in terms of capability and competency, and what they would like to achieve in their career; accordingly bring to them the optimal job mix. Mutual discussion between the employee and the manager plays an important role in this aspect.
4. In the last 7 days, have I received recognition for doing good work?
Understands the culture of recognition for good work. There are both formal and informal means of recognition. Managers need to be responsible for frequent and instantaneous recognition and praise for good work of their team members. Good spirit is contagious and has the power to lift up team spirit and motivation.
5. Does my supervisor, or someone at work, seem to care about me as a person?
It is often said that people join companies and leave managers. Employees are human beings and not machines. Care, respect, support and sense of security go a long way in touching people and make them feel at home in an organisation. Managers need to play a proactive role in building relationships through a genuine

sense of responsibility towards their team members. Open communication and a trusting equation are hallmarks of this genuineness.

6. Is there someone at work who encourages my development?

The term “development” needs to be treated holistically and it does not mean a vertical movement up the corporate ladder. Development is about the overall leverage of the qualities that an individual brings to the organisation in terms of their capabilities, strengths and competencies, and the career aspirations they have set for themselves. Every employee is an individual and the organisation needs to provide the fertile platform for them to develop as people and as professionals.

Teamwork:

7. At work, do my opinions seem to count?

Participation in decision-making and organisational functioning is an important element that makes employees feel involved. This question explores if people feel they have been proactively encouraged to speak and are listened to. The feeling of being left out creates disharmony amongst employees that eventually leads to a drop in enthusiasm and interest for the organisation.

8. Does the mission/purpose of my company make me feel my job is important?

This question measures the alignment of values between the employee and the organisation. Communication plays an important role where management seeks to provide constant clarification about the purpose of the organisation—why it exists and what it stands for. Connections based on values alignment give rise to a sense of belongingness and commitment that lets employees exist as part of a wider system, rather than in isolation.

9. Are my co-workers committed to doing quality work?

This involves a common understanding of expectations from co-workers in alignment to the customer—both internal and external. Clarity in quality standards and their constant reinforcement is important so that difference in interpretation between co-workers decreases.

10. Do I have a best friend at work?

A “best friend” refers to someone with whom one shares the same values, trusts in sharing feelings and information, and there is mutual care and respect. Such a relationship at work builds confidence, courage and trust that in turn leads to enthusiasm, commitment and the ability to stretch.

Growth:

11. In the last 6 months, has someone at work talked to me about my progress?

Explores the existence of feedback and developmental interactions. Goals may be set and trust-based interactions may happen, but what people need is someone to mentor and take stock of where one has progressed against the goals articulated. Progress tracking and feedback need to be set in place as a formal mechanism.

12. This last year, have I had opportunities at work to learn and grow?

Engaging workplaces provide opportunities to their people to learn and grow, both personally and professionally. Formal training and educational platforms are put in place that constantly contribute towards building capacities. Capacity building may not just be limited to formal educational programmes, but can also extend to external events and conferences that give employees an exposure to best practices, benchmarks and market developments.

Using the Q12 analyses, Gallup performs ongoing research to establish correlations between engagement scores and business outcomes that include productivity, customer ratings, shrinkage/theft, turnover, absenteeism, safety and quality. I will discuss some of these perspectives in the next section.

10.3.1.2 Perspectives from Gallup

Extensive research and analytics carried out by Gallup throw up startling statistics about the state of employee engagement in corporations and its influences on business and societal outcomes. The findings of this research have been published by Gallup in a global report called “Where the Great Jobs lie” (Gallup 2015). From 2012 to 2015, Gallup aggregated exhaustive research data from its global surveys representing 158 countries. Responses were categorised as engaged, not engaged or actively disengaged. The analysis revealed:

People who are engaged at work are more involved in and enthusiastic about their work. They are loyal and productive. Those who are not engaged may be productive and satisfied with their workplace, but they are not intellectually and emotionally connected to it. Workers who are actively disengaged are physically present but intellectually and emotionally disconnected. They are unhappy with their work, share their unhappiness with their colleagues and are likely to jeopardise the performance of their team (Gallup 2015; p. 5).

In the same report, Gallup defines a good job as one that has at least 30-h per week of consistent work with a predictable pay. It was found that globally, only 12% of employees having a good job were also engaged. The report goes on to create a model based on the component of “good job” that nations would need to create positive outcomes for their businesses and society. It calls this model the “Gallup Macroeconomic Path” (Fig. 10.2).

Gallup uses this model to advise companies and governments to create healthy work environments. Starting with the basics of law and order, food and shelter, and social institutions, “good jobs” form a critical enabler in this path as it has the potential to address the social, emotional, psychological and financial needs of an individual that can create well-being, which at a larger level contributes to macroeconomic development for a nation.

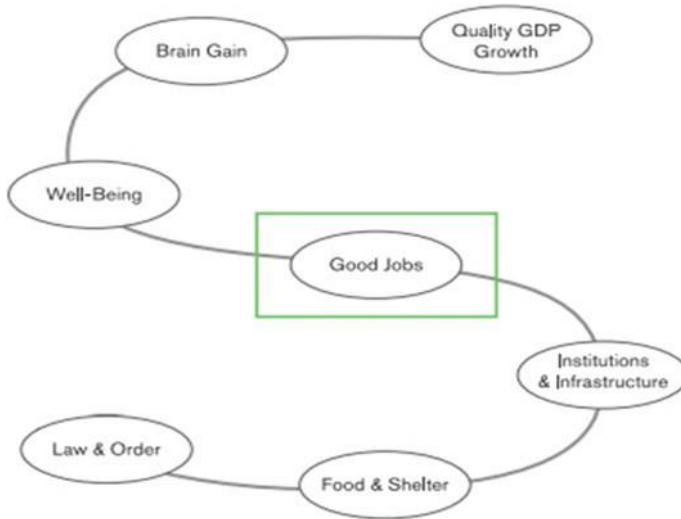


Fig. 10.2 Gallup macroeconomic path (Source Gallup 2015)

10.3.2 Great Places to Work Institute

Great Places to Work (GPTW) Institute is a leading global body that recognises outstanding workplaces through credible study, and provides consulting services and certification programmes. The GPTW model is based on research spanning internationally for nearly 30 years and is applicable to companies in all industries, non-profits, education and government organisations.

GPTW places employee experience and engagement at the core of building great workplaces. The GPTW perspective is that employees' experience is the best when they consistently:

- Trust the people they work for,
- Have pride in what they do and
- Enjoy the people they work with.

The above experiences are based on the concept of “trust” as the defining principle; this sets the culture of great workplaces. Trust is defined with the following five dimensions by GPTW:

- **Credibility:** The core of the culture of trust is the organisation being seen and experienced as believable and trustworthy. The three sub-dimensions are communication, competence and integrity. Clear and unambiguous communication creates transparency and removes any information gap. A competent management is able to create an optimal organisation by bringing about efficiency and effectiveness for judicious utilisation of resources. Integrity is established when there is consistency in words and action, and where promises are kept.

- **Respect:** This is mutual. It is not about greetings and protocols, but it is about support, collaboration and care expressed by management towards employees. Support is both about material and information resources made available to employees in order to deliver on expectations, and also about opportunities provided for skills enhancement and career development. Collaboration is enabled by an inclusive culture and participative decision-making. Caring is signified by the extension of a manager's relationship beyond being purely work related but through an extension to an interest in bringing about improvement to people's personal lives. Employees need to be seen as people and individuals, and not just as a resource.
- **Fairness:** A fair workplace is one that demonstrates equity, impartiality and justice. Employees need to be seen from a lens of equity (not necessary meaning seen as equals). This characteristic is brought to life by balanced treatment of people and equitable access to rewards and recognitions. Fair and impartial practices need to drive decision-making and any amount of favouritism is seen as unacceptable. This is extended to all practices including recruitments, promotions, career development, access to resources and opportunities, rewards and recognitions, task allocation and performance measurements. A fair work environment eliminates politicking, unproductive distractions and prejudice.
- **Pride:** The sense of pride boosts energy and enthusiasm levels that get reflected in great passion for the workplace and great work delivery. Pride emanates from the job, co-workers and the company itself. Pride in the job can be about one's own work, their own teams or the extended workgroup. One's own work is about the difference an employee makes to the company and/or to the company's customers by virtue of being at a position he or she is in. Pride in the company arises from its contribution to business, society and the environment. Recognition of good work and contribution by management can go a long way in instilling a sense of pride in employees. A sense of pride can make employees stay committed to longer times to their companies.
- **Camaraderie:** Measured by the feeling of intimacy, hospitality and community. This is where a workplace needs to be looked at beyond serving the purpose of a place that is meant for just work. When it is about human beings, it is about emotions and feelings. A workplace that is warm, friendly, non-intimidating, open and inclusive has the power to embrace people and makes them feel at home outside of home. A sense of community is where people find a common vision and align with a common purpose. A workplace needs to be hospitable where people can find support, cooperation, relationships and most importantly, enjoyment in everything they do.

GPTW's five dimensions of focus for a trust-based culture are further broken down into sub-dimensions that encompass the operational aspect of talent management.

GPTW has put in place a focused survey to understand employees' experiences with their organisations around the five dimensions and their corresponding sub-dimensions to arrive at a Trust Index. The GPTW model has a set of questions specific to each sub-dimension that measures the employee's association with the respective factor. Individual dimension-wise scores are obtained; an organisation-level

Trust Index is calculated as a consolidation of all dimension-wise scores. The Trust Index was created by Robert Levering and this was based on extensive study and analyses of employee surveys spanning over a decade with leading companies. The index provides a benchmark for organisations to identify strengths and opportunity areas, and work with concerted efforts to build great workplaces. GPTW (2017) has found that a trust-based culture to be a strong driver of successful business.

GPTW found that in 2017 employees who associated themselves with a great place to work demonstrated that they were 13 times more likely to stay with their employers for a long time and 20 times more likely to say that their workplaces exhibited innovative traits as compared to its peer companies (GPTW 2017).

10.3.3 Aon

Aon defines engagement as “the psychological and behavioural outcomes that lead to better employee performance.” Evolved over two decades of global research throughout Asia Pacific, Europe, Latin America and North America and supported by organisational psychology, the Aon model examines engagement at the level of the individual and team outcomes across a range of validated engagement drivers. The model talks about three attributes that demonstrate engagement:

- **Say:** Engaged employees carry a positive tone of voice about their organisation. They speak in a healthy manner about the organisation to co-workers, potential employees and customers.
- **Stay:** Engaged employees demonstrate an intense sense of belonging to their organisation. They desire a long-term association with their organisation with a sense of commitment and connection.
- **Strive:** Engaged employees always give their extra towards driving their roles and the organisation into higher degrees of success. They are motivated to do more and contribute beyond their contractual arrangement with their organisation.

Engaged employees demonstrate all the three behaviours simultaneously. Any missing behaviour does not sum up to the overall characteristic of an engaged employee. For example, an employee may speak positively about their organisation and may be staying long, but may not strive at work; this leads to the under-optimisation of one’s potential. Consider another case—an employee may be staying long and striving hard, but constantly speaking negatively about their organisation; this creates negative energies internally and externally, and eventually may impact the brand. Also, an employee may be a brand advocate and work very hard, but stays in the organisation for a very short duration; the organisation will be unable to leverage on the strengths of the employee.

Aon research showcases several business outcomes of an engaged workplace (Aon 2018). These include the following:

- **Talent:** Higher engagement increases employee retention and reduces absenteeism. Contributes to overall health and wellness of individuals and the team.

- **Operational:** Increase in employee productivity is seen. Employees feel safe and secure at the workplace.
- **Customer:** Higher efficiency leads to more higher customer satisfaction. This results in customers staying longer with and a higher Net Promoter Score (NPS).
- **Financial:** The above results in increased sales and higher revenues for an organisation. Operational income is enhanced, margins bettered and an eventual increase in total shareholder return.

The crux of Aon’s engagement model is six “Engagement Drivers” that define the work experience. These drivers are as follows:

- **Quality of Life:** People work to eventually have a good quality of life, which is ensured by a secure job, safe environment, less stress and a good work–life balance. Personal time is valued and one is able to develop into a rounded individual when there is good quality of life. A rounded individual is possible when one does not have to constantly worry for the basic conditions in life that the job is able to provide.
- **Work:** Work is beyond job, whereas a job equals a contractual employment, work equals a qualitative sense of being able to do what one enjoys and what makes a positive contribution to oneself, the organisation and even the society. People enjoy work that gives them autonomy and independence and allows them to apply themselves in areas where their skills and strengths lie.
- **People:** Organisations are about people. Leadership plays an important role in creating a conducive environment for employees to work with and learn from. Co-workers and team members liven up spirits and can make a contractual employment association substantial and meaningful.
- **Opportunities:** Everyone wants to learn, develop and progress in their careers. A future state creates motivation and drive that create a pull factor for people to strive. Organisations can go a long way by providing the right kind of opportunities to the right kind of individuals that benefit both the organisation and the individual.
- **Total Rewards:** Total reward is beyond the pay check. This is the overall reward that an individual accrues as a result of their association with an organisation—both tangible and intangible. This encompasses the pay, benefits, the experience, brand mileage, development and the quality of life that the organisation offers to its people.
- **Company Practices:** This defines the organisation and is an amalgamation of the systems and processes, practices, infrastructure and communication that form the lifeblood to make an organisation what it is. It is the company practices that make an organisation “real”.

Figure 10.3 presents the Aon engagement drivers and their constituents.

Having introduced, three leading employee engagement frameworks, I will now present a case study of my experience of leading an engagement study and crafting its consequent recommendations.

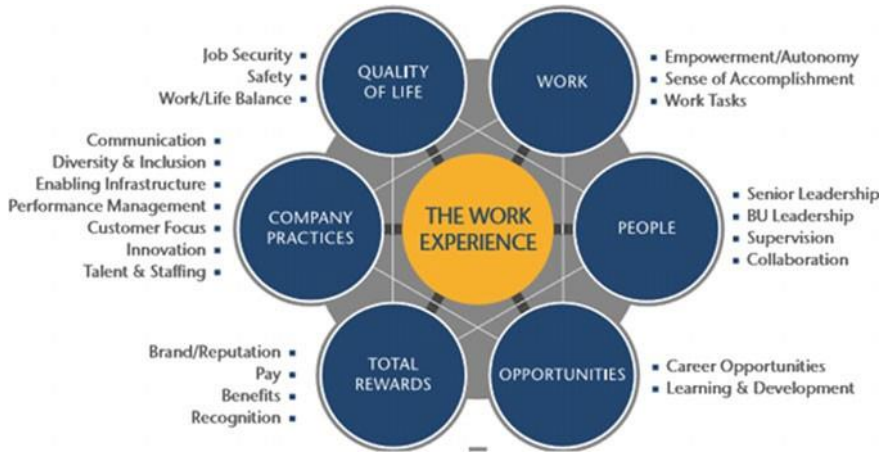


Fig. 10.3 Aon engagement drivers (Source Aon)

10.4 Employee Engagement Case Study

Here I will share my experience of leading an employee engagement study. I was the project lead of a four-member team (including myself); two members were client facing (including myself) and the other two were office-based data analysts.

10.4.1 About the Company

For the sake of anonymity, I will call the company Potential Earthmovers. The company was a leading manufacturer of earthmoving and construction equipment. Its Indian headquarters were in Delhi National Capital Region (NCR). With a large global legacy, the company manufactured world-class equipments in three state-of-the-art factories in India (this expanded to five factories at the time when this chapter was written). The plants also operated as the global manufacturing hub, with products from these plants being exported to over 50 countries in the world. The company had the repute of introducing innovative products to the market. Its premium pricing did not deter it from holding a majority market share of 75% in India due to the quality of its products and brand reputation it enjoyed. Potential was a pioneer in terms of product quality and their sales model and was the first amongst players in the construction sector to sell products through dealerships in India. The company did not have a cookie-cutter approach and customised its products and offerings to the Indian market and the Indian terrain.

Customers enjoyed exemplary service and excellent product quality. In the previous 6–7 years, potential had enjoyed a Compounded Annual Growth Rate (CAGR) of 45%.

The company employed around 3500 people at the time of this study and had a network of over 50 dealers and 500 outlets across India.

Potential Earthmovers had a vision of continuing to provide unparalleled shareholder value. To this end, it realised it had to stay competitive to respond to changing market requirements and higher customer expectations. They were under pressure to constantly innovate and explore newer markets, especially rural. They were focusing on building new products and had built a parallel organisation for new lines of businesses.

As the organisation was building up preparing from transformative growth, the management realised that people were its key asset and that the HR interface was crucial in navigating the same. A mindset of passion and energy, and team synergy were identified as the key focus areas for Potential Earthmovers to stay competitive. Despite being the market leader, the management wanted to continually learn and evolve without letting complacency set in the organisation. The top management wanted to create a workplace that constantly challenges its people, sets evolving benchmarks and also reward high performers. They wanted a team with enthusiasm and pride that would be difficult to replicate. The management in the organisation realised that employee engagement lied at the core of everything it wanted to do.

10.4.2 The Consulting Mandate

The case is set in the year 2011. The HR Director of Potential Earthmovers reached out to us (the consultants) with a proactive mandate to carry out an engagement study for the organisation. The organisation was going through a major expansion in its facilities to cater to its growing market share in India and increasing focus to make Potential's position stronger as the global sourcing hub. The HR team realised that to cater to the ambitious business plans of the company, their approach to employee engagement had to become more focused and nuanced. Hence, the need for a professional engagement study was surfaced.

The objectives of the study were as follows:

- Assess employees' attitudes and beliefs about their work activities, opportunities, quality of work life, company procedures and policies, rewards and people in the organisation.
- Assess employee understanding and support of the business goals and strategies of Potential and identify key drivers of employee engagement.
- Identify the extent to which employees were observing and managers were supporting the desired behaviours throughout the organisation.
- Reinforce the idea of shared responsibility for improving business results.
- Learn whether different groups of employees had different needs or issues.

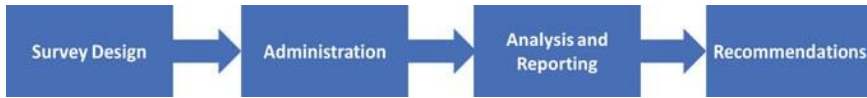


Fig. 10.4 Engagement study process at potential earthmovers

- Seek support in a focused action planning workshop to agree on a way forward for the HR function in line with business requirements.

Our study process went through four steps as presented in Fig. 10.4.

The entire study was mandated to complete within 3 months.

I will now discuss each step in detail drawing from my experience from the ground.

10.4.2.1 Survey Design

This is the first step that was meant to set the tone for the study. We never treated an engagement study in isolation with the business vision. We started by an expectation setting workshop with the HR team where we identified the triggers for the study. The following aspects were discussed during this workshop:

- Key Result Areas (KRAs) of the HR team. This helped us understand why HR would like to understand the pulse of the organisation and how we could support the team to be successful by drawing out desired insights from the study.
- Future direction of the Potential Earthmovers and how HR would drive this path together with the top management.
- Challenges that the team faced both at strategic and operational levels. We were interested to find out how the study could understand such challenges as opportunity areas for HR to address.
- Understanding of the complete organisation structure including location-wise setup, levels, staffing, reporting and team dynamics.
- Any sensitive matters that we had to be cognisant of as we were about to deep dive into the organisation.

The HR team workshop was followed by three individual leadership interactions that included the Managing Director (MD), Head of Sales and Marketing, and Head of Manufacturing, who were all based out of the headquarters in Delhi NCR. These interactions were meant for us to understand the strategic direction of the organisation, how they see their business evolving over the following 3–5 years, and understand their expectations on the organisation as an employer brand. We also understood the aspects about the company they were most proud about and the aspects they wanted to change immediately.

From the HR team workshop and leadership interactions, we understood that the management sensed complacency in the team, which was not a healthy trait as it could eventually lead to depletion of challenge, energy and passion. Potential Earthmovers was the leading name in all categories it operated in and commanded an incomparable

brand mileage at that time, when new international brands were still trying to make their mark in the India market. Its brand reputation meant that customers who wanted a value proposition would go to Potential in any case. This was great from the business standpoint, but interestingly this was also leading employees to take business “for granted”. Business was as usual, and stretch and new thinking were being observed only in specific pockets. For majority of the team, there was a “chalta hai” attitude (in India, the “chalta hai” term refers to the attitude of complacency and overlooking and let the situation be as it is). Yet the management realised that with the vision it has for Potential in India to make it the leading global manufacturing hub, this attitude had to change. They were also aware that employees cherished the brand mileage and that there was an overall healthy labour relations atmosphere in the company.

As important outcomes of this workshop, we agreed on the locations to be covered and total number and profile of the respondents to be covered in the study. The locations selected were Delhi NCR and Pune. Delhi NCR was selected as this was where the company was headquartered and its complex also housed their major plant. Pune was selected as this was a large manufacturing site for the company. We were informed that both the locations had their own cultures. In addition to the main plant locations, we also included employees on the field, who were mainly from the Sales and Marketing function. The field staff was constantly on travel for meetings with deals across India and connecting with customers who use the machines. They did not have regular touchpoints with the main organisation in general.

We agreed at inviting 40% employees as respondent numbers that covered a total 1420 employees (14 employees left the organisation when the study commenced). The respondents covered both the cohorts of both white- and blue-collar workers.

For the white-collar workers, we agreed to conduct an online survey in English. For the blue-collar workers, a pen-and-paper survey was agreed on with the questions translated to Hindi, which was the preferred language for both the plans in Delhi NCR and Pune.

We reached an agreement on the questions to be covered under the survey. The consulting firm I was associated with had an engagement study platform and a question bank out of which we could select specific questions aligned to what was relevant for the management expectation. Questions were also customised to measure specific nuances, given the focus on the organisation on this aspect at that point of time.

The design phase took us the first month to complete.

10.4.2.2 Administration

The survey administration was planned with the following success factors in mind:

- **Clear Communication on the Objectives and Importance:** We wanted employees to take this survey seriously and not just filling up answers because they were asked to do so by their management. With this in mind, all communication was drafted including emails, posters and screen pop ups with messages of why employee responses were important for management to make changes in the

organisation that would benefit all. All communication was created to encourage employees to express themselves without any barriers. It is only by expressing oneself that true emotions and perspectives would be surfaced that could help building a better organisation and a better workplace for all. We supported Potential to create focussed messaging and designs that were used in all employee communication.

A calendar was drawn out to chart out how and when different levels of communication would flow out right from the MD to the reporting managers.

- **Maximising Response Rate:** It was important for us to have maximum response rate so that a good representative landscape for the organisation could be captured. Clear communication was the key behind this. Managers were oriented by the department heads to encourage their teams to respond to the survey. The online survey was left open for 3 weeks with an extension of a further 1 week; hence, in total the survey was open for 4 weeks. Reminder emails were scheduled from time to time through the time span.
- **Ensuring Respondent Confidentiality:** Employees were sharing highly confidential views about their organisation both as means of ratings per very specific questions and in the open-ended question. Complete confidentiality was ensured to all respondents. It was assured that any insights and perspectives will be used and shared in a generalised manner that was unidentifiable to the source.
- **Ensuring Reliability and Validity:** Our question bank itself was highly reliable due to the extensive research that led to the design of the questions. Higher response rate was again a measure to ensure reliability of the study for which dedicated initiatives were being undertaken.

Validity came from the simplicity of crafting the questions. In addition, a dedicated support line was open to all respondents if they wanted to clarify any question or had any question. For blue-collar workers, we facilitated workshops as part of the data-collection process to clarify every question and how they had to respond (more in the next point).

- **Ensuring Blue-Collar Employees' Data Capture:** It was not very common for us to carry out pen-and-paper studies due to the complexities involved. Apart from translations, every response had to carry a unique code so that they could be analysed as per the desired data cuts. When it involves large-scale studies, chances of errors are high and meticulous planning need to be carried out to avoid such errors. Once responses were received, we also had to manually feed in the data into the online system as the overall analyses were carried out by the software system. Errors needed to be avoided even at this stage whilst sieving through hundreds of response sheets. The respondents also had to be sensitised about what the data collection was about and how they were supposed to fill in the responses. We planned a series of workshops across the two locations to carry out the study to optimise time and reduce variations in understanding the questions. Two such workshops each were carried out in both the locations.

We created several respondent cuts to slice and dice the data so that in-depth understanding about the organisation could be arrived at. Some of these cuts included gender, performance level, function, grade, education qualification, age, tenure, location and online versus pen and paper.

The study was carried out as per schedule. However, there were certain challenges mainly in soliciting adequate responses. In case of the online survey, this was overcome by calling for a meeting with all reporting managers along with the Department Heads to reiterate the importance of having responses. Managers went back to their respective teams to reinforce the messages and encourage them to cooperate with speedy responses. In case of the pen-and-paper response, the challenge was getting the respondents together. As this was a manual intervention, the workforce had to be available at one time together for the briefings and data collection. Taking workforce out of their work during an operational plant meant affecting productivity. Hence, there were several cancellations and reschedules before we made the sessions actually take place.

Once data collection was done and the overall results were available with us, we conducted a series of Focus Group Discussions (FGDs) with selected employee cohorts to further understand the traits and obtain more in-depth insights. Eight such FGDs were facilitated—two each for white-collar and blue-collar employees across both the locations. Each FGD lasted for around 2 hours where we went with an outline of pointers to probe. But the discussions were meant to be free flowing.

The survey administration phase ended by the second month.

10.4.2.3 Analysis and Reporting

This stage flowed through the whole of the third month when we deep dived to make sense of the data collected and cull insights. Our analysts used sophisticated in-house platforms to churn out the reports. We understood and interpreted all outcomes in light of the context aided by the range of interactions, workshops and immersive sessions with employees. Here I will discuss the high-level outcomes and emphasise specifically on the aspects that demonstrated our systems mindset in connecting disparate attributes in the organisation.

The overall engagement score for Potential Earthmovers was 69%. Our research indicated that organisations with engagement scores above 65% consistently deliver better business results. The engagement score for Potential placed the organisation in the “high performance” range.

We identified the distribution of engagement, or the “extent” to which employees were engaged in the organisation. Understanding how close to or how far away people are from being engaged helped identify how large the task was of engaging more people, i.e. the more people that were “nearly engaged”, the easier and quicker it would be to convert these people to “engaged” by focusing on the key drivers for the organisation. Conversely, the more people that were “disengaged”, the more difficult and slower it would be to convert these people to “engaged”. At Potential Earthmovers, there was a significant opportunity to increase engagement

because 21% of people were “nearly engaged”. 2% of employees were “completely disengaged”. This group of employees could be acting against the organisation and negatively impacting the engagement of their colleagues.

Further, our analyses showed that at Potential Earthmovers, employees were strong brand advocates of the organisation. More than 75% of employees would proactively recommend the organisation as an employer and would tell great things about the organisation as a workplace. The organisation was doing better than comparator benchmarks; however, there were still grounds to cover compared with the “best employers” in the country. The maximum gap observed was with the element of inspiration that the organisation provided everyday to employees to do their best. Detailed analysis was carried out across various parameters in the organisations to obtain an “X-ray” of the organisation from an employee engagement perspective.

I will now discuss some of the overall highlights across select key drivers that were culled out from the open-ended section and employee focus group discussions.

- **Recognition:** Potential regularly celebrated achievements and employees were recognised and rewarded for their efforts and for achievement of results. However, the need to have recognition and appreciation as part of the processes was stressed on. Employees sought better clarity in their roles and responsibilities through proper Key Result Area (KRA) setting in the beginning of the year. Concern was expressed with the lack of transparency during appraisal time on what goals were assessed against achievements. Employees felt that the sense of urgency was sometimes misleading for certain orders to meet “urgent” deliverables there led to significant lapse of processes and quality. The feedback system was expressed as relatively biased and needed more comprehensive inputs from different quarters. There was a feeling that the above challenges could be effectively addressed by an able leadership team that would be able to instil a culture of objectivity and ensure that “sense of urgency” was also methodical rather than being ad hoc at times of execution.
- **Brand Alignment:** Employees derived pride of being associated with the most reputed brand in the market. They felt recognised and respected by outsiders for being part of Potential and how the company was contributing towards India’s growth story. However, some also felt that the sense of pride was often observed to translate into a sense of arrogance and that needed to be changed. Employees desired to see a stronger connect between the outstanding external brand to an internal brand through a strong employer value proposition.
- **Innovation:** The organisation offered employees the liberty to excel on innovations. Kaizen initiatives enabled an environment of innovation where operations and support functions could work together. The sense of urgency drove employees to innovation and performing better without resorting to any “shortcut”. Employees expressed that the spirit of innovation should link to recognition and individual KRAs to promote a culture of innovation.
- **Career Opportunities:** Employees thought that the organisation was a good place to enhance and develop managerial skills. The organisation provided opportunities

to employees to attend development centres to enhance their professional skills. Employees received opportunities to explore and work on their self-development. It was observed that employees who had spent between 10 and 15 years were most engaged with the organisation and quoted the autonomy and freedom they experienced that allowed them to strive and grow.

However, it was also expressed that there should be stronger role fitment for an individual's skills for better performance. They also wanted a more transparent career progression process. The need to have multiple career paths was expressed. Employees who were in the age bracket of 18–25 years particularly quoted a lack of exposure to different departments that they believed hampered their growth and career opportunities.

- **Departmental Leadership:** Senior management was easily approachable and empathetic towards employees. Senior management always recognised individual efforts put into achieving targets. Employees felt that the organisation had high-calibre leaders who were positive and could be trusted; they gave clear guidance and presented an inspiring roadmap for future strategies. However, employees also felt that identification and nurturing of leadership skills amongst current employees is a gap area, and more needed to be done to effectively strike a balance between functional and people management skills.
- **Co-workers:** A strong sense of community was observed amongst employees with a sense of belonging and respect. People came together at the time of crises and joined hands to overcome them together. Mutual support and encouragement were seen within and amongst team members. Interestingly, employees working in the field were found to have the highest level of engagement, despite being far from the main business hubs. They quoted the sense of belonging and departmental connections as primary reasons for their feeling of attachment and strong association with the organisation.

Blue-collar employees expressed immense appreciation for their union leadership and co-workers. They further elaborated on the culture of transparency and teamwork. They also stated that the facilities and benefits provided to them such as transportation, medical assistance, family activities, etc. kept them engaged. Several employees also spoke affirmatively about their salaries in terms of the quantum and discipline in timely payment. Some employees mentioned that the fact that their fathers/relatives had also had long stints with Potential excited them the most and created a sense of belongingness.

However, there were pockets where concerning voices were surfaced. These were particularly on unwanted language used on the shop floor and a tendency of people to work in isolation between departments. In addition, the engagement levels at the Pune plant were found to be the lowest. Employees at Pune stated that there lacked cohesiveness between different departments and locations. Several employees also stated that there was a lack of alignment with the Potential culture. Employees in Pune also expressed some sort of distance in the way they were treated by the headquarters at Delhi NCR; there seemed to be a sense of “us” and “them”.

Our analytics enabled us to create an engagement linkage model based on studying how the drivers of engagement impacted each other by their mutual interconnected interactions. This analysis displays the interrelationships (statistical modelling) between the drivers of engagement to help identify where the primary sources of engagement existed. The statistical linkage display suggested that the strongest roadmap to enhance the overall engagement at Potential Earthmovers lied in considering Recognition, Brand Alignment and Senior Leadership as focus. The organisation needed to work on creating a robust recognition programme as a priority, supported by objective role clarity, goal setting and performance management system. This could enable the strong external brand to be translated into an employee-friendly internal brand for its people. This needed to be driven at the highest level by the Senior Leadership at Potential.

Detailed cuts were presented to the HR team that went into various data cuts to understand the organisation from various dimensions. These provided important cues for the management to take corrective measures at very specific levels to bring about a positive difference at Potential Earthmovers.

10.4.2.4 Recommendations

This was the final step of the project at the end of the third month where we brought the management together to agree on next steps in line with the learnings from the engagement study. This was designed to be a half-day workshop where we reiterated the key highlights, followed by sharing some best practices from the industry.

We followed this by making specific recommendations across the identified drivers within two corresponding parameters—Framework and Design Elements and Implementation and Communication—the former dealing with the actual changes and interventions that need to be designed and implemented, and the latter dealing with the enabling factors. I will share some perspectives from our recommendations in the following discussion.

Recognition

Recommendations around framework and design elements sought to establish greater clarity and transparency in the system by clear articulation of a policy on employee recognition. This would consider how individual and team achievements contributing to any process, function or the organisation could be recognised. Celebration of success was recommended to be a way of life and not ad hoc. Different categories of recognition programmes were recommended for curating; these included spot recognition, peer-to-peer programmes, redemption programmes, company-level annual awards and other high-visibility non-monetary recognition in both short- and long-term schemes.

Implementation and communication of the recommendations could be enabled by

- Defining of Key Performance Indicators (KPI) for execution of the recognition programmes that could be tracked and monitored by a senior committee appointed.
- Creating a process to solicit nominations from managers and employees on a regular basis as per policy guideline and KPIs.
- Weaving in the culture of recognition into the induction programme for new joiners so that they were in sync with the value of professional contribution that the company fostered.
- Highlighting notable contributions from individuals and teams and talking about the same in various internal forums that would instil a sense of achievement associated with the contribution.
- Mentoring of line managers was highlighted to be an important element in the process.

Brand Alignment

Framework and design elements sought to revisit Potential Earthmover's Employer Brand to ensure that it was consistent and aligned with the organisation's strategic objectives and customer brand globally. It was meant to incorporate the attributes that would attract, engage and retain talent in line with the external value proposition. It had to be compelling and differentiating to stakeholders (including current and prospective employees), apart from driving engagement and helping focus on the intended organisational objectives. It was recommended that HR worked on an alignment of people programmes and practices in line with the employer brand.

Implementation and communication of the recommendations could be enabled by

- Developing a strong communication strategy to socialise the employer brand both internally and externally.
- Creating brand awareness through identified employer brand champions.
- Developing collaterals to reinforce the brand through handbooks, posters, videos, etc.
- Creating robust Standard Operating Procedures (SOP) to live the brand essence in various HR systems and practices.
- Appointing a Cross-Functional Custodian Team that would track implementation of the employer brand deliverables on a regular basis.
- Charting out a roadmap with the external communications team to socialise the employer brand externally in public discussion forums or customer collaterals.

Innovation

Implementation and design elements sought to establish organisational leadership to reinforce the importance of innovation in order to create a direct business impact and achieve its strategic objectives. These would propagate a culture that fosters and encourages innovation by creating an ongoing systematic process. In order to ensure that the culture of innovation is sustainable, it had to be provided with a conducive atmosphere so that new ideas could create measurable business impact. Hence, it was recommended that adequate budgets were allocated for such initiatives, success criteria and measurable success indicators were defined, and that initiatives were organisation-wide and not specific to individual departments or levels.

Implementation and communication of the recommendations could be enabled by

- Creating a process to
 - Solicit innovative ideas from employees.
 - Review ideas and suggestions in accordance with organisation priorities and expected success/value creation.
 - Link rewards for ideas generated and implemented.
- Introducing innovation as a measure of performance in the employees' scorecards, wherever applicable.
- Setting up an innovation task force to support employees and integrate the initiative throughout the organisation.
- Providing employees with a flexible work environment to involve themselves in special projects within and beyond their job requirements.
- Creating an online collaboration portal to deliberate on new ideas and have feedback on practicality of the same.

Career Opportunities

Framework and design elements sought to ensure that there was a well-defined career development framework and processes in place that clearly articulated possible career paths and multiple options available to move up the specialist or generalist route. Organisational criteria to be articulated to objectively lay out career movement requirements and ensure that employees were given the opportunities to undertake cross-function and geographic assignments. It was recommended that the recruitment process should be strengthened by introducing internal job postings.

Implementation and communication of the recommendations could be enabled by

- Creating an employee communication handbook as a career and future reference point that would include the following:
 - A matrix to categorise different levels of employees.
 - Map the above with employee performance and potential.
 - Formulate a Key Performance Indicator (KPI) matrix for target filling of vacancies through internal job postings.
- Circulating a training calendar to all employees periodically and solicit nominations from employees/managers for participation in the same to enhance their skill sets for career movements.

Leadership

Framework and design elements sought to ensure that middle management vision was aligned to senior leadership vision by cascading leadership performance score-cards appropriately across levels. It was recommended that senior leaders fostered a spirit of teamwork and collaboration by regular interaction with employees through town halls, informal sessions and personal connects through well-defined platforms. Specific customised leadership development initiatives were to be adopted based on individual psychometric profiling, comprehensive stakeholder feedback and alignment of individual aspirations to the organisational vision. Business-critical projects were recommended to be led by the leadership team with a target team engagement score to be a KPI for senior- and middle-level leaders.

Implementation and communication of the recommendations could be enabled by

- Objective goal cascade system from organisation strategy to leaders and individual managers within a comprehensive framework.
- Revisiting relevance of the existing leadership assessment methods and tools in line with organisation and people requirements.
- Critically looking into the current behavioural competency framework with specific focus on elements on drive, accountability and cascading leadership, so that the overall vision could be trickled down the organisation.
- Designing action-learning projects centred around competencies relating to leading people and accountability.

Co-workers

Framework and design elements sought to put in place rotational assignments and opportunities for employees to work in multidisciplinary teams. More interactions were encouraged between employees at different locations cross-functional training

programmes. It was recommended that occasions were created for all employees to interact with one another, communicate, exchange ideas and create a sense of community among employees. Emphasis was laid on building social networks by moving employees across functions, businesses and countries as part of their career development. HR to sponsor group events and activities such as sports coaching, CSR and other organisation-wide initiatives where employees could meet their peers in more often in non-work settings.

Implementation and communication of the recommendations could be enabled by

- Creating a cross-functional team that would spearhead these initiatives across the organisation.
- Clear communication amongst all employees regarding social activities to solicit greater participation.

Performance Management

Framework and design elements sought to create a transparent performance management system that would be consistent across all business units and departments, and aligns employee goals with the organisation's goals. The system would involve the process of an organisation scorecard prepared by the leadership team with inputs from relevant stakeholders that would be cascaded to the business units. The business units' leadership would cascade the same down their teams, allocate clear metrics and targets for measurement. Ongoing mentoring based on a continuous performance focused dialogue between managers and employees was recommended. Performance review to be institutionalised in periodic intervals complemented by an effective mechanism to solicit feedback from relevant stakeholders.

Implementation and communication of the recommendations would be enabled by

- Identifying process champions who would spearhead the performance management process with the HR department.
- Making line managers accountable for closing performance scorecards and targets in specified time period.
- Charting out a calendar at the beginning of the performance cycle that would clearly indicate milestones for execution of individual targets and clear communication to remove any ambiguity in the process.
- Investing more in equipping managers to provide direction to employees' careers by training them on conducting career conversations and by providing clear career planning discussion guidelines.

Managers came up as a critical link in driving employee engagement. Managers are the lifeblood between the organisational vision and employees. Our analyses surfaced a direct bearing on how managers can drive the recommendations made. With this in context, we offered to create Manager Scorecards for identified roles

at Potential Earthmovers. Manager Scorecards brought focus and accountability to make things happen as per implementation of action plans and imbibing of the recommendations in its ethos. Management and HR can only put in place frameworks and make resources available. But it is the manager who is the enabler of engagement. It is often said that each line manager is also an HR manager. Introduction of Manager Scorecards meant that managers would be tracked by the management on progress made on their scores and how they have contributed to the overall culture of the organisation.

We formed HR workgroups in the organisation who would be responsible to implement the recommendations that were made. The workgroups included representation from senior managers and teams across departments and locations. Clear timelines and metrics were agreed for the HR team to track progress.

10.4.3 Reflections

This case study brings to the forefront several aspects of an employee engagement project that may be valuable for business. I reflect on some of these aspects below:

- **Defining Engagement:** The approach looked at multiple angles to define engagement. The different drivers of engagement considered are aspects that touch the fundamentals of an organisation management. The sub-drivers helped open up the minds to consider the direct impact that people, processes and technology can create in employee engagement. Our intervention sought to touch the psychological and behavioural outcomes for people, and the model our work was pinned on was holistic and immersive.

Employee engagement is meant to be a multidisciplinary field and needs understanding from fields such as psychology, sociology and group theory (Kahn 1990). Further, organisational life is emotionally charged and psychologically complex (Kahn 1990). A discipline like employee engagement that is an amalgamation of commitment, loyalty, productivity and ownership (Wellins and Concelman 2005) cannot be dealt with by addressing specific areas in isolation, but needs integration of thought, action and resources. The approach that was applied at Potential Earthmovers was defined by this very understanding.

- **The Approach:** We adopted an immersive approach that connected our model with the client. As consultants, we had a standard credible question set, but we invested in understanding the organisation through HR workshops and leadership interactions. This helped us customise and contextualise the questions so that responses were relevant to the organisation. Being a manufacturing-led business, we realised the importance of including the blue-collar workforce in our study. For this, we further contextualised our questions and worked closely with plant-level line managers to reach out to respondents. Our task did not just stop with rolling out the survey, but we worked to increase response rate and adopted different strategies for both the white-collar and blue-collar employee cohorts for the same.

Our approach was guided by holistic thinking and flexibility alike; both went hand in hand. Holistic thinking was at the core of our framework that brought together its drivers and understanding at the level of systemicity (discussed in the next point), flexibility-enabled contextualisation at every step and address the requirements and unique nuances of data collection at the level of blue-collar workers.

- **Systemicity:** I refer to the term systemicity to refer to complex dynamic behaviours displayed as a result of the interaction within a complex system itself or within subsystems (Checkland 1999). The notion of interconnectedness is universal; understanding interconnectedness between subsystems is the only way to understand emergent characteristics of the larger system. Our engagement linkage model helped us explore the select improvement and sustenance drivers in the organisation not in isolation but how they interacted with one another to impact the overall engagement. Saks (2006) talks about absorption while discussing employee engagement. Absorption is an intensely psychological and emotional association that is not reliant on one specific aspect but rests on systemicity due to the complexity of interacting variables involved. Similarly, Xanthopoulou et al. (2009) quote a range of interconnections between job resources, autonomy, social support, mentoring, performance feedback and career opportunities as over time impacting employee engagement. Intervening in employee engagement is about understanding complex interrelationships in a formal social setting called the organisation. Our linkage analysis suggested the strongest roadmap to enhance the overall engagement as Recognition, Brand Alignment and Senior Leadership. This understanding informed our recommendations across the drivers in terms of both framework and implementation. We advised the organisation to consider these recommendations holistically so that the desired overall impact could be realised. Approaching them in isolation could only touch limited change at the surface level. Each driver was a subsystem of influence and the linkage analysis was the realisation of the concept of systemicity.
- **Inclusive Flexibility:** Our approach considered sweeping in the perspectives of blue-collar workers into the fold as a crucial aspect of overall employee engagement. Our approach was flexible to adopt the requirements needed to capture their perspectives. We translated the questionnaire to Hindi, a preferred language for workers at both the plant locations. In order to accommodate for a lack of technology familiarity, we moved from an online survey to pen-and-paper data collection. To increase response rate, we adopted a workshop mode of data collection. These sessions were also used to sensitise respondents about the study, familiarise them of the drivers and make them comfortable with the process. The flexibility in our approach made our model inclusive and participative. Working specifically in the manufacturing setup where workforce involvement and productivity is a crucial determinant of success, we had no choice but to bring in the perspective of the blue-collar workers. Mehta et al. (2016) say that involving employees enables management in overcoming the challenges collaboratively as it instils a sense of ownership and stronger bond with the organisation; this in turn results in an “upward spiralling cycle of superior results”. Blue-collar workers are the backbone of the Indian manufacturing industry. Malladi and Bhatt (2018)

quote: “Although 90% of India’s labour force continues to be in the unorganised sector, the productivity of the organised sector with 10% of the total labour force is around 900% more than the unorganised sector, and contributes to almost half of the Indian National Domestic Product (NDP)”. Bringing this cohort into a strong consideration set can serve a long way to contribute towards their engagement beyond what is guaranteed to them by prevailing labour laws and long-term settlements between employee groups and employers. Labour laws in India already specify quality of working conditions, method and quantum of wage payments, working hours, provisions for statutory savings and methods to resolve disputes along with necessary rights to workmen (Malladi and Bhatt 2018). Our approach helped us to look beyond the guaranteed and understand aspects touching emotions rather than legal guarantees.

- **Action Orientation:** Our focus was not just the assessment of employee engagement but a sincere interest to bring about real change in the system. We introduced employee FGDs across locations and respondent types to delve deep below the surface of engagement scores to interpret why the scores were as they were and what certain open-ended comments could be better contextualised. We followed this up with a workshop to identify priorities and draw out an implementation roadmap in light of the industry benchmarks and recommendations. With the realisation that managers are the biggest link between the organisation management and people, we created manager scorecards that served to drive accountability on them to bring the change we wanted to see. The scorecards were almost meant to serve as “report-cards” for managers on their work to create a conducive workplace. The HR workgroups were created to ensure execution of recommendations within agreed timelines. This brought in greater rigour and sincerity to the entire initiative.

Given the considerations of our definition, approach, understanding of systemicity and operating under the mindset of inclusive flexibility, our action steps and way forward recommendations were meant to be contextually relevant and sustainable for Potential Earthmovers.

For the organisation itself, Potential Earthmovers displayed self-criticality and learnability by its proactive initiation of the engagement study. Despite being the market leader, the management wanted to continually learn and evolve, without complacency set into the system. This requires flexibility, openness and long-term horizon in part of the top management.

10.5 A Holistic Approach to Employee Engagement

A holistic approach to employee engagement takes a 360° view of how an employee relates to his or her organisation, how they get involved in delivering on their role, and the physical and psychological connection they build with the organisation. Given the multiplicity of elements involved in achieving this and the complexity in the elements

themselves, there cannot be any singular approach for employee engagement. In common parlance, when speaking about employee engagement, there is a tendency to refer to fun and entertainment at the workplace, but this is an extremely narrow view. Employee engagement requires an evolved perspective where one has to look at the various dimensions that exist in principle and in practice at the workplace as we have seen in the various models explored in this chapter.

The role of the manager has been highlighted in several instances as the link between the management and employees. The role of the manager is not just to allocate tasks and monitor progress, but to coach, mentor and enable the success of their team. Regular on-the-job coaching can have a direct positive effect on an employee's performance and that can eventually lead to positive financial results (Xanthopoulou 2009). The manager is also responsible for providing the conducive resources and enablers for employees to deliver on expectations, and this can lead to enhancing the overall engagement levels (Mauno et al. 2006).

The Gallup model is pinned on the Q12 that is centred around the manager's oversight on an employee's progression from basic needs to management support to teamwork to growth. At Bharti Airtel, India's largest telecommunications company, focus on associate engagement is part of all manager KRAs. Managers are trained through off-the-shelf programmes to connect and coach their teams and in HR processes such as recruitment and performance management system to ensure consistency.

Great Places To Work (GPTW) and Aon charts out a list of dimensions and drivers that are near exhaustive of key aspects—physical, emotional and psychological—that come to play when working on creating an engaging workplace. GPTW also articulates the importance of giving back to the community with employee involvement in CSR as creating an important sense of responsibility and commitment to their roles as part of an organisation. More and more, people desire to be associated with organisations that are ethical and responsible and not just focused on revenue generation. Millennials are driven by an atmosphere that allows them to follow their passion, create value for themselves, give back to the society and do what they would like to do beyond their job. Different initiatives have been undertaken by various organisations to intervene into the drivers of engagement and touch their people.

The way reward and recognition programmes are institutionalised have been relooked into by leading organisations that include initiatives such as spot recognition by managers, redemption points programmes, organisation-level annual awards and high-visibility non-monetary recognition.

In various organisations, definition of career movement has been broadened more effectively in the employees' mind to include not just upwards progression and lateral movement, but also growth within the existing role, growth within the function and growth outside the function. Focus on internal development has been heightened and formally defined career path and succession plans to enable the same are put in place. This has been complemented by role changes in periodic intervals keeping in mind

an individual's career aspirations and organisation needs. The Aditya Birla Group, India's leading global conglomerate, has a coherent HR strategy to connect its vast employee base of 40 nationalities. The CEO personally monitors top 100 leaders in the group. Focus on employees' careers is offered by providing individualised career progression dossiers and focused developments through a world-class training academy. The group works in over 4000 villages in India in the spaces of health care, education, sustainable livelihood and infrastructure, where employees are given a chance to contribute and gave back to their communities.

Internal communications play an important role. There is a high degree of correlation in the direction established by the CEO, HR strategic plans and employees' understanding of the strategic objectives for the best employers. Leading organisations are proactively working on translating their customer promise to an articulated employer value proposition to be lived in through organisational systems and processes. This is significantly fostered by the organisation leadership and facilitated by HR. Forbes Marshall, an Indian engineering and energy conservation solutions provider, has an initiative called Value Dilemma Workshops that are conducted by business units and HR to foster a culture of transparency, where members are encouraged to openly discuss their dilemmas on the way that values are practised within the organisation. Dilemmas are collected and clarified during the workshops. The ones that are not clarified are taken up with the senior leaders of the organisation to understand the rationale behind those actions.

Leadership communication and management connect is an integral element of internal communications. For organisations that spread across locations have considerable scale and work across time shifts and zones, creating such a connect requires greater thought and effort. Every employee counts. At Hyatt Hotels, a leading international hospitality brand, the Night Owl Breakfasts initiative allows any leader who has ever had a good night's sleep to speak passionately about the value of a reliable overnight team. These "night owlers" oversee the safety and well-being of an entire hotel full of guests. These "night owlers" do not have adequate opportunities to communicate with the hotel leadership. To bridge the gap, Hyatt Hotels regularly hosts "night owl" Breakfasts to facilitate better communication between the overnight staff and hotel leadership.

Collaboration between employees is looked into with great focus by leading organisations and senior management remains personally invested in efforts on the same. Coaching and mentoring programmes are put in place to equip employees with behavioural and attitudinal skills to work together and overcome apparent tensions that arise at the workplace. Organisations have institutionalised practices that collect feedback with different intent so that a more engaged workplace can be realised. For instance, InterGlobe Enterprises, a leading Indian conglomerate, has a system of successive feedback collection mechanism after an employee joins. Day-1 feedback aims to understand the onboarding experience of the employee and their comfort level. Day-7 feedback aims to understand if the employee has settled into the organisation. Day-45 feedback aims to understand whether the employee has settled into the role. Finally, Day-90 feedback aims to understand parameters such as work environment, supervisor, communication and team culture.

Organisations are also working proactively on making workplaces more women friendly. Women are increasingly encouraged to take up key managerial or technical roles. In few organisations, even a certain percentage of key roles are necessarily supposed to be filled by women employees and such efforts are tracked as part of management KRA. Flexible work practices are introduced to support women employees balance work and family commitments. These include flexible working hours, flexible working week, part-time work, job sharing and work from home.

A systemic approach to employee engagement needs both holistic thinking and flexibility. Systems thinking allows management to consider various dimensions that directly and indirectly make a workplace more engaging for employees as we have seen with the models and examples above. Flexibility allows greater options and more creativity in conceptualising and introducing practices that make the systems perspective amenable to creative ideas.

10.6 Conclusion

In this chapter, I led a discussion to understand the various facets that contribute towards a holistic approach to employee engagement. I argued that a holistic approach is one that considers the physical, emotional and psychological drivers that engage people at their workplaces, and lead to greater productivity and overall organisational performance.

I began the discussion by introducing various definitions of employee engagement. I argued that the concepts of satisfaction and engagement are essentially different although satisfaction drivers form an element of engagement. I went on to discuss how engagement can yield benefits for the individual, team, business and the society. This was followed by the discussion that the concept of employee engagement is not generic and different professional cohorts may value different engagement drivers and may be motivated by factors specific to them.

I talked about three prominent models from leading consulting and advisory firms—Gallup, Great Places To Work Institute (GPTW) and Aon—and introduced the subtleties of their points of view and approach to assessing engagement levels at the workplace. I discussed a detailed case study of my experience of leading an engagement study project with a manufacturing firm in India that I called Potential Earthmovers. I took the reader through the project lifecycle of the mandate. The approach and analyses demonstrated how understanding interconnections, flexibility in approach and ability to see beyond functional barriers could make recommendations that were systemic and more impactful.

I closed the chapter with an overall narration on a holistic approach to employee engagement.

References

- ADP Institute (2012) Employee satisfaction vs. Employee engagement: are they the same thing? <https://www.adp.com/~media/RI/whitepapers/Employee%20Engagement%20vs%20Employee%20Satisfaction%20White%20Paper.ashx>. Accessed 13 Aug 2018
- Aon (2018) 2018 trends in global employee engagement. Aon Corporation. file:///C:/Users/PRactice/Downloads/Aon_2018_Trends_In_Global_Employee_Engagement.pdf. Accessed 20 Nov 2018
- Bindl UK, Parker SK (2011) Feeling good and performing well? Psychological engagement and positive behaviors at work. In: Albert S (ed) Handbook of employee engagement: perspectives, issues, research and practice. Edward-Elgar Publishing, Cheltenham, pp 385–398
- Checkland PB (1999) Soft systems methodology: a 30-year retrospective. In: Checkland PB, Scholed J (eds) Soft systems methodology in action. Wiley, New York, pp A1–A66
- Cross D (1973) The worker opinion survey: a measure of shop-floor satisfaction. *Occup Psychol* 47:193–208
- Fleming JH, Coffman C, Harter JK (2005) Manage your human Sigma. *Harv Bus Rev* 83(7):106–115
- Gallup (2015) Where the great jobs are. https://www.gallup.com/file/services/186197/GlobalGreatJobs_Report_11-19.pdf. Accessed 10 July 2017
- Great Places to Work (2017) Three predictions for the workplace culture of the future. https://www.greatplacetowork.com/images/reports/Fortune_100_Report_2017_FINAL.pdf. Accessed 13 Aug 2018
- Hackman JR, Oldham GR (1975) Development of the job diagnostic survey. *J Appl Psychol* 60(2):159–170
- Harter JK, Schmidt FL, Hayes TL (2002) Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *J Appl Psychol* 87:268–279
- Herzberg F (1964) The motivation-hygiene concept and problems of manpower. *Pers Adm* (27):3–7
- Kahn AW (1990) Psychological conditions of personal engagement and disengagement at work. *Acad Manag J* 12:692–724
- Khaleque A, Rahman MA (1987) Perceived importance of job facets and overall job satisfaction of industrial workers. *Hum Relat* 40(7):401–416
- Malladi KC, Bhatt N (2018) The Indian manufacturing story—a time for change. *Total Rewards Q* Aon 6(2). <http://aonhewitt.co.in/Home/Resources/TotalRewards-Quarterly/Vol-6-Issue-2/The-Indian-Manufacturing-Story-A-Time-for-Change>. Accessed 16 Sept 2018
- Maslach C, Schaufelli WB, Leiter MP (2001) Job burnout. *Annu Rev Psychol* 52:397–422
- Mauno S, Kinnunen U, Ruokolainen M (2006) Job demands and resources as antecedents of work engagement: a longitudinal study. *J Vocat Behav* 70(1):149–171. <https://doi.org/10.1016/j.jvb.2006.09.002>
- Mehta M, Chandani A, Nair M, Chandran P (2016) Trends in employee engagement practices in global and indian companies: a technique to curb attrition. *Indian J Sci Technol* 9(15). <https://doi.org/10.17485/ijst/2016/v9i15/92128>
- Newman DA, Joseph DL, Hulin CL (2010) Job attitudes and employee engagement: considering the attitude factor. In: Albrecht S (ed) Handbook of employee engagement. Edwin Elgar Publishing, Cheltenham, UK
- Robinson D, Perryman S, Hayday S (2004) The drivers of employee engagement. www.employment-studies.co.uk. Accessed 13 Oct 2016
- Saks AM (2006) Antecedents and consequences of employee engagement. *J Manag Psychol* 21(6):600–619
- Scarpello V, Campbell JP (1983) Job satisfaction and the fit between individual and organizational rewards. *J Occup Psychol* 56:315–328
- Seijts GH, Crim D (2006) What engages employees the most or, the ten C's of employee engagement. Oxford University Press, Oxford

- Smith PC, Kendall LM, Hulin CL (1969) *The measurement of satisfaction in work and retirement*. Rand McNelly, Chicago
- Wellins R, Concelman J (2005) *Creating a culture for engagement*. Workforce performance solutions. www.WPSmag.com. Accessed 02 Aug 2005
- Xanthopoulou D, Bakker AB, Demerouti E, Schaufeli WB (2009) Reciprocal relationships between job resources, personal resources, and work engagement. *J Vocat Behav* 74:235–244. <https://www.wilmarschaufeli.nl/publications/Schaufeli/308.pdf>. Accessed 15 Nov 2018
- Yu D (2013) *A case study of employee engagement in AkzoNobel Corporate HR*. https://essay.utwente.nl/63833/1/MSc_Difeng_YU_Rena.pdf. Accessed 11 Sept 2015
- Yuzuk RP (1961) *The assessment of employee morale: a comparison of two measures*. Ohio State University, Columbus, OH

Chapter 11

Sustainable Urbanisation and Community Engagement



11.1 Introduction

Cities are growing at a rapid pace. This pace is fuelled by economic development and an unprecedented migration of people from rural to urban and semi-urban areas. Urban expansion itself creates conditions for further economic development. Urbanisation is not only a spatial and economic phenomenon, but it affects how people live, interact and develop relationships between one another. Urbanisation impacts livelihoods and culture, and shape societies.

However, urbanisation has unwanted consequences of congestion, pollution and crime due to the challenges posed by growing number of vehicles, excessive usage of perishable resources, inadequate waste management and unequal access to economic opportunities. Often the concern is that the pace of urbanisation is unsustainable due to challenges going out of control for the people who inhabit and manage urban centres.

Creation of sustainable urban centres requires multi-stakeholder engagement. Communities that inhabit urban centres need to be at the heart of such engagements. This chapter draws from my experiences of conceptualising and managing a community engagement programme towards enabling sustainable urbanisation in the city of Bengaluru in Southern India during 2014 and 2015. The programme was sponsored by a leading multinational corporation, and was commissioned keeping in mind sustainable urbanisation as the key business imperative for the company. A multi-stakeholder programme was designed and implemented with the principles of Social Systems Design.

In this chapter, I will share my experiences of being involved in the programme from the state of conceptualisation to design to implementation. I will take the reader through the creative process that led to the birth of the programme, the challenges and opportunities, and the various approaches we adopted to bring this programme to life.

11.2 Urbanisation in India

It is usual to associate India with large rural population with an encompassing agrarian economy. However, India's urban centres are growing at a pace that has baffled urban planners. Before we could internalise the realities, India has come to have some of the most densely populated, some of the most polluted and some of the most crime-prone cities in the entire world. The unprecedented growth of Indian cities has been fuelled by a new economic push and global financial impetus with investments in infrastructure, heavy industries and new age economies that have not only provided a fillip to growth in these sectors but also in allied sectors. Currently, with about 35% of the entire population in India living in urban centres, the McKinsey Global Institute (MGI) predicts that by 2040, India's urban population may touch nearly 600 million (MGI 2010), which will be 40% of India's population. The report by MGI goes on to say that with the current rate of urbanisation, many Indian cities will become larger than many countries today.

11.2.1 *Challenges of Urbanisation*

Cities offer a promise to people—a promise of better economic opportunities, and a better and higher quality of life. However, there are risks and challenges that come with urbanisation that may pose a threat to the very promise that urban centres present. Ahluwalia et al. (2014) trace this phenomenon to the concept of “agglomeration” that has an inbuilt tendency to continue unless the costs of agglomeration outweigh its benefits. Urbanisation is a classic example of agglomeration where a specific trigger at an urban centre results in attracting more and more people to agglomerate to a point where there is enough tension to challenge its state of equilibrium (Overman and Venables 2010). Ahluwalia et al. (2014) argue that the self-reinforcing dynamics of agglomeration creates a state of entropy in the system due to the wedge between the perceived economic benefits of movement of people to cities and the actual scarcity and over usage of finite resources that cities have to offer. This happens due to the fact that individuals are unable to internalise the external effects (often negative) they produce due to the agglomeration, as a result of which more and more individuals continue migrating to cities leading to over-urbanisation (Ahluwalia et al. 2014).

This can lead to a Frankenstein situation where people may be lured to come into the city in large numbers due to the promise of better livelihoods and public good, but the city may not be evolving at the similar pace with the infrastructure and civic provisions required to cater to the rapidly increasing population. The population with disposable income can purchase private modes of transportation and the rapid rise of two-wheelers and four-wheelers may outgrow what the current transportation network can support. Overcrowding of cities with vehicles lead to poor quality of air and related health problems. More and more people can come into cities considering the economic externalities, but soon the population may outgrow job availability,

leading to unemployment. The urban poor end up living in illegal settlements with no regular income, leading to increased crime in neighbourhoods and depleting social security. Solid waste management comes as a grave challenge for town planners and administrators who have to manage huge amount of waste generated by increasing population and a parallel growing economy and industrialisation that supports them. Policymakers and administrators continue to add on investments to industrialisation and infrastructure for the cities to cater to an ever-growing population leading to grave impact to society, environment, public health and the long-term economy.

Urbanisation has come with its own share of problems for India with mushrooming city dwellings, unplanned expansion and unauthorised land occupations. Little regard has been paid for infrastructure, public transport, water supply, sanitation, waste management, public health and security. Entropic conditions in Indian urban centres are failing its own citizens with India falling desperately behind in delivering even a basic standard of living for its residents. According to the MGI, with the current rate of growth of Indian cities, every key citizens' service will have to be amplified by five-to-sevenfold if growing demands of urban dwellings need to be met. However, with the current state of affairs in India, the country may fall woefully behind by 2030 in meeting these services (MGI 2010). Right from water supply to transportation to waste management to housing, the average citizen could be greatly impacted with this kind of a gap by 2030 leading to irreversible harm for urban centres.

The manner in which urban centres are growing in India is not sustainable in the long term. As we saw earlier in the argument presented by Ahluwalia et al. (2014), population migration to cities push policymakers to take drastic steps to promote industrialisation and create infrastructure to cater to the growing needs of the population, which in turn is a self-reinforcing loop. Such measures come at a heavy cost to the environment as environmental considerations may not always feature high in the consideration set during urban planning stage due to the speed required for such change to be brought about.

Growing affluence and disposable incomes in urban centres lead to a rise in greater demand for power to support homes, industrial zones and public infrastructure. Majority of the power in India is coal generated that has a dual negative environmental impact because of the implications of demand-related mining and also emission-related pollution. Excessive burning of coal for power generation leads to tremendous emission of greenhouse gases leading to respiratory ailments and depleting environmental balance.

Mobility is an important element that keeps cities moving. Adequate infrastructure enables people to move between home and workplaces, and provides the arteries for goods and services to reach between the desired nodes of production and consumption. However, due to unprecedented population increase, roads in urban centres often get choked with private vehicles owned by a large number of the people who can afford the same. Existing public transport systems become inadequate for the vast majority of people. Upsurge of both licensed and unlicensed three wheelers—both motorised and unmotorised—are seen that fill the gap. Urban planners need to promptly act and rethink new transportation systems and bring in innovative ways

of traffic management. The last decade has seen metros being introduced across main cities in India and also experimentation with Bus Rapid Transport (BRT) corridors to channelise movement of public and private vehicles in select routes.

Unlike leading cities in the west that have had a long history of planned progress, in India urban settlements are organic, and often boundaries are not clearly defined. Gradually expanding urban boundaries and unforeseen increase in population lead governments and industries to continually keep adding to their delivery capacity. The same is not true for model cities of the world. Consider Singapore—a city that charted out a 50-year plan in 1971 with a provision of reviewing and updating the same every 5 years (Muggah 2017). Unlike such model cities, no such concepts existed in India until a decade ago and today policymakers and administrators are grappling with an urban system that is choking in itself.

Urban planning goes beyond just infrastructure, power and transportation. It is a complex discipline encompassing social, political, cultural and regulatory affairs. Significant stakeholder engagement and residents' involvement is crucial in urban planning projects. However, due to the haste of response required at the hands of the dynamic changes in urban centres, often these “softer” dimensions get overlooked and plans get made and executed that solve a short-term issue rather than addressing a long-term problem.

True that Karl Polanyi once wrote of “the fatal irreversibility of urbanisation”.

Whilst working on the concept for the project that I will discuss in detail later in the chapter, I went into a literature research of various existing frameworks and models that attempted to understand the central issues of urbanisation in Indian cities. I will make reference to a specific white paper by Janaagraha that greatly influenced me through the creative process. Janaagraha is a Bengaluru-based registered Not-For-Profit organisation that works for bringing about positive transformation in the lives of people living in the city and beyond. It works with citizens' groups to catalyse government reforms through civic learning, civic participation, and advocacy and reforms. The case study I will discuss later in the chapter is also based in the city of Bengaluru.

Ramanathan (2005), founder of Janaagraha, identifies a “pentagon” of five key issues, each having multiple elements that are central to urban design. Ramanathan (2005) talks about the integration of these elements that is necessary for the creation of meaningful and sustainable urban spaces. These elements have overlaps, interdependencies and congruences that are to be leveraged for a holistic strategy for urban planning. I will briefly talk about the five dimensions below.

- **Urban design:** In India, urban design and planning are carried out by the local development authorities often in isolation from the public and the citizens whose lives these decisions would touch. External factors like political influence, market dynamics and having to give answers to evident urban problems drive authorities to take decisions in haste and with short-term solution orientation without consideration of “how to shape environments with a high quality of community, convenience and well-being” (Ramanathan 2005). Wider issues pertaining to social, compliance, responsibility and economic environment are overlooked at the cost

of closure of plans aimed at specific projects around re-zoning and expansion. Such urban designs and plans fail to address the creation of urban “spaces” that provide ease, comfort, security and meaning to people. Citizens need to be engaged as active leads in urban design and planning because such measures are ultimately aimed for citizens’ benefits.

- **Core city issues:** With increasing urbanisation, core city issues of unauthorised settlements, pollution, crime, inadequate public transportation and lack of access to housing and civic amenities will appear. Going specifically with the metros in India, all the cities have large industrial zones in their peripheries that are constantly expanding even beyond state boundaries. These cities are witnessing flourishing growth in the new economy enabled by information technology, information-technology-enabled services, creative and advertising industry, specialist services such as advanced health care, and entertainment and leisure. Big cities see not only an agglomeration of people but also an agglomeration of industries. This is a self-reinforcing system where people and industry drive each other leading to even greater core city issues. Core city issues seep into the gaps that exist in lack of alignment and coordination between macro city plans and requirements, and nuances of specific locations and sites. This leads to provisions of public institutions that may end up being inaccessible, facilities that may end up being unusable and spaces that are soulless and meaningless.
- **Outer urban area development:** I have earlier made references to cities expanding beyond their defined limits to engulf peripheral areas. Often expansions can even move beyond state boundaries; case in point is Delhi National Capital Region (NCR) that spans across the states of Delhi, Uttar Pradesh and Haryana. Traditionally, it is seen that the focus is always on the core city and the peripheries are ignored as industrial zones and migrant settlements. However, with the unprecedented developments seen in the last decade-and-a-half in Gurugram (Haryana) and Noida (Uttar Pradesh) in the periphery of Delhi (capital city of India), they have themselves become major sub-cities with their own peripheries in the making. This has completely redefined the notion of peripheral regions by creation of sub-cities.
- **Governance:** Effective governance in urban management establishes transparency, accountability and resilience. The quality of governance is translated to actual life experiences for people. Effective governance is not only a factor of effective systems and processes but also of multi-stakeholder involvement in these systems that includes corporates, government, local administration, NGOs, activists, media, academia, civil rights groups and think tanks.
- **Community involvement:** Ramanathan (2005) argues that historically urban design and planning in India have been isolated from public involvement and participation. Decisions that affect local people are made at the policy level that works at a different plane from reality. The public is not “listened to” when policies are framed and executed. This leads to an “us” versus “them” mentality, which is unproductive. Effective urban planning requires citizens and the government to be working together as partners and not as contenders. Ramanathan (2005) further argues that “democracy has to evolve further and go beyond representation towards

constant engagement by the citizens. That is the end-goal—a true partnership in nation building” (p. 27).

Issues appear at several levels in the process of creating cities that have the vision to be sustainable, inclusive and aspirational. Considering the multiplicity of such issues, Booz & Co (2010) summarises the challenges of urbanisation in India in two categories—structural and execution—under which several of the issues discussed above can be clubbed.

- **Structural challenges:** India today is witnessing the largest urban movement in the world and the closest match is only China. India has multiple modes of urbanisation such as organic agglomerations, industrial hubs and satellite nodes—both planned and unplanned. Whereas there has been a handful of planned greenfield projects, 60% of the urban growth in India has happened through organic increase in population. 5 of the 20 most densely populated cities in the world are in India, with Mumbai and Kolkata being the world’s most densely populated. The projected urban population of 600 million by the year 2040 is itself a mammoth number to fathom from a structural perspective for urban planners.
- **Execution challenges:** The system is plagued by limited transparency. Government and civic bodies operate like a black box that is isolated from the general public. Accountability is fragmented between several policymaking and implementing agencies with unclear demarcations of where the buck stops. This is also a result of incongruent city divisions; Bengaluru can be taken as an example where a count of 88 was recorded for policing and 39 for electricity (Booz & Co 2010). This also results in “leakage” of resources between wards and authorities. Municipal expenditure is at a dismal 0.5% of India’s Gross Domestic Product (GDP) which is set on a narrow revenue base with inadequate capabilities (Booz & Co 2010).

Understanding issues in categories of structural and execution can help urban planners in approaching them with different attention. Whereas structural issues can be approached from a perspective of strategy and design, execution issues can be approached with capability and governance. However, these categorisations are not watertight. Planners and executioners need flexibility to see issues constantly transforming, evolving and permeable between categories, what we have earlier also referred to as self-reinforcing dynamic of urbanisation.

11.2.2 Towards Sustainable Urbanisation

Addressing the challenges posed by the urban phenomenon in India needs an approach that is long term, holistic and flexible. Urban planning and management is a multidisciplinary science that needs to bring together variety of expertise such as town planners, sociologists, historians and administrators. This needs to be pinned on multi-stakeholder engagement that brings together professionals, the government,

local administrative bodies and councillors, NGOs, think tanks, residents welfare associations, individual volunteers, the media and other influencers.

Going by the definition of the United Nations, sustainable urbanisation can be defined as urban growth that meets the needs of the present without compromising the ability of future generations to meet their own needs. This can only be possible if development can have “meaning” attached to it not only for the future but also for the present. If we need to create a just and inclusive society for the future, the present will have to demonstrate equity and ethics. Economic independence and viability can create the conditions that enable equitable and accessible solutions to be created for the public. Finally, economic viability and development cannot be at the cost of the environment.

For urbanisation to be meaningful and sustainable, the following three goals need to be achieved: social equity, economic viability and environmental sustainability (Booz & Co 2010). Such outcomes are only possible if a holistic and integrated approach is undertaken that cuts across the various elements of urban planning encompassing governance, business model and infrastructure (Booz & Co 2010). Effective governance can ensure accountability and delivery by removing unnecessary bureaucracy, increasing transparency and enforcing regulations. The right business models can bring together corporations, government and the civil society to own and self-generate sustainable solutions for livelihoods and urban maintenance. Adequate infrastructure is at the core of enabling mobility of people and goods that serve as the lifeblood for urban centres. Adequate infrastructure needs to be backed by viable technical solutions.

Ahluwalia and Mathur (2014) highlight select areas of focus for sustainable urbanisation. These include the following:

- Economising electricity use,
- Sustainable urban transport systems,
- Sustainable water and sewerage systems and
- Solid waste management and sustainability.

The above focus areas have significant overlap and permeable boundaries—all more reasons for integrated thinking, flexible approaches and adaptive planning. Needless to say that citizens’ involvement and participation need to be at the crux of such approaches as all efforts are directed to create sustainable cities not as an end in itself but as a means to an end of granting a healthy and meaningful living for citizens.

Putnam (1993) notes that engaged citizens help in better resource mobilisation and brings in collaboration that creates greater economic value in the ecosystem, which in turn exerts a positive influence on citizens that help them succeed in other aspects of life. He goes on to say that engaged citizens are motivated to proactively advocate for more effective legislation and expect effective performance from government and civic authorities.

Nair (2017) talks about a range of benefits to bring in the public for city design and planning for specific intervention areas (necessarily not always for large-scale programmes). These include the following:

- Allows people to address issues at the level of “communal spaces” that are integral to community cohesion.
- Enables design and implementation to be made more safe, practical and meaningful that can cater to needs of a wide variety of requirements including those for children, the elderly and the specially abled.
- Crowdsourcing of ideas for urban design makes the process more transparent and increases buy-in; this needs to happen at the policy level.
- Encourages residents of neighbourhoods to solve their own problems and foster a sense of pride and camaraderie.
- Increases public trust in the government.

However, translating the intent of citizens’ participation to actual practise in an institutionalised manner is a lot more difficult (Sager 2013; Tewdwr-Jones and Allmendinger 1998). Realising this intent in practise needs drive, passion and will from multiple stakeholders. The journey can be long and beset with challenges, especially when governments keep changing, community leaders have different agenda, and when planners and influencers fail to see to eye.

11.3 The Case Background

Having set the background for sustainable urbanisation and the core debates of the same, I will now turn to present the case study. Set in India during 2014–2015, the case study explores the specific aspect of citizens’ participation and community involvement in a sustainable urbanisation programme. The programme was sponsored by the India unit of a leading American multinational organisation (referred to as the “sponsor organisation” from hereon) and was set in the city of Bengaluru. During the programme conceptualisation and execution, I was associated with The PRactice, a leading public relations firm.

11.3.1 The Sponsor Organisation

The sponsor organisation is a leading American corporate that specialises in the field of commercial aerospace, defence, mobility, climate control and building industries. It ranks among the world’s most respected and innovative companies. During the time of this project, the sponsor organisation had five key businesses in India. The sponsor organisation is a leading player in India in all the sectors it exists in contributing significantly to the nation’s economy, employment generation and social responsibility, creating value for customers, employees, shareholders and the society alike. It had always considered sustainability as value driver for business where the long-term payback is high, both directly and indirectly. The company has always set

explicit “green goals” for its businesses to drive behavioural change and technology adoption.

The sponsor organisation considered efficient mobility and transportation as essential pillars for the future of sustainable cities and recognises people-centric policies as its enabler. It has partnered with several governments in leading cities of the world to support design and execution of people-centric sustainable solutions. To enable the same, the sponsor organisation had created strong collaborations with stakeholder groups, citizens’ organisations, governments and other corporations to create a symbiotic ecosystem for people and businesses to succeed in a manner that is financially viable, socially responsible and environmentally sustainable. It endeavoured to create single integrated solutions from complementary technologies to increase efficiency and enhance effectiveness to deliver value and achieve scale. For the sponsor organisation, this integration went beyond its immediate technology and business and had over the years, invested heavily in building a vibrant global dialogue to sensitise the public on the necessity of balancing the built environment with our natural environment as part of a shared vision for the future.

11.3.2 Project Background

The sponsor organisation partnered with The PRactice (my then employer) in 2014 to initiate a discussion on how we can create a strategic community engagement programme that would enable citizens’ participation in bringing about a positive change in the urban spaces they live. The programme would drive a business-aligned and impactful community engagement programme centred on the principles of sustainable urbanisation.

In the recent years preceding this intervention, the concept of sustainable development had begun to be applied proactively in the field of urban planning in India. Cities in India were learning to adopt best practices and were becoming smarter in the way they operate. The development of smart cities was important to sustainability. India had recently also seen growth amongst social enterprises in the space of sustainable development. There was an influx of grants from foundations, incubators, fellowships and competitions for early-stage enterprises in the sector. Sustainable urbanisation was becoming an area of active public debate during the time the sponsor organisation initiated its discussions with us.

Considering the rapid pace of growth of urban centres and the impinging challenges, several opportunity areas were evident for the sponsor organisation in the space of sustainable urbanisation across the spectrum of energy, conservation, mobility, housing, zoning, community and regeneration, amongst others. This was therefore seen as a business opportunity for the company, as the company’s future largely depended on progressive urbanisation, given its leadership position in mobility, climate controls and security. The company and the cities needed a mutually symbiotic relationship. Whilst urban centres were economic drivers for the sponsor organisation, the corporation provided the solutions that the centre needed to move forward

and foster. Focusing on community engagement would contribute towards bringing the brand closer to people and the communities it served.

A well-planned community engagement programme for the sponsor organisation could bring the company close to the communities it exists in, create goodwill and bring in long-term business benefit.

I was the lead for the research and strategy for the programme.

11.3.3 Way Forward

We realised that the key to open the door to this window of opportunities was to make communities owners of their own future and equip them to take decisions in their own hands.

The way forward was a complex road to navigate given that sustainable urban planning was still nascent in India that lacked proper structure and had weak or non-existent citizens' involvement. We realised that creating a programme that would address the objective for the sponsor organisation would need to bring together a variety of stakeholders in a systemic manner over a long period of time. However, in consultation with the sponsor organisation, we decided that we will create a defined project for a specific urban centre.

We agreed to embark on an approach that would be informed by thorough research, involve citizens from various walks of life, bring in subject matter expertise, create a platform for ideation and debate, and would be focused on execution and creating real impact within SMART parameters—Specific, Measurable, Assignable, Realistic and Time-Bound. These would need to be aligned with the core business value drivers of the sponsor organisation. As a project team, we had to be highly flexible and adaptive in our thinking and approach, and be agile in being able to navigate roadblocks through the implementation of the programme. The programme itself had to go through various changes and adaptations as we progressed through the work as several variables kept changing and tensions were created at several levels—both in terms of vision alignment within stakeholders and administrative hurdles from an implementation point of view.

I will now take the reader through my experiences of working through the programme.

11.4 Case Narration

The project team consisted of four core members including myself. The journey of working through the concept, strategy and implementation was completed over a period of one-and-half year's time. I will be narrating the case under three broad segments—creative deliberation, programme strategy, and execution and handholding.

11.4.1 Creative Deliberation

Creative deliberation was the stage of untangling the problem situation and make sense of a complex ask to identify aspects that could be easily assimilable and actionable. During this stage, intervention areas had to be defined, the urban centre for intervention had to be agreed on, partners had to be decided and a brand identity for the programme had to be created that would make the programme distinctive and identifiable.

11.4.1.1 Defining Intervention Areas

We realised that business alignment was crucial for freezing the intervention priorities. Working on sustainable urbanisation needed technical expertise and subject matter understanding. Being a leader in technology and innovation, the sponsor organisation had the expertise to support the initiative, not just in terms of financial resources but also in terms of technical capabilities. We took a holistic approach identifying linkages between the sponsor organisation's technical expertise, its business drivers and the requirements of the project in order to make the initiative meaningful for the project sponsors and other stakeholders. We expected such an approach to create greater value for the sponsor organisation. This involved a process of thoughtful mapping between the various elements for business alignment in a methodical manner that was influenced by a functional approach of creating cause-and-effect linkages.

With this in mind, we commenced our creative deliberation with understanding the business drivers for the sponsor organisation and how our initiative could align with the same. We identified them as increasing efficiency, reducing energy consumption and enabling environmental impact. To achieve this alignment we realised that we had to leverage the business strengths of the company and understand how these could be leveraged to inform and support the initiative undertaken.

We mapped out the key aspects of sustainable urbanisation relevant for this programme based on extensive literature research (some of which have been mentioned above) and interviews with subject matter experts based across New Delhi, Mumbai and Bengaluru over 2 months. Based on all the data collected, we articulated the focus areas for the future that we had to consider to create our programme:

- Energy efficiency and conservation,
- Transportation/mobility across and within urban centres,
- Community service and upliftment,
- Creating attractiveness of small and medium centres,
- Management of obsolete industrial facilities and
- Zoning and housing patterns.

As a parallel activity, we studied the five business verticals of the sponsor organisation and identified their respective expertise areas that could be relevant and transferable

to address the articulated focus areas. As a subsequent step, we mapped out the relevant and transferable business expertise of the sponsor organisation to the focus areas for sustainable urbanisation to determine the level of alignment that could be achieved between the technical expertise that could be required to approach the same. This enabled us to clearly articulate how different teams within the team could lend their expertise in various aspects of a sustainable urbanisation project.

We further went on to highlight representative impact areas across the opportunities from the sustainable urbanisation focus areas and created an indicative alignment of each of these areas with the sponsor organisation's business drivers.

Specific teams within the sponsor organisation offered technical support for respective intervention areas during the programme execution. This exercise helped us create greater business alignment for the company where projects were not chosen in isolation, but they were aligned with the business drivers for the company.

The following success imperatives were agreed on for the programme:

- Need to create a vision for sustainable urbanisation for the target urban centre.
- Structured planning to aid the project implementation in a directed and focused manner.
- Place citizens at the centre of the initiative so that they take their own futures into their own hands.
- Leverage the strengths of partners to execute our programme.
- Branding the initiative to create excitement and buzz.

The above success imperatives are reflected throughout the deliberations on the case.

11.4.1.2 Bengaluru as the City for Intervention

In discussion with the project sponsors, we agreed on Bengaluru as the city for the programme considering several factors. Bengaluru is the capital city of Karnataka, a progressive state in Southern India.

Bengaluru was one of the fastest growing cities in India that is expected to be more than 50% urbanised by 2030 (MGI 2010). It had, over the years successfully emerged as a cosmopolitan city that people across age ranges and from different parts of India had preferred to call home. It competed with other Indian cities such as Hyderabad and Chennai.

The rate of growth and expansion of the city highlighted the need of greater urban efficiency for Bengaluru, in order to create the conducive platform to make it a city of choice in the future. Compared to other cities in India, Bengaluru also presented a great degree of receptiveness for stakeholders to take keen interest in civic issues. The city had significant civic awareness with proactive citizens' bodies such as the Bangalore Political Action Committee (BPAC), Bangalore City Connect and Janaagraha, amongst others that were engaged in bringing about real change in the city with strong advocacy and visible impact. The city harboured several successful businesses and business leaders of national and international repute, and who had played influencing role in national policy.

In the area of urban planning and civic enablement, bodies such as the Bangalore Development Authority (BDA) and Bangalore Metropolitan Region Development Authority (BMRDA) were able to facilitate conducive urban infrastructures for the city to grow and thrive. These bodies had also integrated the guidelines of national bodies like Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in its city planning initiatives.

These policy initiatives had been translated to on-ground City Development Plans (CDP), with the first plan being initiated in 2003. This was aimed at compact, balanced and equitable and even urban growth. Directive principles were identified to ensure economic efficiency and social equity. It also sought to promote and protect the natural endowments and historical heritage. 2015 was set as the timeline for the renewal of the CDP.

Talking about the receptiveness of Bengaluru as a city, one could not overlook the contribution of its world-class education and research institutes like the Indian Institute of Management Bangalore (IIMB), Indian Institute of Human Settlements (IIHS), Manipal Institute of Higher Education (MAHE) and Indian Institute of Science (IISc), amongst others, who through their expertise of international standing, had been the harbinger of knowledge creation, collaboration and dissemination.

However, every success story coexists with challenges; and needless to say, there were several of them in Bengaluru. The biggest being the existence of several urban planning and community development initiatives that existed in isolation. At a national policy level, the CDP and JNNURM stood on two independent pedestals. There were situations of lack of accountability in deliverables and targets. Although there were various initiatives at the national and state levels with a focus on the city, several of them were being initiated without an integrative approach, and hence lot of the execution efforts were piecemeal and unsustainable. Moreover, implementation of the CDP itself had faced serious challenges due to political misalignment and for getting caught in the government red tape. Objectives and directive principles of the CDP have been talked about above, but unfortunately, these had not been translated into real action that could benefit the residents and the communities. Hence, at the time of its renewal, we did not see any impact or visible implementation of this plan. The plan has remained on paper.

Reflecting on both sides of the coin, we realised that Bengaluru could offer an opportunity to create a success story by taking a fresh perspective to the situation and garner support of identified influencers, and create an impactful plan that could touch the city and its communities. There were opportunities in the field of energy, infrastructure, mobility, health care, environment, education and recreation that could be explored.

Seeking support of key influencers of the city and enabling integrated projects through multi-stakeholder engagement could see fructification of plans into real action and impact.

11.4.1.3 Partnerships and Alliances

The nature of the project demanded the involvement of several stakeholders from Bengaluru through the stages of ideation, execution and impact assessment. We went on to evaluate a range of partners for the programme across stakeholder cohorts and met with potential leads across the country. We had to be patient and flexible through this journey as meeting with such a wide variety of senior individuals from different walks of life meant that each interaction required a specific messaging and a specific approach. Our own priorities also underwent change from time to time as we met more people as the design and approach of the programme had to be coevolved with our partners and not driven by us or the sponsor organisation in silo. This made the process long drawn and beset with the challenge of aligning different points of view into a common agenda. We eventually identified select roles for specific partners to help us see through the programme. Even though the stage of designing the programme strategy, there were changes that were brought about in the partners due to changing priorities and focus areas.

Our proposal to the sponsor organisation included the following recommendations on partnership engagements:

- **Academic institution:** We provided names of select institutions and centres of excellence that specialised in the areas of municipal finance, urban administration, legislative reform and public service delivery.
- **Thought leaders:** Thought leaders from select walks of life like urban planning, social entrepreneurship, Corporate Social Responsibility (CSR), business and academia were proposed to be brought together to form a steering committee to provide the overall direction to the programme, advice on overcoming bottlenecks and exert the right influence to steer the programme to success. A list of such influencers was recommended. This also included technical experts who could guide the team with the finer nuances of urban design and planning.
- **Citizens' group:** The name of Bangalore Political Action Committee (BPAC) was proposed as the citizens' group that would be the strategic incubation partner for this project. BPAC as an organisation promoted a good quality of life for all citizens of Bengaluru city by advocating to improve the quality of infrastructure in the city based on global high standards. Over the previous few years, it had successfully conceptualised and implemented several impactful projects around walking zones, solid waste management, sewage management, and geographic and monumental revival in the city. The committee regularly brought together leading citizens of the city to deliberate on a better future.

Along with BPAC, we brought in the Centre for Public Problem Solving (CPPS) Bengaluru, a citizens' group that actively worked in on-ground change facilitation to address civic problems that people faced. The CPPS team had the capability of undertaking research, facilitate change and run large projects pertaining to public issues.

We anticipated BPAC's involvement as a strategic partner to be crucial for the success of this project that will exert the right influences in steering the initiative

in the desired direction. Whilst we relied on BPAC as the influencers, we relied on CPPS as the change agents.

- **NGO partner:** To implement the actual programme, we had to work with a strong NGO partner who would be responsible to mobilise resources, drive projects on ground and coordinate between the diverse range of stakeholders. We proposed the name of United Way Bengaluru (UWB). UWB seeks to engage with and empower local communities with a worldwide network of local chapters, where each chapter addresses the key challenges facing a particular geographic community. UWB strives to analyse the root cause of societal problems, sensitises and mobilises local communities, and promotes social and policy change that strengthens communities.
- **The community:** Engaging with the community was a key agenda for the sponsor organisation. Through various stages, the project team would actively engage with the community at various levels to understand its needs and challenges and involve them in ideation on what could be done to change the on-ground situation. This was expected to be achieved through focus group discussions and engaging interfaces that will enable the community to be part of the solution making.
- **Civic authorities:** The confidence and trust of civic authorities such as the Bangalore Development Authority (BDA), Bangalore Metropolitan Region Development Authority (BMRDA) and Bruhath Bengaluru Mahanagara Palike (BBMP) (or the Greater Bengaluru Metropolitan Corporation) was crucial for a programme that could bring changes to critical aspects of urban planning. Any on-ground project execution would require clearances and approvals from such bodies, and they would have to be kept informed and involved in crucial stages of the project. The role of the key influencers was most important to this end.
- **Auditors:** The project would require two kinds of audits—effectiveness audit and compliance audit. Effectiveness audit entails measurements that would ascertain the alignment of the project to the core idea and overall objectives. This could be handled internally by the sponsor organisation or outsourced to an external partner. Effectiveness audits needed to be frequent and regular. This would inform on impact measure, course correction, support required and various other parameters. Compliance audit is accounting related and mandatory as part statutory compliance. Such audits are generally undertaken by authorised external auditors.

We proposed our team from The PRactice to play the role of the overall programme management.

11.4.2 Programme Strategy

The programme strategy was geared towards enabling an ecosystem that would facilitate citizen–government engagement in decision-making on matters related to sustainable urbanisation. Formal urban planning and design developments were being carried out anyway through the Master Plan and other initiatives driven by the

government. These plans were often regarded as indispensable and the only way forward towards enabling betterment in the city systems. However, we realised through our study that sustainable solutions could only be created by bringing citizens at the core of problem-solving for themselves rather than solely relying on government schemes.

We wanted to challenge the apparent comprehensiveness of formal government driven designs and give a chance to citizens to come up with their own solutions with their own worldviews to create a reality that is closest to them. Neither were citizens proactively invited to participate in making decisions about their own communities; nor were urban designs arrived at were comprehensive to address citizens' problems, although on papers they were meant to be. Referring to the work of Churchman (1979), Jackson (2000) talks about social systems design with people at the centre as the act of using the "theoretical indispensability of comprehensive systems design as an ideal standard to force us to recognise the requirement to reflect critically on the inevitable lack of incomprehensiveness in our actual design" (p. 225). We wanted citizens to take over control and our vision was to create a fertile platform that would work in the direction to achieve the same garnering adequate support wherever and whenever required.

We reached an agreement with United Way Bengaluru (UWB) as the lead implementation partner for our programme. Our strategy was to work alongside community leaders and civil society organisations to identify, incubate and execute projects that would contribute towards navigating Bengaluru on the path of a sustainable city. Armed with the strength of partners identified, the programme would work along with urban planners, youth from schools and colleges, community members, businesses, trade and professional organisations, civil society members, academic institutions working on urban sustainability, residents' welfare associations, architects and designers of the city, local civic bodies and other cities.

This programme strategy was geared to address issues at the execution level, and not structural level of urbanisation challenges (Booz & Co 2010). We were not set to find solutions to migration, rate of urban growth and structural plans. We rather aimed at hitting micro-issues that touched citizens on a day-to-day basis.

11.4.2.1 Two-Pronged Strategy

We articulated a two-pronged implementation strategy through a deficit mapping for the city of Bengaluru and a neighbourhood improvement programme for on-ground impact. This is further explained below.

- **Deficit Mapping for the city of Bengaluru:** Planning in Bengaluru, as most Indian cities, was a vestige of an era and the approach was of limited relevance for the city of the present. Through our research, we had arrived at the understanding that although there were several progressive initiatives and projects being undertaken by the government for Bengaluru, the city lacked a clear deficit mapping that could serve to work towards a vision for the city. We found our programme well timed

with a major initiative by the state government of Karnataka that had then recently commissioned the Netherlands-based organisation to undertake the mammoth task of developing a master plan for Bengaluru city. However, we understood that there were no defined measures to incorporate citizens' voices in that Master Plan. Our discussions with civic authorities such as the Bengaluru Development Authority (BDA) and Bangalore Metropolitan Region Development Authority (BMRDA) led us to find an avenue to capture citizens' voices and feedback into the Master Plan initiative through a consolidated deficit mapping report for the city of Bengaluru. This document would spell out first-hand what citizens would desire to see in their own city of the future.

This was also a way to appreciate multiple worldviews and not get restricted to theoretical analyses and relying solely on what existed on official plans and designs for the city. We realised that every point of view is biased with inherent drivers and the best way to have a systemic perspective is to be open to listen to different and differing opinions and works towards making things happen.

The deficit mapping would be widely shared among the relevant stakeholders and would serve as the formal input of citizens' voices in the final Master Plan for Bengaluru. The deficit mapping with citizens' voices was conceived to be a catalyst for the official Master Plan for the city of Bengaluru.

We created a framework to capture outcome-focused metrics that could align with Bengaluru's Master Plan. A Working Committee was constituted to undertake the exercise that had representation from all sections of the society and senior leadership of the sponsor organisation. The constituted Working Committee was facilitated by Bengaluru Political Action Committee (BPAC), an organisation that was extensively working in the city to improve accountability from the local civic bodies and gave a voice to community members. The constituted working committee would have the primary responsibility of ensuring that large sections of the community members' voices found place in the deficit mapping report.

- **Neighbourhood Improvement Programme (NIP):** Our endeavour to make citizens custodians of their own futures led us to conceptualise the Neighbourhood Improvement Programme (NIP) as the essential element of our initiative. While the deficit mapping report and citizens' vision was meant to capture citizens' voices, the NIP was meant to provide an opportunity to community members to work along with local civic bodies, urban planners and civil society organisations to improve their neighbourhoods.

We built a model to facilitate this with excitement and a sense of competitiveness to recognise and support outstanding ideas from neighbourhoods to bring about change in their own communities. The NIP was designed to encourage local communities to submit proposals to improve their neighbourhoods. Community members were encouraged to submit proposals along the intervention areas of mobility, waste management, environment and water, public spaces, public safety and off-the-grid power. A high-profile panel was created to identify model projects that would be funded by the sponsor organisation for execution with multi-stakeholder support.

11.4.2.2 Programme Brand Identity

The programme required strong branding so that citizens' outreach could establish recall value and so that it could garner high participation of people for the award entries and their engagement through the programme's lifetime. We considered the following imperatives for the programme that drove our programme strategy (the programme imperatives directly fed into the programme brand identity):

- **Upgrade:** We created a framework plan that identified areas of sustainable improvement for the city of Bengaluru and this was the lynchpin on which the programme was based. The vision was to upgrade conditions in the city.
- **Involve:** We agreed on an approach to establish direct citizens' connects by reaching out to 1500 citizens individually to gather their views for the vision of the city. These were used as direct inputs for the deficit mapping and eventually, the city's Master Plan. The NIP would bring together ideas from citizens themselves to make a difference in their own lives through corporate sponsorship and multi-stakeholder support.
- **Transform:** We envisioned transformation of the city to be brought about through implementation of select projects by citizens over a period of time. We envisioned the best ideas to be supported with a grant and technical incubation.
- **Celebrate:** We did not lose sight of celebration to recognise the good work happening and highlight great potential that citizens could bring from their own communities to make a change in their own lives, if given a platform. The idea was to celebrate the creation of "the city we need".

We constituted our own creative team at The PRactice to deliberate over the imperatives of the programme. After several rounds of discussions with the sponsor organisation, we arrived at the brand name "Citizens for the City" (C4C) and designed a logo for the initiative.

The PRactice creative team came up with brand guidelines that would be used for creation of all collaterals and publicity material around the initiative. Our team also took up the responsibility of managing the social media for C4C to spread the message, and create adequate awareness and buzz amongst target audiences. Apart from amplifying the programme per se, our social media messaging also centred around sensitising people with non-technical information about what sustainable urbanisation entails.

Our programme strategy was developed keeping in mind multi-stakeholder engagement due to the complexities involved. We involved key stakeholders as we worked through the strategy as it required buy-in from all of them. As programme leads, we had to be flexible and accommodative through the process as every involved party had their own objectives that they wanted to achieve, and our role was to bring all synergies together in the common direction to work towards the fundamental objective.

11.4.3 Execution and Handholding

I call this step “execution and handholding” due to the manner in which we led the programme to fruition. This was not just about bringing the partners together and letting them move forward with the deficit mapping and the NIP, but was much larger than that. Our role as the programme lead entailed aligning stakeholders, sensitising the public about the initiative, offering adequate support to implementation teams, bringing about course correction, having a foresight on impact, and above all, overcoming interpersonal issues whenever they sprung up from time to time. To meet all such expectations, we had to exercise great amount of foresight, flexibility and grit. The deficit mapping was carried out over a period of 4 months between November 2014 and February 2015. The study was carried out by the Centre for Public Problem Solving (CPPS) and was anchored by Bengaluru Political Action Committee (BPAC). 1500 citizens were reached out to across neighbourhoods in Bengaluru as planned.

While the aim of this exercise was to plug the deficit of the current Master Plan and provide a check for the next, it also propagated the idea and provided direction for how citizens could reclaim the right to shaping the future of their city. As the exercise progressed, it also began to be seen as a way to refine our approach for the NIP and understand how we could intervene at a micro-community level.

The outcome of the deficit mapping led to a series of deliberations between the sponsor organisation and The PRactice. This led us to freeze on specific intervention areas. Following were the final intervention areas that we defined for the NIP:

- Mobility,
- Waste management,
- Environment and water,
- Public spaces,
- Public safety and
- Off-the-Grid power.

The NIP was launched in early 2015 at a public event in Bengaluru with participation from all involved stakeholders. The media was leveraged to amplify the message across the city along with social media initiatives to achieve maximum reach. A website was created “www.citizensforthecity.com” that was the central repository of all information pertaining to the programme. Through digital media, we reached out to a large number of interested audiences to solicit their participation in the programme, both as volunteers and for the grant application.

Community members including civil society organisations on behalf of the urban poor were encouraged to apply for the grant to improve their neighbourhoods. The grant application process was entirely online through the programme website and applications from anywhere around the world was accepted, as long as the geography of intervention was within the city of Bengaluru. The following criteria were laid out as the basis for applications to be considered for evaluation:

- Innovative idea,
- Impact on quality of life in the neighbourhood,

- Implementability, considering governmental compliance,
- Execution timeline of 9 months,
- Visibility within the defined neighbourhood and
- Replicability.

The United Way Bengaluru (UWB) team extended due support to the applicants all through the application process. This support was required as the application form had several technical details that had to be completed. Often the general public who were bidding for the awards had great ideas but lacked technical acumen. We made sure that everyone who was deserving had the adequate support to have a fair opportunity. The UWB application completion support desk was open to all applications who qualified the first round.

More than 150 registrations were received and 90 proposals were qualified after the first round of evaluation. The percentage split of applications across the impact areas is presented below:

- Waste: 25%,
- Public spaces: 13%,
- Public safety: 12%,
- Off-the-grid energy and water: 10%,
- Mobility: 22%,
- Environment and lake: 11% and
- Others: 7%.

The Working Committee assessed the 90 shortlisted proposals and presented to the Bruhath Bengaluru Mahanagara Palike (BBMP) for evaluation. The evaluation included finer elements of the parameters shared above. Finally, 14 most deserving project proposals were selected to be supported over a period of 9 months.

The selected projects spread across the city of Bengaluru and were meant to be incremental steps towards addressing some of the most pressing challenges citizens were facing. None of the projects were meant to be moonshots with grandiose scale, but ones that could be managed locally and have local impact. Our programme was meant to create real impact on the ground driven by the common person and all the illustrated projects had the same intent.

Handholding the teams through their execution meant that we had to navigate several changes with partners, the programme plan and teams. Roadblocks from civic authorities appeared from time to time that had to be overcome, which often entailed extensive paperwork and stakeholder influence. CCPS played the facilitator role in bridging the gap with regulators with adequate paperwork and adherence to all compliance.

At the time of commissioning of the grants, we realised the importance of formalised subject matter expertise that would be required to handhold the teams towards execution of the projects. We brought in EMBARQ to fill this gap and made sure that the neighbourhood projects received adequate mentoring and support. EMBARQ is an organisation that catalyses and helps implement environmentally, socially and financially sustainable urban solutions to improve quality of life.

Over a period of 9 months, the, UWB worked with the project teams to bring their ideas to fruition by bringing in the right technical mentors and support, aided by individual financial grants awarded by the sponsor organisation. The PRactice operationalised a robust governance framework that ensured that the Working Committee met regularly every month to take stock of the progress of projects, which was reported in by UWB.

The programme even created opportunities for the sponsor organisation's employees to be closely involved with the projects in a voluntary manner to lend their technical expertise wherever required. The sponsor organisation's employees were involved right from the beginning to design the deficit mapping study, collating and analysing data, participating along with community members to execute the NIP, and overseeing implementation of the projects on the ground.

We concluded the programme towards the end of 2015 with the sponsor organisation deciding to roll out the initiative to other corporates to partner and sustain it.

11.5 Reflections

The Citizens for the City initiative was born out of an inherent call to create sustainable urban spaces and a corporation's desire to create inclusive change. We played the role of catalyst by giving form and shape to the programme and by bringing citizens to the forefront of participative decision-making. I will reflect on this case study from two angles: the systems perspective and the perspective of corporate reputation.

11.5.1 *Systems Perspective*

This exercise is reminiscent of the philosophy of Social Systems Design (Churchman 1979) that can be discussed under the following four aphorisms as articulated by Jackson (2000).

- **The systems approach begins when first you see the world through the eyes of another**

The C4C initiative brought about citizens' participation not in a superficial manner, but at the level of intent. This was done by a two-pronged strategy. First, the deficit mapping took into consideration citizen's voices by letting them spell out their vision for the city; expectations from the same were fed into the Master Plan for the city of Bengaluru. Second, the approach of letting general people come up with proposals to change their own neighbourhoods and communities took power away from established institutions to ordinary citizens, who are often ignored in civic issues handled by governmental bodies.

The sponsor organisation, despite being the project sponsor, took a conscious call to play an enabler role and not in one instance pressed their own ideas or agenda in the project. The top team sponsoring the programme empowered The PRactice and UWB for key decisions, who together mediated the process of ideation, conceptualisation and implementation of the programme. The sponsor organisation was able to disassociate itself from the initiative and this confidence came from a profound sense of trust in the process itself that allowed people to take their neighbourhoods into their own hands. The sponsor organisation remained committed to the cause with its financial and technical support for the projects, and employees saw through the process with the required time commitment to bring the initiative to life.

This was possible due to our recognition of the power of subjectivity that we needed to approach reality through the eyes of another and not get carried away by the formal line of decision-making that is the legitimate governmental route that can be isolationist and distant from real issues on ground. Planning dictated by one-sided viewpoint is biased as every viewpoint emanates out of a priori assumptions and knowledge. System designers need to recognise multiple worldviews and challenge taken for granted assumptions (Jackson 2000). Churchman's (1979) philosophy talks about system designers and beneficiaries that I would equate with the government urban planning authorities and citizens, respectively, in this case. System designers have the responsibility to facilitate interventions that would enable better conditions of existence for beneficiaries. This can only happen if the former is able to appreciate the needs from the eyes of the latter. For cities to be created as livable, sustainable and meaningful, the residents not only have to be involved in the process of planning and design but also supported with the right capacities. This can only happen if we are able to make the mental shifts, challenge traditional approaches and create avenues for participation and partnerships.

- **The systems approach goes on to discovering that every worldview is terribly restricted**

Our programme brought together a range of stakeholders in a serious effort to welcome and embrace diverse skills sets and capabilities. The other way to look at this mandate would have been a straightforward linear approach of commissioning the grant money to an urban planning expert body to come up with a way forward for sustainable urbanisation. But we chose to take the offbeat route to conceptualise and launch India's first neighbourhood improvement programme that was by the citizens, for the citizens and of the citizens. To bring this vision to reality, we had to look beyond civic authorities and weave in the strengths of influencers, government, civil society, NGOs, citizens and the media. Every worldview found a place through debate and deliberation. As programme managers, we had to be flexible and agile to accommodate as many worldviews as possible. It was this diversity that gave strength to the C4C initiative.

Convergence did not always come easily. When there are multiple stakeholders involved in a complex setting, there are bound to be difference of opinions and disagreements. The PRactice played the role of the informed mediator bringing teams together, highlighting points of disagreements and facilitating consensus.

Difficult discussions were always been driven by a dialectic that rested on reason and logic to bridge the thesis and antithesis and arrive at a synthesis, or the Hegelian philosophy of dialectic debate.

Our programme strategy came to surface as a result of extensive internal creative deliberations within The PRactice and several rounds of presentations with the sponsor organisation. This required us to push our own boundaries and significant risk taking to embark on an initiative that was the first of its kind to have been undertaken in the country. The creative deliberation came as a result of our ability to critique our own mental boundaries and remain flexible to converge on differing objectives of stakeholders and embrace variety of different viewpoints.

- **There are no experts in the systems approach**

This aphorism was well depicted in the nature of the NIP programme itself. Ideas came from the common public and along with them, came their approaches for execution. The best ideas were supported, both financially and technically, to see them through to fruition. There was no “expert” urban planning body that imposed anything on the projects. Expertise here defied formal established systems and was spurt from communities and neighbourhoods.

Bringing about an overall improvement in the system was the end objective and this led the initiative to provide the adequate support—both financial and technical—to select projects that demonstrated the potential to show results and scale. In other words, expertise here was enabled where there was a sign of potentiality. This was an immensely empowering experience for citizens of Bengaluru who wanted to “be the change they wanted to see”.

This democratic principle created subsystems of neighbourhoods through the C4C initiative that had social equity, economic viability and environmental sustainability, some of the key tenets of sustainable urban centres. Solutions came from the common people and the democratic approach brought buy-in and ownership.

The flexibility in our approach of partnerships also indicated that we continually critiqued expertise positions and this did not dissuade us from partnering with new agencies through the programme. For instance, our partnership with EMBARQ came in much later after C4C was launched. This partnership was particularly exciting for us due to EMBARQ’s work in the grassroot implementation level for cities across the world. They understood the challenges of citizens’ participation and appreciated the nuances required to be considered in situations like the one we were operating in.

- **The systems approach is not a bad idea**

Jackson (2000) notes that “the attempt to take on the whole system remains a worthwhile ideal, even if its realisation is unattainable in practice” (p. 223). Considering our limitations, the C4C initiative made an attempt to think systemic through the entire thread beginning from the concept to the idea to execution and sustenance. The concept in fact started from a business understanding of the sponsor organisation articulating the company’s business drivers and then its inter-linkages between its technical expertise and how these can contribute to the pieces of the sustainable urbanisation focus areas. This led to the identification of representative intervention areas and indicative projects that formed the basis of our

discussions to understand the problem situation and deliberate on how the same could be addressed. The tenets of Critical Systems Thinking (CST) (CST is discussed in detail in Chap. 3) flowed through the stages of the programme strategy that led us to constantly push our boundaries, use multiple methodologies and focus on the improvement of citizens through a process that was inclusive and empowering.

Here I would like to make a reference to the metaphorical archetypes that contributed to our creative approach in making it more focused and directive (the concept of metaphors has been discussed in detail in Chap. 3). Being able to refer to metaphorical archetypes enables researchers and social scientists understand complex situations in terms of characteristics and attributes, and approach them with specific strategies. Reference to metaphorical archetypes has led to several works by scientists and planners as a process of scientific inquiry that can aid in the development and adoption of different frameworks respective to attributes of metaphors (Berggren 1963; Black 1962; Schon 1963; Hesse 1966; Brown 1977). The creative deliberation in this case led us to understand the problem situation in terms of three different metaphorical archetypes as highlighted below.

A mechanistic archetype to understand the alignment with the sponsor organisation's business expertise, design and planning for a complex project, and monitoring and coordination between various stakeholders in order to ensure smooth execution. This archetype led us to bring order and predictability in the process that was much required when we had to work with multiple stakeholders. Setting governance mechanisms and undertaking course corrections whenever actual work on the ground differed from plans were features that helped the initiative stay on track.

A cultural archetype to inform design and planning of a citizen-centric programme; this lets planners listen and assess situations from the point of view of the citizens. Perspective emerging out of listening and needs assessment helps creating conditions that can let planners and administrators have better oversight of the situation. The cultural archetype constantly brought us together as a team to deliberate on challenges that could surface, sensitivities that could emerge and conflicts that could arise within communities and between stakeholders through the life of our programme. This led us to appreciate probable risks, dependencies and governance.

A transformative archetype that helped explore how people can link their thought and action to transcend their alienation created in the system. This paradigm informed us to enable a system where citizens could create their own future. Handing the power of change in the situation back to the hands of the citizens through the NIP was intended on transformation not just physically but also at an emotional level.

Working through the C4C initiative made me realise that systems is a state of mind and does not need to be always applied with frameworks and methodologies. This is especially true in cases where there are multiple stakeholders with varying levels of understanding and where introducing formal systems terminologies and methodologies may confuse or complicate the design and planning process. It was a systemic mindset that tricked through the entire programme in this case through our understanding of metaphorical archetypes and how their distinct characteristics could be, respectively, handled. Flexibility of thinking, ability to make choices, complementarity of resources and ability to challenge were tenets that brought to life the ethos of Social Systems Design.

The C4C programme was a step towards creating sustainable cities with citizens' involvement at the core. The ethos of Social Systems Design was reflected through the programme with its various facets.

However, several larger aspects of creating sustainable cities could not be touched in this programme. As we discussed earlier, a holistic approach will need to take into consideration urban planning and design, urban capacities and resources, empowered and legitimate political representation and transparency, accountability and participation. It is only the last aspect of transparency, accountability and participation that the C4C programme was able to make an intervention towards a model concept for replication. A whole system intervention will require shifting mindsets of the government, corporations and society at a much larger scale, and is a matter outside the scope of this chapter.

11.5.2 Corporate Reputation

Building corporate reputation is a long-term journey where stakeholder engagement is the core strategy. I will discuss corporate reputation in detail in Chap. 17. Making a reference to the arguments I have presented in Chap. 17, it suffices to say here that the C4C initiative brought the sponsor organisation in close proximity to key stakeholders through an intense engagement. The company was able to address one of the most pressing challenges the world is facing today—sustainable urbanisation. The sponsor organisation engaged with a variety of stakeholders with areas of engagements that concern or interest them specifically. Research bodies were engaged with for problem structuring and relevant analyses. NGOs were engaged with for actual change management. The government was involved for all approvals and the initiative itself complemented the government's efforts for urban improvement. Citizens were empowered to come up with ideas to improve their own conditions and were provided with required resources to achieve the same.

Communication on the initiative through media, social media and public announcements were substantiated with actual change efforts driven by a genuine corporate intent to conduct responsible business.

11.6 Conclusion

In this chapter, I narrated a case study of my experience of being part of a sustainable urbanisation project with a focus on citizens' involvement and participation. Branded "Citizens for the City", this initiative was set in the city of Bengaluru in Southern India, conceptualised and managed by The PRactice, and had a multi-stakeholder engagement approach at its core.

I began by introducing the nuances of urbanisation of India and discussed the importance of sustainable urbanisation to make our urban centres more meaningful and fulfilling for citizens. I discussed the various challenges associated with urbanisation in India and highlighted select approaches to address the same.

I then led the reader through the detailed narration of C4C touching upon the genesis of the project, the creative deliberation, programme strategy, and the final execution and handholding stages. The case narration highlighted the various tenets of Social Systems Design that shaped the various stages of the initiative. I described how we, as the project lead, were able to appreciate the interconnections between business, sustainable urbanisation and the community in a holistic manner and articulate a coherent programme that connected the dots. Systems is a mindset that informed and led our deliberations and approach. Through the project journey, we made an attempt to see the world through the eyes of the other recognising that every worldview is restricted; we challenged expertise and empowered the common people in the attempt to let them take the power to change in their own hands, and led a programme that was pinned on challenging established approaches. Flexibility and agility in thinking, approaches and resources made our programme see the light of the day.

Finally, I also touched upon how C4C also contributed to building the sponsor organisation's reputation.

References

- Ahluwalia IJ, Kanbur R, Mohanty PK (2014) Challenges of urbanisation in India: an overview. In: Ahluwalia IJ, Kanbur R, Mohanty PK (eds) *Urbanisation in India: challenges, opportunities and the way forward*. Sage, New Delhi, pp 01–28
- Ahluwalia MS, Mathur A (2014) Sustainable urban living. In: Ahluwalia IJ, Kanbur R, Mohanty PK (eds) *Urbanisation in India: challenges, opportunities and the way forward*. Sage, New Delhi, pp 82–116
- Berggren D (1963) The use and abuse of metaphor. *Rev Metaphys* 16:450–472
- Black M (1962) *Models and metaphors*. Cornell University Press, Ithaca, NY
- Booz & Co (2010) *Intelligent urbanisation: roadmap for India*. Booz & Co
- Brown RH (1977) *A poetic for sociology*. Cambridge University Press, Cambridge
- Churchman CW (1979) *The systems approach and its enemies*. Basic Books, New York
- Hesse M (1966) *Models and analogies in science*. University of Notre Dame Press, Notre Dame, IN
- Jackson MC (2000) *Systems approaches to management*. Wiley, Chichester
- McKinsey Global Institute (2010) *India's urban awakening: building inclusive cities, sustaining economic growth*. McKinsey & Co

- Muggah R (2017) The biggest risks facing cities—and some solutions. TED Talks. http://www.ted.com/talks/robert_muggah_the_biggest_risks_facing_cities_and_some_solutions/transcript. Accessed 05 Oct 2018
- Nair P (2017) Cities for citizens, by citizens: public participation in urban planning. <https://lkyspp.nus.edu.sg/gia/article/cities-for-citizens-by-citizens-public-participation-in-urban-planning>. Accessed 23 Oct 2018
- Overman HG, Venebles AJ (2010) Evolving city systems. In: Beall J, Guha-Khasnobis B, Kanbur R (eds) Urbanisation and development: multidisciplinary perspectives. Oxford University Press, Oxford, pp 103–123
- Putnam RD (1993) Making democracy work: civic traditions in modern Italy. Princeton University Press, Princeton, NJ
- Ramanathan S (2005) Sustainable urbanisation in India. White paper, Janaagraha, Bengaluru
- Sager TØ (2013) Reviving critical planning theory. Routledge, NY
- Schon D (1963) Invention and the evolution of ideas. Tavistock, London
- Tewdwr-Jones M, Allmendinger P (1998) Deconstructing communicative rationality: a critique of Habermasian Collaborative Planning. *Environ Plan* 30(11):1975–1989

Chapter 12

Electronic Public Health and e-Governance



12.1 Introduction

This chapter provides a systemic appreciation of a visionary framework for electronic Public Health (ePH) that I had built in the year 2010 in collaboration Deepankar Medhi, Curators' Distinguished Professor at the University of Missouri Kansas City (USA) (Chowdhury and Medhi 2010). This framework is in context of enabling e-governance addressing a specific aspect of health and well-being, i.e. Public Health.

When complexity is high and the range of interrelationships between various elements is varied and diverse, it is important that any Public Health initiative is able to capture different coexisting factors that influence success, consider the interrelationships between different elements in the environment, and understand how, because of the interrelationships, the system as a whole transforms and evolves. In order to appreciate this, we have resorted to taking a systems perspective in evolving an architectural framework for the ePH. The understanding draws heavily from the Indian context as the country presents an interesting array of the challenges that we have mentioned above. Furthermore, rather than being drawn from existing ICT, our proposed approach is visionary and forward-thinking in terms of what we want to see in future ICT in order to enable the ePH. India is also on the verge of significant change in terms of ICT in public services and related e-governance initiatives. The framework that is proposed will not only be relevant to India, but learning from this can also be inferred for other countries with a similar environment.

The conceptual ePH remains visionary and relevant in the current times in the absence of any such solutions that we articulated in 2010. In this chapter, I will delve deeper into the nuances of putting in place such a system both from conceptual and implementation perspectives, and lead a discussion on how the ePH can be positioned

Parts of this chapter have appeared previously in "E-System For Public Health in India: Towards an Architectural Framework Incorporating Illiteracy and Linguistic Diversity" authored by Rajneesh Chowdhury and Deepankar Medhi (2010). In J. R. Cordoba-Pachon & A. E. Ochoa-Arias (Eds.), *Systems Thinking and E-Participation: ICT in the Governance of Society* (pp. 69–91). Hershey: Idea Group. Reprinted with permission from the publisher.

in the scheme of e-governance. My discussion here will be contextualised for India and my deliberations will keep in mind the nuances and realities specific to this context.

12.2 What Is Public Health?

Public Health can be defined as the study and practise of those activities and initiatives that result in the prevention and reduction of illnesses and diseases in the population. What accounts for rectification of diseases when there is an outbreak, does not represent Public Health; rather, the process of designing and implementing initiatives that will result in the prevention of such incidences in the first place will account for Public Health. These may include educating the public and raising their awareness of health- and disease-specific issues, and implementing health and hygiene initiatives. Hence, Public Health does not mean treatment. Public Health can therefore be classified as being proactive rather than being reactive, and being preventive rather than being curative. Dasgupta (2005) notes:

Public health services are architecturally distinct from medical services. They have as a key goal to reduce a population's exposure to disease, for example through assuring food safety and other health regulations; vector control; monitoring waste disposal and water systems; and health education to improve personal health behaviours and build citizen demand for better public health outcomes (p. 1).

Public Health normally consists of community-wide health and welfare initiatives that are ideally facilitated by the government, and in certain cases supported by Non-Government Organisations (NGOs), international bodies and self-help groups.

The Public Health scenario in India presents a concerning picture with the country desperately lagging behind in health outcomes. At the time of developing our model, we collated information from Garai and Shadrach (2006) that depicted a concerning scenario for India with a lack of adequate medical attention resulting in one maternal death every five minutes, existent infant mortality rate of 70 per 1000 live births, the highest number of cases of HIV/AIDS outside of South Africa, high incidences of non-communicable diseases and an estimated 24.7 million deaths caused every year due to water contamination, poor sanitation and poor hygiene.

The situation has not drastically changed today. Poor government doctor to population ratio, inadequate hospital beds for the sick, high infant and maternal mortality rates, and high incidences of communicable and non-communicable diseases, India's Public Health scenario is alarming (D'Cunha 2017).

However, the last decade has witnessed shifts in policies, practices and attitudes in Public Health in India, with average life expectancy increasing from 64 years in 2005 to 68 years in 2015. Jain (2018) notes the following changing trends in the public health scenario in India in the last decade:

- **Downtrend in communicable diseases:** A concerted government push and civil society awakening led India to be a polio-free nation in 2014 and tetanus-free

nation in 2015. In addition, the central government, state governments and municipal administration are pursuing strict targets for the elimination of malaria, tuberculosis and lymphatic filariasis. The government's push towards cleanliness and hygiene at a mega scale with its *Swachh Bharat Abhiyan* (Clean India Movement) is carrying forward the agenda to reduce open defecation, increase hand washing, enable better solid waste management and reduce the spread of communicable diseases.

- **Focus on prevention:** Preventive measures, especially for non-communicable diseases such as hypertension, diabetes, cardiovascular diseases, stroke and cancer are at the forefront of advocacy dialogues and civil society narrative. The recent past has witnessed increasing numbers of wellness centres and preventative health centres across the country. The central government is focusing on all-round wellness. Additionally, the emergence of the National Health Mission (NHM) to focus on disease control, prevention and surveillance, as a result of the merger between the National Urban Health Mission and the National Rural Health Mission in 2013 is an important testament of the same (Jain 2018).
- **Reduced neonatal mortality rates:** Improvement in neonatal mortality rates has been a significant achievement for India from 57 deaths per 1000 live births in 2005 to 37 in 2015. This has been achieved through multiple interventions including an increase in institutional birthing, immunisation coverage and improved sanitation (Jain 2018).
- **Tackling antimicrobial resistance:** Lack of awareness, irresponsible patient behaviour and unregulated availability of prescription drugs in the country have led to the general population consuming antibiotics in an irresponsible manner, leading to people developing drug resistance. The government has taken proactive steps to regulate the industry through introducing directives to discourage sales and sensitise the general public on the dangers of consuming antibiotics without proper prescription through the 2017 National Action Plan on Antimicrobial Resistance and Red Line campaign (Jain 2018).
- **Improved nutrition:** Government initiatives, multilateral aid and private sector efforts have helped improve nutrition amongst children and adults in India steadily over the last few decades. This has dramatically reduced anaemia and childhood stunting. Over the next 10 years, the country plans to introduce fortified food to two-thirds of the country via the National Food Security Act (Jain 2018).
- **Digital transformation:** The Ministry of Health and Family Welfare has taken various initiatives to improve the efficiency and effectiveness of the public health system in India. Concepts such as digital health and artificial intelligence for social impact are part of the governmental and private sector discourse in the country. Some of the key initiatives undertaken by the government in this area are:
 - *National Health Portal:* To provide information to citizens and stakeholders in different languages (currently six languages: Hindi, English, Tamil, Gujarati, Bengali and Punjabi). The portal also provides for voice-based support through a toll-free number 1800-180-1104 and mobile application.

- *e-Hospital*: A hospital management system for government hospitals that covers major functional areas such as patient care, laboratory services, workflow-based document information exchange, human resource and medical records.
- *Online Registration System (ORS)*: This provides services to citizens for taking online registration and appointment, payment of fees, online viewing of diagnostic reports, inquiring availability of blood online, etc. in various public hospitals.
- *“Mera Aspataal”*: (*Patient Feedback*) *Application*: Through which patients can provide feedback on healthcare services through a multi-channel approach, viz. SMS, outbound dialling, web portal and mobile application. This empowers citizens to participate in improvement of healthcare service delivery.
- *Central Drugs Standards Control Organisation, “SUGAM”*: Enables online submission of applications, their tracking, processing and grant of approvals mainly for drugs, clinical trials, ethics committee, medical devices, vaccines and cosmetics, in order to provide a single-window for multiple stakeholders (pharma industry, regulators, citizens, etc.).
- *Mobile Applications*: Range of mobile applications launched such as “Indradhanush Immunisation” that supports parents in tracking immunisation status of their children, “NHP Swasth Bharat” for information dissemination on disease, lifestyle and first aid, “NHP Directory Services” that provides information related to hospitals across India, and “Pradhan Mantri Surakshit Matritva Abhiyan” for reporting pregnancy-care-related information from across states.
- *Health Management Information System (HMIS)*: A web-based portal for monitoring the programmes under National Health Mission (NHM). Currently, approximately 200,000 facilities are regularly reporting on the HMIS portal.
- **Stronger government accountability**: For decades, India has been plagued by low spends of annual budget to healthcare, underuse or inadequate use of the allocated funds, and a lack of trained professionals to serve the hinterlands. However, we have seen heightened government accountability to make change happen with the government committing 2.5% of the GDP to health care by 2025 and a push for new and more effective programmes to use 100% of the allocated funds (Jain 2018). These programmes are driven by inclusive approaches bringing together both government and private facilities.

The establishment of the Public Health Foundation of India (PHFI) in 2006 by the government as a premiere independent body was another feat that brought Public Health to the forefront in policy advocacy, capacity building and change facilitation. PHFI is constituted as a public–private partnership model and addresses Public Health not only from a clinical perspective but also from a social perspective. PHFI brings in integrative approaches and best practices from around the world and tailors them for Indian conditions to encompass promotive, preventive and therapeutic services.

The integrative model of bringing together both the public and private sectors have been strategically approached by the government with the National Institution for Transforming India (NITI) (the central government’s premiere think-tank), and the Ministry of Health and Family Welfare proposing such a model to “increase the

participation of private business in public health system, and sharing state-run hospitals' ambulance services, blood bank, physiotherapy services, mortuary services, in-patient payment counters and hospital security" (D'Cunha 2017).

Needless to say that the intent, strategy and action are in the right direction. However, India has still a long way to go to make adequate provisions and facilities for Public Health for the country's citizens.

The focus of the next section will be on electronic Public Health (ePH) in the context of e-governance.

12.3 ePH in the Context of e-Governance

Electronic governance or e-governance refers to the delivery of public services, information exchange, transactions and communication within the government machinery between the government and business, and between the government and people using Information and Communication Technology (ICT) (Kanungo 2004). e-Governance can increase the effectiveness of public services, enable more efficient information flow, create transparency and enhance citizens' engagement.

Bannister and Connolly (2012) make reference to a wide variety of definitions pertaining to e-governance, such as

- The use of ICT to support (inter alia) public services, democracy, the private sector, etc.,
- Technology-mediated services,
- Something that includes e-government,
- A model of government,
- A commitment to technology,
- Functions that empower citizens,
- Internally focussed use of ICT by government,
- About networks and relationships,
- Use of ICT to improve the quality services and governance,
- Something that enhances e-democracy and
- A technology-mediated relationship between citizen and state (p. 9).

e-Governance in India has had its natural evolution over the years. Starting from computerisation of departments for document management and departmental integration, today there is increasing conversation on citizen centricity, service orientation and transparency. These initiatives encompass the central, state and local government levels. The central government has taken a programmatic approach for e-governance of the country with a clear vision (Ministry of Electronic and Information Technology, Government of India, 2018):

Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realise the basic needs of the common man.

To bring this vision to life, the government has constituted the National e-Governance Plan (NeGP) with a programmatic approach that enables addressing specific intervention areas with a clear focus on results. This has the potential to save costs, share resources, establish standards and create interoperability. This has been enabled through a country-wide digital infrastructure.

e-Governance can be delivered seamlessly if a number of enabling factors are provided for. These spread across technical, institutional and capability. Joshi (2008) talks about following key imperatives for e-governance in the context of India.

- **Technical infrastructure/framework:** Complete, efficient and integrated hardware and software infrastructure need to be built connecting not only urban centres but also the hinterlands. Availability of multilingual information and consideration of the specially abled for access to information is required.
- **Institutional capacity:** In the form of training and development for government employees and collaboration with external expert bodies and consultants. This needs to be a regular and continual feature to keep up with changing needs and advancing technological developments.
- **Legal infrastructure:** Legal frameworks are fundamental for any new public system to function in a transparent and accountable manner. Being a new subject, e-governance legal provisions need to be instituted to accommodate nuances of new technology and the emerging complexities associated with the same. Aspects such as privacy, access, neutrality and safety need to be considered. There needs to be adequate judicial sensitisation on digital and new technology so that custodians of the law have the required knowledge to carry out their responsibilities.
- **Information availability online:** All public information needs to be made available online and in all official languages. However, availability of content in regional languages is a challenge. Even though the reasons cited for this usually points at lack of universal standards for scripts and fonts, input methods, transliteration and translation software, the fact is that standards and guidelines for text and Information Technology (IT) localisation does exist in the ecosystem. The real problem is low awareness and adoption of the same.
- **Centre–State partnership:** The federal setup of the government in India necessitates close partnership between the central and state governments for effective delivery of e-governance (or for that matter any) services. This also means that pace of technology adoption and digital maturity levels across states need to have some degree of parity and consistency.
- **Standards:** Including standards on interoperability, security, technology, quality and skills. Standards enable consistency and predictability.
- **Awareness and sensitisation:** Finally, the real test lies on the digital literacy levels of policymakers, implementers and citizens. e-Literacy is the key and again, the public and private sectors need to work hand-in-hand to put in place provisions and incentives for more and more people to “go online”. Continual learning needs to be encouraged and the government must make time and finances available for public sector employees to continually stay ahead of the latest developments in IT.

Provision of Public Health service is an essential element in e-governance where a holistic approach needs to be taken considering technology, information, access, awareness and adoption. Public Health is not a one-way street of pushing information from a source to the public, but it is an area where citizens' participation and engagement plays a crucial role for the adoption of information and access to provisions as made available by public institutions.

It is understood that electronic Public Health (ePH) initiatives exist in developed countries with a certain degree of maturity, given the ready availability of funds and the relative homogeneity of the population. Our interest was in evolving an ePH architectural framework for a geography that poses challenges of a very different kind in terms of its socio-economic inequality and cultural diversity. Such a situation presents its own uniqueness.

India has a population of over 1.2 billion people. The population is spread over an enormous landmass spanning over 3,287,263 km² that includes mountains, deserts, swamps, rainforests, valleys and plains, nurturing a rich and equally diverse ecosystem. The massive population harbours a huge array of languages and dialects, and it follows different faiths. While the number of languages used in India can be identified to be over one-thousand, 22 of these languages are recognised by the Indian Constitution. The majority of the languages stem from two families: Indo-Asian and Dravidian. The former is spoken by about 70% of the population and the latter is spoken by about 22% of the population. The rest of the languages stem from families like Dardic, Tibeto-Burman and Austro-Asiatic families (Kanungo 2004). The primary religions to be found in the country are Hinduism, Islam, Christianity, Zoroastrianism, Judaism, Buddhism and Sikhism. A majority of the population follows Hinduism, followed by Islam and Christianity. Furthermore, Hinduism has numerous sects and sub-faiths that yield different levels of influences and beliefs.

This diversity of India is no less reflected in its economic scenario. An aggressive growth rate, rampant industrialisation, unprecedented technological innovation and heightened Foreign Direct Investments (FDI) have created a class of people who have been immediately and directly benefited from the situation and who lead a lifestyle that is extravagant, elitist and indulgent. There is another class of people who have been completely left out of the benefits of economic prosperity, who live a life of severe deprivation. Whereas India's 100 wealthiest people are worth nearly than USD 500 billion according to Forbes (Karmali 2018), the country's ranking is 130 out of 138 countries in the latest human development rankings released by the United Nations Development Programme (UNDP) (UN India 2018).

Demographic, economic and linguistic diversity, coupled with a lack of coordinated efforts, give rise to a situation where the population has varying degrees of understanding of health-related issues due to varying literacy levels, and varying kinds of access to Public Health facilities. This may give rise to a situation where the access and use of any ICT enablement in Public Health get restricted only to the literate and privileged sections of the society. Therefore, our interest is in working towards an ePH architectural framework that will benefit the underprivileged sections of the society.

12.4 Systemic Appreciation for ePH in India

A social system involves interrelationships based on codes of conduct that are mutually agreeable in terms of language, ethics and resources sharing. Information and communication play a crucial role here with language with universally acceptable “speech act” (discussed in detail in Chap. 3). However, ICT has greatly shifted our understanding of the society in terms of a network of information flow thereby altering the “language” of communication itself in a rhetorical manner.

12.4.1 Key Emerging Issues from a Systems Perspective

In this section, I will discuss some of the key emerging issues in this regard from the perspective of critical systems thinking.

12.4.1.1 Equity of Information Access

It is true that ICT has made information readily and easily available to citizens. However, access to information is not equitable. Transformation brought about in the information society is not uniform and this has led to “pockets of change” and “pockets of stagnation” within the society, leading to what Cordoba-Pachon and Ochoa-Arias (2010) call “institutional impacts”. In an information society, institutional impacts are a result of multiple information nodes that are getting created in the society due to inequitable access to information; and inequitable access to information happens due to uneven access for a variety of reasons including lack of resource, inadequate knowledge and insufficient provisions. Such conditions have created specific sections of the society who have greatly benefited from ICT, and equally sections who have been “left behind”. For instance, today there is tremendous amount of valuable information online pertaining to health care. However, only sections of people who are digital literate, communicate in English and have the resources available are able to access such information. A pseudo-digital healthcare institution has been created that has not even given a chance to a large section of the society. This is a self-perpetuating institution that is burgeoning at the cost of huge sections of the society (Toffler 1992). There is a tendency of “normalising” a system at the cost of inclusiveness and respect to diversity.

Equity of information access can only be enabled if the right conditions are put in place that leads to enabling access not only in form but also in intent. Whereas access in “form” could mean enablement through physical infrastructure, access in “intent” could mean comprehension of information in terms of incorporation of language diversity of the information when it is made available, amongst other aspects. Understanding of power relations can play an important role in furthering this argument.

12.4.1.2 Power in the Information Society

The primary stakeholder in e-governance is the government and the agencies it deploys, the government being the principal sponsor for e-governance. Government is about power and power is never even. Power includes and excludes. Always! Sections of the public, being involved and affected parties, can adopt, resist or use it for their own purposes (Bloomfield and Coombs 1992; Cordoba-Pachon and Robson 2008). Power is established, challenged and perpetuated by contradictions and opposing voices, and it is always one power centre that eventually emerges victorious and legitimises itself in the society for self-perpetuation.

Power needs to be an important aspect of consideration for e-governance. As Cordoba-Pachon (2010) says, consideration of power brings in complexity. This emanates due to the multiple nodes of power that exist within the society—seen and unseen—beyond the overall government–public power divide. This understanding is borrowed from Foucault (1972) who talks about the existence of power relationship in every interaction and at every level between individuals in the society. Building on this theory of power from Foucault, Cordoba-Pachon (2010) goes on to develop his power-based pattern of e-government that explores the concept of “ethical subjects” in the context of e-governance defined by the “possibilities and constraints [that] have to do with who we have become in practice and what we can do about it” (p. 43). Citizens can be included or excluded in the design and deployment of e-government initiatives. Inclusion can be in different degrees itself. In this regard, open and flexible information technologies can play a facilitative role in opening up new possibilities for citizens and systems of governance itself (Contini 2009).

The government and its agencies need to play a facilitator role in bringing together diverse opinions and interest groups together, optimise resources and leverage expertise to put in place ePH strategies that are inclusive and flexible. A power-based pattern of e-governance in the context of ePH would mean consideration for the marginalised, embracing diversity and being constantly adaptive as power itself is an evolving and transitional concept that is never static. This also means system designers need to plan and prepare for both intended and unintended consequences of the ePH design and deployment. Cordoba-Pachon (2010) highlights the following emphasis for a power-based pattern of e-government that I will discuss in the current context:

- Awareness of and plan for both intended and unintended consequences of system design. Various scenarios need to be considered whilst developing the ePH. As an example, curating and presenting content itself can be a sensitive task given cultural nuances and consideration of what is ethical and what is not. System designers may go ahead with specific content that is accurate and to which the public needs to be sensitised, but sections of the society may think otherwise. This may lead to rejection and social unrest that was completely unintended with the system.
- Being cognisant of individuals’ assessment and scope of control over their own possibilities and constraints in the macro-level power relations that exist. Carrying forward the above example, the question that can be asked is what stops the state

and local governments, and citizens' self-help groups to come up with their own micro ePH. The federal structure of the government in India means that different parties can be in power in the central- and state-level governments, and different public health ePH can be put in place if the state governments so wish. However, to establish greater predictability, control and accuracy of information that is required for a subject like ePH, a consideration needs to be given to all such possibilities, and the government and citizens need to work towards building a system that is set on standards and has consistency.

- Citizens' ability to use ICT in an "ethical" manner and together with this, planners' ability to introduce systems within the "ethically permissible" limits. ePH systems need to be secure and permissible for use only for its intended purpose. With regards to planners' introducing such systems in "ethically permissible" manner, significant focus on sociocultural and religious aspects need to be considered.
- Possibilities of "normalisation" of relationships with the government. ePH cannot be a one-sided system being imposed upon the citizens by the government and expect this to be a "normal" reality endorsed by legitimate legal authority. If normalisation is enforced, it is beset with power and domination. Citizens' participation and engagement are crucial.

I will take this deliberation forward with a discussion on e-participation.

12.4.1.3 e-Participation

Participation in strategy, design and implementation enhances ownership and buy-in. Castells (2004) talks about collective action through technology to uphold common values and ideologies to create empowerment. Critical thinking is at the centre of participation that informs us to extend our boundaries, embrace diversity and uphold dialectics. Cordoba-Pachon and Ochoa-Arias (2010) note that "critical thinking is needed not only to engage people but to review the assumptions and limitations of the network idea and implications for people's participation in societal affairs (p. 3)". e-Participation needs to be at the core of a networked society if technology has to show meaning to its stakeholders.

Beyond strategy, design and implementation, participation needs to be fostered as a continual process that allows for users to share feedback and be part of development inputs in the process of ICT enablement. For this to happen, one has to move from a "consumer-like" (Mattelart 2003) engagement in the information society to one where participation is driven by true intent. Layne and Lee (2001) talk about the progression on e-government in terms of four stages as presented in Fig. 12.1. The stage of "engagement" is an addition I have made to the original model that I will discuss.

Layne and Lee's (2001) stages are based on two axes—degree of complexity and degree of integration. Degree of complexity refers to the nature of participation that is being desired or provided for in a particular system; this automatically means consideration of various factors such as language, sociocultural nuances, access and

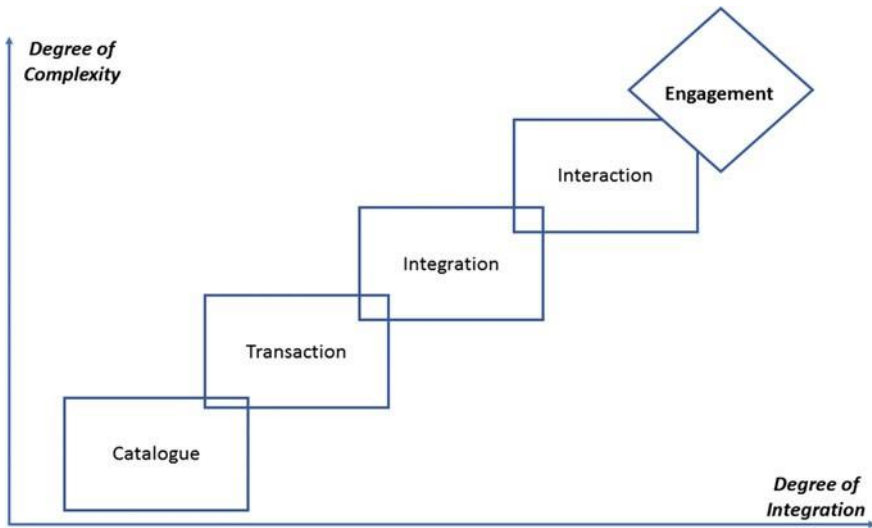


Fig. 12.1 Stages of e-government (adapted from Layne and Lee 2001)

level of e-literacy. Degree of integration refers to the extent to which electronic systems within and between departments are connected. Going by these two axes, Layne and Lee (2001) talk about the four stages:

- **Catalogue:** Where information is merely stored and presented. This is one sided and the system is merely a repository. Imagine a website that lists names of government polio centres that parents can view and take newborns for vaccinations. The information is available only in one language.
- **Transaction:** Allows for two-way interaction individually between a system and its user. Imagine the website referred above allows parents to choose their nearest centre and fix a vaccination appointment.
- **Integration:** Where different systems are interconnected. Now imagine the polio centre records details of the newborn that is made available to a primary and secondary care centres. If the newborn has to go for secondary care, the hospital would already have their vaccination details.
- **Interaction:** This is an evolved system that would have taken into consideration citizens’ participation for design and implementation. Imagine the above system referred to had taken parents’ feedback and experiences and incorporated the same.

However, I would go further with one more stage of “engagement” that would have citizens as an inalienable part of the system that is put in place to serve them. Engagement can only be possible if hurdles discussed under the previous sections are overcome and there is genuine intent. A critical systems approach would embrace diversity, remain adaptive and provide for differing requirements to truly engage citizens to make them part of the journey of ePH, a crucial aspect for effective e-governance. This is what I would call the fifth stage of the intersection of the degree

of complexity and degree of integration that is always at a state of constructive flux. To talk about such a state, Ocha-Arias (2010) refers to Feenberg (1992) and says:

... an understanding of technology as providing an ever changing arena for the debate and collective construction of the future by considering technological devices and rationale as the most advanced stance of human beings in building up their own constitution as “homo sapiens” (p. 23).

Such a state can see citizens’ empowerment leading to even ownership of ICT as an effective means of governance. Policy and decision-making in government need to move beyond traditional one-sided approaches to those that are influenced by critical thinking; policymakers need to be prepared for unintended consequences—both technologically and socially. Reaching the level of “engagement” in e-governance in a rewarding state, yet one that is beset with challenges, and need sophisticated planning and engagement methods.

12.4.2 Approaching the Situation with a Systems Mindset

For the ePH to be successful in the Indian context, it needs to be positioned within a multi-contextual situation considering social, political, economic, demographic and cultural factors. Therefore, architecting an ePH framework will entail that the above elements are considered, not in isolation, but in interaction with one another. Any ICT infrastructure will need to be able to capture and address factors that are beyond those that are directly lifestyle and illness related, towards those that are inherently related to the multi-dimensional factors mentioned above. As Midgley (2006) observes, “the whole concept of public health is founded on the insight that health and illness have causes or conditions that go beyond the biology and behaviour of the individual human being” (p. 466). Architecting effective ICT for public health will need to adopt approaches that are able to recognise interrelationships between elements stabilise difference of opinions and emancipate, to whatever extent possible, the voices and opinions of those sections of society that are easy to be ignored or overlooked. Therefore, it is important to approach the architectural framework design of an ePH for the Indian context from the standpoint of critical systems thinking. In the context of Public Health, Leischow and Milstein (2006) note:

Equally important [to considering directly health-related aspects] is an emphasis on relating different types of structures that shape our lives, including the biological systems of our bodies, the organisational systems in which we work, and the political systems with which we govern public affairs. Although there is no single operational method for identifying and interpreting these relationships, there is, in fact, a common architectural orientation recognisable as a systems approach: it is a paradigm or perspective that considers connections among different components, plans for the implications of their interaction, and requires transdisciplinary thinking as well as active engagement of those who have a stake in the outcome to govern the course of change (p. 403).

A range of systems approaches and methodologies have been used in various ways in Public Health, research planning for health care and intervention and policy

formulation for health care. The methodologies and techniques used include System Dynamics, Critical System Heuristics, Soft System Methodology, Strategic Assumption Surfacing and Testing and Interactive Planning and Strategic Choice (Cohen and Midgley 1994; Sudhir et al. 1997; Maani and Cavana 2000; Fahey et al. 2004; Chowdhury 2006; Chowdhury et al. 2007; Chowdhury and Nobbs 2008).

Considering our discussion on the socio-economic diversity of India and the factors that interplay therein, we have placed the Indian context under consideration in the complex-coercive space of the System of Systems Methodology (SOSM) framework (SOSM is discussed in detail in Chap. 3). This directs us towards considering a postmodernist approach in the architectural framework design for ePH that will appreciate the diversity the system will deal with. A postmodernist systems approach will encourage appreciating the diversity of factors that interplay beyond the surface level and consider how an attempt can be made to reach out to the benefits of the subaltern and deprived sections of the society. A postmodernist approach appreciates systems in flux and is able to bring into fold complex power dynamics emanating out of a variety of factors. In Chap. 3, I talked about the three main types of uncertainties Taket and White (2000) that we need to consider whilst seeking solutions for such a problem situation:

- Uncertainties about the working environment.
- Uncertainties about guiding values.
- Uncertainties about related decisions.

Designing and implementing an ePH system in a complex-coercive setting will need cognisance of all the three kinds of uncertainties as I have discussed in this chapter. In this light, we focus on proposing a visionary architectural framework, rather than being tied by what is possible within the current ICT systems such as the ones proposed as of date.

12.5 Requirements for ePH in India

An effective ePH architectural framework is one that would enable holistic information availability of a defined range of health-related topics aided by user-friendly interfaces, and delivered by effective ICT. An ePH approach will need to deal with the scale of health-related information that needs to be shared and the various mediums by which this is provided. According to Garai and Shadrach (2006), the common ways by which ICT supported Public Health initiatives have been implemented or conceptualised in India include disease-specific websites, online training to paramedics and nurses, e-learning packages like interactive web-based portals and CD-ROMS, knowledge gateways for personalised counselling services, virtual knowledge communities for sharing of information and experiences, e-consultations and online repository of latest medical journals and periodicals. I have cited more integrated initiatives from the recent past earlier in this chapter that seeks to streamline efforts

between different departments, facilitate two-way communication between service provider and the public, and introduce mobile-based solutions.

However, it is crucial to note that where the level of complexity and diversity is exceedingly high, as in the case of India, there will be a requirement that the ePH architectural framework has the following qualities:

- **Inclusive:** The ePH needs to be inclusive so that it caters to the requirements of the underprivileged sections of the society. For instance, a significant population of India remains non-literate yet they must still have access to Public Health information. A traditional ICT approach is not suitable for this population. Rather, there may be a requirement to develop a text-free User Interface (UI) for this population (Medhi et al. 2005; Medhi and Kuriyan 2007). Even within non-literate users, there is a cultural difference between different religious communities in understanding information. It was found that while non-literates among Hindus expect time to flow from left to right, the non-literate Muslims expect this in the other direction, although they do not have any knowledge of Arabic script (Donner et al. 2008). In other words, the ePH needs to be outlined in such a way that it is able to take into consideration various requirements and sensitivities in the design and implementation phases, so that the system is inclusive in nature.
- **Dialectic:** In a climate that is diverse, it is very common to have diametrically opposing viewpoints and apparently opposing ideologies about how the ePH needs to be developed. We may take the example of sex education in schools in India. Earlier in 2008, the health ministry proposed to introduce compulsory sex education for schoolchildren to increase awareness of sexual health and reduce incidences of sexually transmitted infections. However, this attracted tremendous resistance from a section of parents, who believed that sex education would infringe upon the morality of their children. The debate today is struggling to achieve a balance between rationality and morality in the country. The ePH is required to be designed considering such diametrically opposing ideas and approaches rather than trying to discount the same. Public participation should be dialectic and be able to arrive at a consensus, if not agreement, in order to have the ePH that is able to address the differing needs and belief systems of the society. Dialectic debate is the process in which opposing ideas are put forward in front of each other by their proponents and dialogued to arrive at an agreement. The value and contribution of dialectics in the evolution of human thought have been extensively documented in social and management theory (Stump 1989; McTaggart 1964; Eemeren 2003).
- **Adaptive:** Technology is changing rapidly and so are requirements of and expectations from technology. What is therefore required is an ePH that has the ability to be adaptive to change and innovation. This can only be achieved by avoiding an ePH architecture that is rigid and straightjacketed. Architecting ePH needs to be able to make provisions of a system that is able to appreciate and address the variety in the environment. This should be designed in the line of a complex adaptive system that can change and shape itself according to the demands of the environment, so that control and order become emergent, rather than predetermined (Dooley 1995).

- **Evolving:** Adaptiveness is the prelude to evolution. An ePH should be able to adapt to differing requirements in a continual manner, but at the end of a particular time span, the resultant character of the ePH should ideally be qualitatively different from and superior to what it was when it started. This is important because public health requirements can themselves change over a period of time. For instance, in India, plague was an issue of severe public concern in the 1990s. However, the concern gradually moved to HIV/AIDS a decade later. Currently, there are other forms of illnesses such as Avian Flu and Severe Acute Respiratory Syndrome (SARS) that are capturing the attention of the public and the policymakers. The way the ePH will have to address these differing health requirements needs to evolve as the quality, quantity, sensitivity and modes of delivery of the information (pertaining to the different demands) will also change.
- **Robust:** It is important that whilst the ePH needs to be inclusive, dialectic, adaptive and evolving, it also needs to be highly robust with the ability to withstand the test of changing times and demands. The challenges that this will give rise to are the ability to be robust yet flexible, to be system defined yet adaptive and to be specification-centric yet evolving. However, robustness in this case is understood not from negating its counterpoints, be it inclusiveness, dialectic, adaptiveness or evolutionary, but by being able to derive its strengths from these negations.
- **People Sensitive:** Any ePH must be people sensitive; this means that it must be able to absorb the dynamics involved in people–machine interactions within the existing sociopolitical framework. With new technological provisions, an ePH may seem like a liberator. However, the environment within which this architecture needs to be managed may have acculturated and ingrained logics of working that may be averse to the use of ICT as well. Conventional planners and practitioners may be highly conservative about the way they have been doing a particular job for quite some time, and they may not want to bring about changes in their working patterns. Hence, the framework should also be able to absorb such resistances. Change management can appear to be a challenge, and innovation acceptance, a threat to established practices. The analysis and understanding of the human element are of utmost importance in considering the successful introduction of new ICT systems. Unfortunately, planners tend to pay more attention to the technology element rather than the people element.

From the above discussion, we arrive at the understanding that an ePH for a diverse population with challenges around language, literacy, poverty and deprivation needs an approach that is able to encompass these factors and look at the process of working towards this framework in a holistic and systemic manner. This holistic and systemic approach will not only be required in the conceptual stage of working towards the ePH architectural framework but also in its planning and implementation. Together with this, a range of different approaches will be required to take into consideration the pluralism of elements that exist in interplay within the system and how they can be integrated to make further application sense for the target population.

12.6 ePH Systems Dimension and Categorisation

With the above background and in order to present an architectural framework for the ePH system, we proposed our thoughts on an architectural framework for ePH. In order to do that, the following important primary dimensions were identified:

- **Population factor:** While the ePH system is meant for all citizens, there are certain aspects about the Indian population that must be taken into consideration. Consider that the top 5% (Farrell and Beinhooker 2007) of the population (the middle class) is highly educated and has either access to computers easily or own a computer with an internet connection. This group already has the knowledge and resources to know what to look for in terms of understanding about a particular public health need. In fact, this group is well versed in the English language and can use any popular search engine such as Google or Yahoo to search for information about any public health issue. Thus, in the systems consideration, we assumed that this population group is not the primary target for the ePH in India. In other words, the target population group for this ePH system is the lower middle to lower strata of the society. In the context of India, this group can be further divided into different categories by considering the following factors: language, demography and literacy.
- **Mode of access to information:** There are various modes of providing information about public health to citizens: television, print medium (e.g. newspapers), billboards, the Internet and mobile phones. India uses billboards to make its citizens aware of a particular public health concern (e.g. HIV-AIDS). Furthermore, television and the print medium (newspapers) have also been commonly used over the years for the same purpose. Two of these mediums (print and billboards) assume that the target group is literate. Three of these mediums (television, print and billboards) do not fall under our consideration. In other words, we focussed primarily on the following two modes for access to ePH: the internet and mobile phones.

Internet access from desktop computers is now available in many places, including in rural areas where this access is available at community centres through the effort of the National Informatics Centre. Besides such Internet access, the mobile phone is an important component of the ePH system for India. There are four primary reasons for this: (1) the newer mobile phones have a number of capabilities such as a multimedia display; (2) due to infrastructure limitations of wired phone connectivity, the mobile phones have made inroads to the remotest parts of the country, even in places where the availability of electricity is limited. In many rural areas in India, the wireless base stations for mobile phone services are routinely powered by diesel-powered generators; (3) from a communication technology point of view, the infrastructural side of providing mobile phone services is moving towards the Internet protocol (IP) technology, to be in common with the wired Internet; (4) web access is already available on many mobile phones, albeit for a fee.

- **Public health priorities and types of information:** While the basic architectural framework should not depend on a particular public health priority, for the purpose of illustration, we must prioritise public health information in terms of dissemination of information in two directions. One would be for routinely known needs such as AIDS, malaria and so on, and the other for newly emerging issues on a short or near term basis, for example, the impact of Avian Flu, Swine Flu, Severe Acute Respiratory Syndrome (SARS), Chikungunya, Dengue, Coronary Heart Disease and Diabetes.
- **Content type:** Any information about a particular public health issue may be available in four basic modes for online availability: text, picture, audio and video. “Text” means a web page that may include some graphics as necessary. “Picture” means depicting a particular piece of information pictorially for ease of understanding; this type is meant to serve the need of non-literate or low-literate people who would benefit from having this feature. “Audio” refers to the ability to listen to public health information, be it via the Internet or a mobile phone. “Video” refers to a video clip to explain a particular public health issue. In general, audio and video are important for non- and low-literate users as they can listen or watch to understand a phenomenon.

The above four dimensions are inter-related for the ePH consideration. For instance, a particular public health priority may be available primarily in one of the content types, but not all. That is, from an architectural point of view, it is not implied that it is necessary to have all information contents available in all modes. Development of these will depend on cost as well as needs. Second, when the population factor was considered and the mode of access, we could see that it is necessary to cater to different needs. For example, for a non-literate user, the assumption that the information that is available through a classical text-based User Interface (UI) on a computer is viable is neither practical nor sufficient. Rather, for a non-literate user, there is a strong need for a *text-free* UI. Such text-free UIs can be pictorial in nature so that the user can click on a button to understand what type of information it refers to; not only that, the button, when the mouse is moved over, plays a small audio to explain what the button is about. In the case of a mobile phone, an audio service may be provided so that the user can directly talk to, which in turn, the service understands and interprets the information. Note that unknown to the user, the feature may generate a call to an automated system or an actual person, who can then offer feedback to the user on the required information either as an audio or a video clip or a text message.

Let’s focus on the users themselves. In India, there are many different languages and demographic groups, further stratified by economic factors. For instance, users in a particular language may be more non-literate than users in another language. Second, even among literate users, a significant portion of the population does not know or understand English. Currently, India has deployed computers in many village areas—with its English-based interface, but only a small fraction of the literate population can take advantage of simple features such as web browsing and searching;

thus, such computers are rarely used. While Hindi is a national language, only small fractions of literate users understand Hindi to the fullest, i.e. the problem is not simplified if the user interface is in Hindi. What this means is that providing a text-based UI in just a single language does not satisfy the need of the overall population. In fact, it is critical to develop text-based UIs in different languages. With the advent of Unicode [Unicode], characters in several Indian scripts are already available. In fact, this set encompasses many Indian languages. For example, the Devnagari script is used in many Indic languages in the northern part of India; Bengali script in Unicode can be used in Bishnupriya-Manipuri and Meitei languages since the script is the same; furthermore, Bengali script, as defined in Unicode, includes a few extra characters that are needed for the Assamese language—this means the Assamese language is also covered by Unicode. Thus, it is now a matter of developing language-based text-based UIs. The architectural framework proposed here recognises the need for text-based UIs in different languages in order to reach a larger population group.

In summary, by considering different dimensions, we envisioned the following broad categories from a systems approach perspective that must be considered in the architectural framework:

- ePH content: either routine contents such as AIDS or Malaria, or non-routine contents such as when needed in the case of an epidemic (e.g. avian flu, swine flu).
- Information type: text, picture, audio and video.
- Language factor: a variety of languages.
- Literacy factor: non-literate and low-literate users.
- User's access mode: text-based or text-free UI, or mobile phone.

The next question is how to consider these categories in the architectural framework of the ePH system. Although the information availability mode is via both the Internet and mobile phones, we must address the literacy factor to recognise that the user's access mode must cater to three different modes: text-based UIs, text-free UIs and mobile phones. Text-based UIs and text-free UIs are both required for Internet-based access to cater to literate, low-literate and non-literate users who need access to the ePH system. Moreover, the text-based UI must be available in different languages. Regarding mobile phones, it can be considered as a single mode or simply, as a third user Interface. This is because traditionally, a telephone service does not require a user to be literate (because language or written texts are non-issues). However, at a much deeper implementation level, it would need to have different features for interactive sessions for the users of different literacy groups. Consider when a mobile phone is turned off; it is not uncommon for the caller in India to hear a message in three languages about the mobile phone being turned off: the local language, Hindi and English. Finally, the demographic factor does not need to be highlighted separately; this can be addressed through a combination of the language and the literacy factors.

12.7 Architectural Framework

Taking a holistic approach along with the critical dimensions for India outlined above, we proposed a conceptual architectural framework for the ePH system. This framework is based on the premise of strong functional components and taking citizens along the way.

12.7.1 Functional Components

Our architectural framework for the ePH system has four primary functional components:

- User Interface (UI),
- Information base,
- Request interpreter and
- Content translator/broker.

A pictorial view of their functional relationship for the proposed architectural framework is shown in Fig. 12.2.

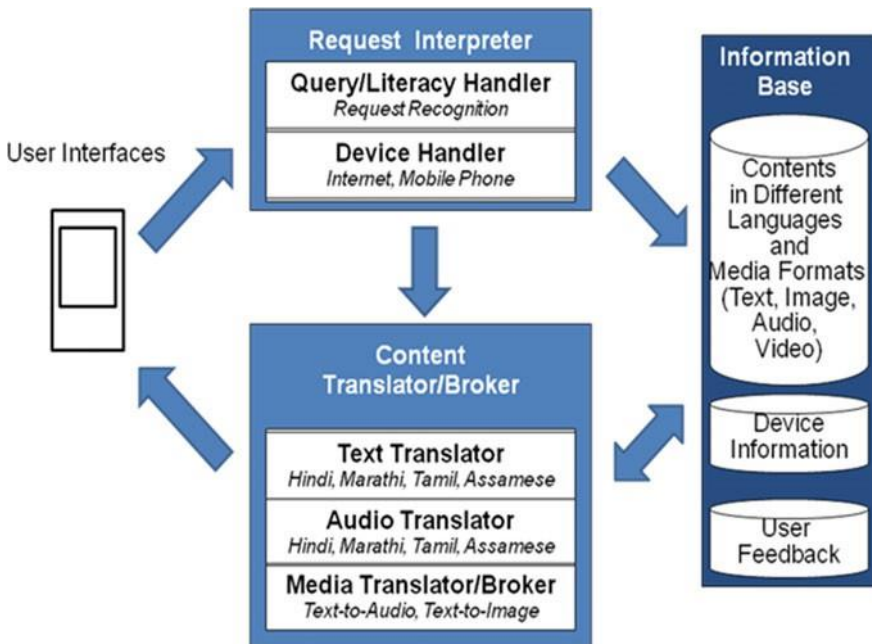


Fig. 12.2 ePH architectural framework

Each of the components is elaborated below:

- **User Interface:** The User Interface (UI) is the entry point for a user to the ePH system. From an actual physical device point of view, this breaks down further to a computer for Internet access or a mobile phone. In the case of a computer, we may have both text-based UIs (albeit for multiple languages) and text-free UIs as discussed earlier.
- **Information Base:** The Information base is the storage of public health information that would be of interest to users. They would be available in a variety of media: text, pictures, audio and video. Furthermore, information may be contained at different levels of content depth, and in different languages. It should be noted that the Information base is not meant to be a single entity. While from a functional point of view, we refer to the Information Base as one, it can be broken down into multiple different entities based on media types such as text, picture, audio and video, and/or based on languages.

A system development of the scale of ePH in India must have a feature built in for user feedback for its different interest groups. On one end, is the end user who either may not get the information they want or the content is not of an adequate nature. Therefore, the end-user UI must also have the ability to provide user feedback. For example, for non-literate users, this can be done by asking them to reply to a series of questions after certain information is provided to the user. Their responses to the questions, although to the user they appear to be going to the same system, would in fact go to a functional component that handles user feedback. So that a user is not “penalised” for not giving a high approval rating, and this phase must have the ability to randomise the request where the responses are stored in a secure way so that the feedback evaluator does not know the actual user who provided the feedback and the information the user provided is available only through the user’s anonymity. Such feedback should then go back to the system designer (another reason for our proposal to consider a spiral model) so that enhancements to the ePH can be done. Since the specifics of the user-feedback handling is more of a software system implementation level issue, this is only shown as a component within the Information Base in the architectural framework as the collection point of the feedback information. Certainly, additional interfacing by external entities to this component is needed for further processing.

Besides the end user who provides feedback, the overall system must also allow other constituents to provide feedback on a variety of things. For example, Non-Government Organisations (NGOs) are going to be an important user group of the ePH system and their needs and requirements may be quite different from that of an average end user. In other words, people’s participation through user feedback is an important component in e-governance.

Such user-feedback capabilities go to the heart of e-governance. For example, electronic feedback can be processed and summarised to understand new needs or changes to the currently developed system. These can then be taken into account quickly to make enhancements.

Unlike traditional governance, content for the information base can also be contributed by the citizens of the country through another User Interface. This will help speed up information availability to the citizens, especially when it may be extremely time-consuming to provide every piece of information in every language and media type. In addition, it is certainly possible that such contents are not reliable information. On the other hand, however, what we have seen with services such as Wikipedia on the Internet is that such content often converges to highly reliable information. Such a system may be supplemented with a scoring system, where knowledgeable citizens can also give scores on the validity of the content. Thus, user-provided information may be classified as “not approved” to a point in time, when through the scoring system, it becomes recognised that this information has validity. Thus, in the e-governance context, we see content can be broadly separated into three groups: user provided but lacking an adequate score, user provided that has an acceptable score and approved information (either generated by public health officials or moved into this group through the scoring system).

The application of the ePH modelled here may offer the public authorities a framework for effective integration of ICT enablement in Public Health. This may in turn facilitate the access of its services for the diverse population of the country. The ePH architectural framework evolved here can be used as an integral part of the overall e-governance agenda of the government of India. Integration of this kind of a framework would enable efficiency, effectiveness, clarity, transparency and accountability of Public Health services within the e-governance framework.

- **Request Interpreter:** The Request Interpreter can serve a number of different roles. For instance, a user may request information about HIV/AIDS to be provided in her native language. In this case, the Request Interpreter contacts the Information Base for a copy to be provided in that language. Another type of request may be that a user indicates (through the User Interface) being non-literate but provides his preference of native language. The Request Interpreter then contacts the Information Base to provide the information to the user either in a pictorial form, or an audio or a video clip in the user’s native language.
- **Content Translator/Broker:** The Content Translator/Broker, in its simplest form, works as a simple forwarding function when the Information Base already has the content that the user requested in the desired mode. Its role, in the more complex form, is multi-faceted. For example, if the request of a user cannot be served by the Information Base in the preferred type requested by the user, an alternate form may be presented. Consider a user requesting information about malaria in the Bishnupriya-Manipuri language in audio form. Suppose that the Information Base currently does not have any information about it in this format, but has a description about malaria in textual format in the Bishnupriya-Manipuri language. In this case, the Information Base sends the response first to the Content Translator/Broker that in turn does a text-to-audio translation in real time and plays it out to the user. For another request, the Content Translator might serve the role of providing the response in an alternate format. For example, the user requests a video format; however, there is no content available in a video format, but it has

it available in an audio format. In this case, the Content Translator/Broker plays the role of a broker to provide the content in a different format. Over time, with the advent in technology, a Content Translator/Broker would be able to translate from one language to another language in real time, both for textual contents and also for audio clips.

The most important aspect of the proposed architectural framework is that it presents a futuristic vision that takes into consideration the requirement of an ideal ePH system for a country of the size of India with its diversity from many different directions. On the one hand, it is important to consider the diverse factors, while on the other hand, the simplicity of the architectural framework is that it focuses on the important goal of serving the diverse end users without unduly complicating the framework. From a functional point of view, these four major components would satisfy the need.

12.7.2 Taking Citizens Along the Way

The architectural framework presented here communicates a vision for ePH in India. But this vision can only be realised if citizens are taken along the way. e-Governance needs to be facilitated in a collaborative setting where a shift needs to happen from passive participation to active engagement of citizens in the process. The aspect of user feedback is discussed in the conceptual framework in Fig. 12.2, active engagement is much beyond feedback; it is about making citizens equal partners in the concept, design, execution and improvement of the system. Citizens need to be given a voice so that uncertainties about the “working environment”, “guiding values” and “related decisions” (Taket and White 2000) are addressed adequately and systemically. Pluralism will need to be the guiding mindset in a situation such as the one presented here where complexities are high, and so are stakes. As discussed in Chap. 3, pluralism will need to be in the nature of the client (here the government), methodologies, the language deployed and in the nature of the facilitator (Taket and White 2000).

The government and health agencies are constantly under pressure to perform according to changing priorities and evolve their services and offerings as per changing technological developments. Points of view need to be mediated and decisions need to be facilitated in a balanced and rational manner. Consensus needs to be reflected by accommodation and inclusion of different interests.

Pluralism needs to be reflected in the way different systems methodologies are mixed and modified to suit a particular context. A range of methodologies can be drawn together to leverage their strengths. The following ideas can be explored for a pluralistic methodological approach for citizens’ engagement (adapted from Midgley 2006):

- Individual interviews with stakeholders with expertise.
- Surveys and Focus Group Discussions with neighbourhoods, citizens groups and caregivers.

- Photographs and cards with evocative pictures to stimulate ideas.
- Rich pictures (discussed in detail in Chap. 6) for creative deliberations.
- A synergy of systemic planning methods implemented in separate stakeholder and multiagency workshops, such methods can include Interactive Planning (discussed in Chap. 7) and Critical System Heuristics (discussed in Chap. 13).
- Values mapping (a method we developed to visualise people's values and the logical connections between them).
- Small group, multiagency action planning.
- Production of reports, magazines and posters for multi-audience dissemination.
- Formative evaluation (feedback questionnaires filled in by participants).

Taket and White (2000) say that “methods change the world” and there can be no better situation than this for the application of inclusive and empowering approaches/methodologies that may have the power to craft a new Public Health fabric for India.

The role of the facilitator (which may again be an agency appointed by the government to bring about this change) does not need to play the role of expert or advisor (Foucault 1972); they simply need to provide the instrument of analysis to the problem owners. Creative tension can be generated between and within stakeholder cohorts to visualise what is feasible and what is not, given social, economic and technological realities. The facilitator will need to be respectful to participants, be critically aware, not be afraid of self-disclosure and yet have self-confidence, be questioning, be observant, be direct and be confronting rather than confrontational (Gregory 1999).

Flexibility, forthrightness, focus and fairness (Taket and White 2000) would be the hallmarks of the system designers for this proposed architectural framework.

12.8 Implementation Challenges

Having discussed the ePH architectural framework, it is important for us to discuss certain implementation challenges that can arise for the same.

Consider first the Request Interpreter. This is not to be misconstrued as a basic web server or a web client. In fact, as of now, there is no known Request Interpreter that can satisfy the need of this architecture. The current search engines such as Google or Yahoo are text-based search engines; second, they cannot meet the user preference coming from heterogeneous devices; third, they cannot serve as a resolver. For instance, a Request Interpreter must also serve the role of a resolver to different forms and/or locations of information in the Information Base. The concept of a resolver has been around on the Internet since its nascent days. An example of a resolver is when a user requests to go to a web site (such as <http://www.google.com>) that first identifies its domain (www.google.com); the domain is first resolved to a valid Internet Protocol (IP) address to which the request is routed. A more sophisticated resolver is the Handle system [Handle]. In this case, the proposed

resolver is envisioned to work at an application level with a much broader scope as its role is to resolve requests based on multilingual texts as well as audio requests with multiple modes of operations. Consider a voice-command-based search request through the phone system that is used in many parts of the world. For example, in such a system if a user calls a phone number for flight information, a voice-prompt-based interactive system identifies what the user is interested in knowing (the specific flight number, arrival or departure, and so on). This mode of operation is extremely important to provide with the text-free User Interface for non-literate users so that they can use the microphone on a computer or a mobile phone to speak and request any particular information. Thus, such requests will be directed to the Request Interpreter that may involve a resolver to identify where to direct the request. Note that audio over the Internet is now possible since Voice over Internet (VoIP) technology is now a standardised mechanism allowing users to make voice communications over the Internet.

In essence, the Request Interpreter is an abstraction for certain types of actions. For a specific medium, different search mechanisms or a request resolver may be developed or customised for different types of users. Rather than being a complex monolithic system, the Request Interpreter function may be implemented using multiple different units for different purposes by providing functions for different types of searches and capabilities for the resolver function through different computing units. It is important to recognise that unlike a web browser, the Request Interpreter does not reside at the user's end. Rather, the user's end starts with the User Interface (UI). The UI is provided with certain intelligence that is more than a web browser, with the capability to direct the request to the right Request Interpreter.

Consider next the Content Translator/Broker. This is another function that is not currently available as we are envisioning it and it also does not need to be served through a monolithic system. Instead, different requests can be routed through a different Translator/Broker in order to meet the needs of the ePH system in terms of translation from one medium to another or being able to offer alternate solutions. In fact, going from the architectural view to an actual computing system design would lead to this function splitting into multiple sub-functions to minimise software system implementation and computing system management complexity. For instance, a particular computing system may handle all the requests related to the text-to-audio translator. Thus, when the brokering function determines that this translation needs to be invoked, then the request is forwarded to the appropriate translator. Not only that, such translator systems may be organised separately for different languages. It must be noted that we are not advocating that every such translator be developed from scratch; rather, there are existing off-the-shelf text-to-audio translators for some of the languages that can be used in this translation function. Another translation function is when a specific text needs to be translated from one language to another. Such translations may potentially change the semantic meaning. Since we are dealing with Public Health, it is important to ensure that such translations do not give information that can lead to misunderstandings. Therefore, consistency in vocabulary that is aligned with the Unified Medical Language Systems [UMLS] is important since UMLS provides facilities for natural language processing. Along with this, a domain

model that captures key concepts would be important to consider (Oldfield 2002). There has been some work on controlled vocabulary in Public Health (Niedzwiedzka et al. 2008).

The Information Base is another function that serves as the abstraction for different content bases. In practical implementations, this function may be divided based on languages and different media types. It is, however, worthwhile to develop a good naming scheme for different content identifiers, along with associated attributes so that it is helpful both for the Request Interpreter in identifying correct documents (be it text, audio, or video) and for the Translator/Broker to further resolve it. The Document Object Identifier (DOI) is a well-developed concept that has already been used in practice [DOI]. The DOI system is currently used for identifying documents, including persistent identification. Either the DOI may be extended for the purpose of the ePH system or a similar identifier system would need to be developed.

Consider next the User Interface, in particular, consider text-free User Interface for low-literate and non-literate users. There has recently been some development in this regard (Medhi et al. 2005; Medhi et al. 2006; Medhi and Kuriyan 2007; Sherwani et al. 2007; Medhi and Toyama 2007a, b). Such text-free UI plays a very critical role in the ePH system, especially since a sizeable audience requiring Public Health in India is from this demographic group. In general, most non-literate users, given that they are from the lowest income group, would not be able to afford a computer. On the other hand, due to efforts by governmental organisations such as the National Information Centres (NICs) and Non-Governmental Organisations (NGOs), the non-literate user group is expected to have access to computers at certain locations (“community centres”), where the users can go to use the facility. It is important that such computers be customised to cater to the language (sometimes multilingual) needs of the local community as well as with the capability for text-free UIs with audio capabilities. In some instances, such devices may be customised so that some user preference/settings may be set up beforehand; in this regard, some functional components from the Request Interpreter may be off-loaded to the user end.

It is crucial to note at this point that the system is proposed with security robustness and foolproof access to ensure authenticity of information. This factor is important not only to enable high-quality reliable information but also to ensure that the system does not fall into the hands of miscreant elements of the society promoting their own agenda. This thought is important given the fact that our approach is influenced by postmodernism that propagates the existence of multiple interpretations; it should not pave a way for multiple interpretations of health-related and medical facts. Post-modernism influences the approach and model, not the content. For this to happen, a multi-level governance mechanism needs to be introduced into the system so that information goes through several levels of rigorous reviews before it is deemed publishable.

We can see from the above discussion that there are many components that would need to be built to fit into the proposed architectural framework. Certainly, not all can be accomplished in a short period of time. A systemic approach is needed to reach the end goal. Earlier in this chapter, I discussed that our approach to the ePH system

with Critical Systems Thinking (CST) put our framework under the postmodern systems thinking within the scope of the System Of Systems Methodologies (SOSM). In addition, the proposed architectural framework is also partly influenced by the network-based distributed computing paradigm. (Distributed computing refers to a system with more than one processor and/or storage that is distributed over multiple computers for a certain task: Attiya and Welch 2004). Rather than taking a software process approach to distributed computing, a systems approach is taken here to identify different functional components in a distributed fashion. It can be said that our approach then is a hybrid of an N-tier architecture (Manuel and AlGhamdhi 2003) and a peer-to-peer architecture (Oram 2001) when we consider both the functional and sub-functional components of our proposed framework. (An N-tier, typically a three-tier architecture, in a distributed software system is a client–server architecture that includes a middle-tier that processes a client’s request to forward to the appropriate server, for example, a database server. In a peer-to-peer architecture, an entity can serve both as a client and as a server at the same time, i.e. it is a server to others while it can take turns to be a client to request from others).

It is important to point out that neither the SOSM nor the distributed computing addresses the actual development of the overall computing system to reach the end goal. Given that many components are not going to be ready in short time intervals (both from a logistics and from cost point of view), the actual system development should be a spiral-like approach. The spiral model is a well-known model for software development and enhancement (Boehm 1988). In this case, the spiral model also encompasses design decisions and enhancement. Here the end goal is not fixed; it will evolve with time as new issues in Public Health need to be addressed. Thus, the design phase from the architectural framework must be extensible with a spiral-like fashion, as opposed to a design for a purely closed-loop system.

Finally, a comment on the actual communication technology for Internet connectivity. Depending on different parts of the country, the network connectivity may not be the same; in fact, certain areas may have very low bandwidth network connectivity. Thus, in such cases, both the User Interface end as well as the Request Interpreter would need to have bandwidth-aware intelligence so that the response provided is not bandwidth consuming. This would require customisation functions as appropriate.

12.9 Reflecting on the ePH

The ePH proposed in this chapter is an attempt to address the Public Health information requirements for the diverse population of India. It was realised at the outset that given the uniqueness of the Indian context and the challenges discussed associated with this context, the ePH would have to be designed in such a way that it is able to accommodate the contextual variety and complexity, rather than underplaying and simplifying the same. Taking a critical systems approach, the postmodernist style was adopted that led us to consider a range of design variables and see how these can be coherently understood within a conceptual framework. A range of challenges that

could emerge for the framework was also considered—a style that again emerges from postmodernism and critical thinking that encourages self-critique and paves the way for challenging one’s own thinking. This lends the idea that there is no absolute truth, but truth is what we create as humans out of our own impressions of the situations around us. We considered our ePH framework as an impression, open to debate and questioning. The attempt has been to propose a framework that is likely to be able to accommodate changing demands and situations as they emerge in the model of a complex adaptive system, taking cues from a critical systems approach. This has been considered with the proposed integration of feedback loops, spiral design and a distributed computing paradigm. In so doing, an attempt was made to bring together various design parameters, including involvement of diverse stakeholders both in the planning and implementation stages. A critical systems perspective has enabled us to approach the ePH architectural framework in the light of the above considerations.

The stance we took enabled us to be guided by a set of criteria that would make the ePH relevant and empowering to one and all. These criteria are (Cordoba-Pachon and Orr 2010):

- **Dealing with marginalisation:** The information society on one had comes with all its benefits and promises, and on the other hand has the power to “leave behind” the citizenry if planners are not sensitive to its dangers. An informed approach as suggested in this ePH has the power to challenge exclusion and marginalisation and can bring into the fold diversity pertaining to sociocultural and economic realities.
- **Critically informed planning:** This visionary architectural framework challenged mental models from the perspective of feasibility and current reality. Yes, the technology itself has to catch up to make several of the features real here, but this did not deter us to create a model that is futuristic and not completely undoable. Hence, we suggested to start with a spiral development approach so that advanced features can be added on to the ePH with due technological developments and learning as we go along the implementation process. Such visionary planning needs critical thinking, grit and humility.
- **Including opposing views in debate:** Given the sociocultural nuances that India presents, we suggested critical systems methodologies that can bring together opposing views and help planners and citizens arrive at agreeable resolutions. We need to be aware of both intended and unintended consequences of technology implementation and bring in the power of dialectics to resolve situations whenever conflicts arise. Linear planning does not work in such situations and it needs openness to continual debate, creating engagement and embracing change.

I borrow Table 12.1 from Cordoba-Pachon and Orr (2010) that talks about these criteria to develop alternative approaches to planning.

Table 12.1 can also serve as a ready reckoner for government agencies working in the field of Public Health planning and for e-governance in general. Technology can either be an enabler for equity and access or it can be a separator and divider, depending on how technology-enabled systems are conceptualised, designed and

Table 12.1 Criteria to develop alternative approaches to planning (Cordoba-Pachon and Orr 2010; p. 60)

Criteria	Description
Dealing with marginalisation	Enabling continuous assessment of who is (to) benefited and marginalised from the process, as well as what is to be considered relevant as the content of plans
Critically informed planning	Enabling questioning the neutrality of planning tools, sources of expertise and effects of planning outcomes in groups of people
Including opposing views	Embracing both the intended and unintended potential and actual impacts of plans and policies

delivered. The ePH architectural framework presented here is an attempt to align with the former potential. Realising the reality of the ePH system presented here can contribute significantly towards the government's e-governance agenda from the perspective of Public Health.

To draw this chapter to a close, I refer to Das and Chandrashekhar (2006), who talk about how e-governance can contribute towards governance, public services and management. They highlight the advantages of e-governance in the following classifications (Das and Chandrashekhar 2006):

Governance

- Transparency,
- People's participation and
- Promotion of a democratic society.

Public services

- Efficient, cost-effective and responsive governance,
- Convenient services to citizens and businesses,
- Greater citizen access to public information and
- Accountability in delivery of services to citizens.

Management

- Simplicity, efficiency and accountability,
- Managing voluminous information and data effectively,
- Information services and
- Swift and secure communication (p. 4).

The ePH presented here can contribute towards adequate governance through the proposed transparency and accountability, enhance public services by democratising health information, and finally ease management by bringing in speed and simplicity in managing complex information.

12.10 Conclusion

This chapter presented a deliberation on electronic Public Health (ePH) and e-governance with a contextual reference to India due to the complexity and diversity the country provides. I leveraged postmodernist systems to build on the deliberations. I first published this architectural framework by Professor Deepankar Medhi in 2010. This chapter presented a further deliberation of the same with perspectives from critical systems thinking and e-governance.

I first elaborated on what we understand by Public Health and then discussed the challenges in terms of diversities that are posed by India as a country. The challenges and nuances of public health in India were discussed in detail highlighting some key developments in the space of technology-enablement in the health setting. I then elaborated, why as a result of this, systems thinking and approaches can lend a perspective to work towards an architectural framework for the ePH in India and considered how this can be woven into the e-governance framework of the country. I lead a detailed deliberation on ePH and e-governance. I delved into the architectural framework in detail elaborating on its features and components, and presented an argument in favour of public engagement for the system development. Finally, I touched upon some of the challenges of the ePH that need to be considered during the implementation of the ePH.

Although we took India as the case-in-focus, this framework can be replicated and adapted to other countries with similar situations or with a similar stage of economic development, where challenges posed by illiteracy, ignorance and lack of access may be of a similar nature.

It needs to be considered that given the fact that this framework has been evolved in a context where there is considerable complexity in the absence of any such prior framework at the national level, it is likely to face certain challenges in its implementation (some of which are already articulated in this chapter). Along with this, it is probable that there will be certain critiques of this framework itself. The approach presented does have an affiliation with the postmodernist point of view, but at the same time, only two variables of the systems design have been considered—language and literacy. This approach needs to be widened with the inclusion of further variables in the systems design. Language and illiteracy were the two major variables identified for this stage of a zero-based design for the ePH.

References

- Attiya H, Welch J (2004) *Distributed computing: fundamentals, simulations, and advanced topics*, 2nd edn. Wiley-Interscience, Hoboken, NJ
- Bannister F, Connolly R (2012) Defining e-Governance. *E-Serv J* 8(2):3
- Bloomfield BP, Coombs R (1992) Information technology, control and power: the centralization and decentralization debate revisited. *J Manag Stud* 29 (4):459-459

- Boehm B (1988) A spiral model of software development and enhancement. *IEEE Comput* 21(5):61–72
- Castells M (2004) Informationalism, networks, and the network society: a theoretical blueprint. In: Castells M (ed) *The network society: a crosscultural perspective*. Edward Elgar, Northampton, MA, pp 3–48
- Chowdhury R (2006) *The information Messiah: issues and debates within the NHS*. Working papers in social sciences and policy, No. 15, University of Hull, Hull
- Chowdhury R, Butler RE, Clarke S (2007) Healthcare IT project failure. *J Cases Inf Technol* 9(4):1–15
- Chowdhury R, Medhi D (2010) E-system for public health in India: towards an architectural framework incorporating illiteracy and linguistic diversity. In: Cordoba-Pachon JR, Ochoa-Arias AE (eds) *Systems thinking and e-participation: ICT in the governance of society*. Idea Group, Hershey, pp 69–91
- Chowdhury R, Nobbs A (2008) Critical insights into NHS information systems deployment. In: Jemielniak D, Kociatkiewicz J (eds) *Management practices in high tech environments*. Idea Group Inc., Hershey, USA, pp 245–264
- Cohen C, Midgley G (1994) *The North Humberside diversion from custody project for mentally disordered offenders: research report*. Centre for Systems Studies, Hull, England
- Contini F (2009) ICT, assemblages and institutional contexts: understanding multiple development paths. In: Contini F, Lanzara GF (eds) *ICT and innovation in public sector*. Palgrave, London, pp 244–271
- Cordoba-Pachon JR (2010) *Systems practice in the information society*. Routledge, Oxon and New York
- Cordoba-Pachon JR, Ochoa-Arias AE (2010) Searching upon the limits of e-government and e-participation: a systemic appraisal. In: Cordoba-Pachon JR, Ochoa-Arias AE (eds) *Systems thinking and e-participation: ICT in the governance of society*. Idea Group, Hershey, pp 69–91
- Cordoba-Pachon JR, Orr K (2010) Shifting discourses on e-government: from piecemeal planning to boundaries and traditions. In: Cordoba-Pachon JR, Ochoa-Arias AE (eds) *Systems thinking and e-participation: ICT in the governance of society*. Idea Group, Hershey, pp 55–67
- Cordoba-Pachon JR, Robson W (2008) Power and ethics in IS evaluation. In: Jemielniak D, Kociatkiewicz J (eds) *Management practices in high tech environments*. Idea Group, Hershey
- Das SR, Chandrashekar R (2006) Capacity building for e-governance in India. UNDP Asia-Pacific Development Information Programme. <http://www.apdip.net/projects/e-government/capblg/casestudies/India-Chandrashekar.pdf>. Accessed 21 July 2008
- Dasgupta M (2005) Public health in India: an overview. World Bank policy research working paper 3787, New Delhi. http://www.wds.worldbank.org/servert/WDSContentServer/WDSP/IB/2005/12/02/000016406_20051202162921/Rendered/PDF/wps3787.pdf. Accessed 13 Sept 2006
- D’Cunha SD (2017) Despite a booming economy, India’s public health system is still failing its poor. <https://www.forbes.com/sites/suparnadutt/2017/09/12/despite-a-booming-economy-indias-public-health-system-is-still-failing-its-poor/#246bd54378e0>. Accessed 15 Oct 2018
- Donner J, Gandhi R, Javid P, Medhi I, Ratan A, Toyama K, Veeraraghavan R (2008) Stages of design in technology for global development. *IEEE Comput* 41(6):34–41
- Dooley K (1995) A complex adaptive systems model of organizational change. *Nonlinear Dyn Psychol Life Sci* 1(1):69–97
- Emmeren FHv (2003) *Anyone who has a view: theoretical contributions to the study of argumentation*. Argumentation library, vol 8. Kluwer Academic, Dordrecht, p 92
- Fahey DK, Carson ER, Cramp DG, Muir Gray JA (2004) Applying systems modelling to public health. *Syst Res Behav Sci* 21:635–649
- Farrell D, Beinhocker E (2007) Next big spenders: India’s middle class. *McKinsey Global Institute Business Week*. <http://www.mckinsey.com/mgi/mginews/bigspenders.asp>. Accessed 05 Jan 2008
- Feenberg A (1992) Submissive rationalisation: technology, power and democracy. *Inquiry* 35(3/4)
- Foucault M (1972) *Power/knowledge: selected interviews and other writings 1972–1977*. Edited by Colin Gordon. Pantheon Books, New York

- Garai A, Shadrach B (2006) Processes and appropriation of ICT in human development. In: Rural India: bridging the research and practice gaps. http://www.dgroups.org/groups/oneworld/OneWorldSA/docs/TICTEIV_pdf.pdf. Accessed 15 Aug 2009
- Gregory W (1999) OR practitioners and facilitators—a health case study. Paper delivered at the AGM of the Operational Research Society Health and Social Services Study Group
- Jain N (2018) 7 ways public health in India has changed over the last decade. <https://www.path.org/articles/7-ways-public-health-india-has-changed/>. Accessed 23 Oct 2018
- Joshi A (2008) e-governance in India. <http://indiaegovernance.blogspot.com/>. Accessed 18 January 2012
- Kanungo, V (2004) Citizen centric e-governance in India: strategies for today, vision for future. Society for Promotion of E-Governance. Languages of India, New Delhi. Retrieved June 22 2008 from http://en.wikipedia.org/wiki/Languages_of_India
- Karmali, N (2018) India's richest 2018: Mukesh Ambani adds another \$9.3 billion to retain top spot. <https://www.forbes.com/sites/naazneenkarmali/2018/10/03/indias-richest-2018-mukesh-ambani-adds-another-9-3-billion-to-retain-top-spot/#18634c1db6ea>. Accessed 17 Oct 2018
- Layne K, Lee J (2001) Developing fully functional e-government: a four stage model. *Gov Inf Q* 18:122–136
- Leischow SJ, Milstein B (2006) Systems thinking and modelling for public health practice. *Am J Public Health* 96(3):403–405
- Maani KE, Cavana RY (2000) Systems thinking and modelling: understanding change and complexity. Prentice Hall, Auckland, New Zealand
- Manuel PD, AlGhamdi J (2003) A data-centric design for n-tier architecture. *Inf Sci* 150:195–206
- Mattelart A (2003) The information society: an introduction. (trans: Taponier S, Cohen J). Sage, London
- McTaggart JME (1964) A commentary on Hegel's logic. Russell & Russell, New York
- Medhi I, Kuriyan R (2007) Text-free UI: prospects for social inclusion. In: Proceedings of international conference on social implications of computers in developing countries, Brazil
- Medhi I, Pitti B, Toyama K (2005) Text-free UI for employment search. In: Proceedings of Asian applied computing conference, Nepal
- Medhi I, Sagar A, Toyama K (2006) Text-free user interfaces for illiterate and semi-literate users. In: Proceedings of international conference on information and communication technologies and development, Berkeley, USA
- Medhi I, Toyama K (2007a) Full-context videos for first-time, illiterate users. In: Proceedings of ALT. CHI forum at ACM CHI '07, San Jose, USA
- Medhi I, Toyama K (2007b) Full-context videos for first-time, non-literate PC users. In: Proceedings of IEEE/ACM international conference on information and communication technologies and development, Bangalore, India
- Midgley G (2006) Systemic intervention for public health. *Am J Public Health* 96(3):466–472
- Niedzwiedzka B, Czabanowska K, Śmietana R (2008) Controlled vocabulary in public health: an overview of the achievements to date. *J Public Health*. <http://www.springerlink.com/content/31-5862w47215-m058/>. Accessed 25 Nov 2008
- Ochoa-Arias AE (2010) Technology and government: the pursuit of governmental technologies in the present. In: Cordoba-Pachon JR, Ochoa-Arias AE (eds) Systems thinking and e-participation: ICT in the governance of society. Idea Group, Hershey, pp 22–32, 69–91
- Oldfield P (2002) Domain modelling. <http://www.aptprocess.com/whitepapers/DomainModelling.pdf>. Accessed 25 Nov 2008
- Oram A (2001) Peer-to-peer: harnessing the benefits of a disruptive technology. O'Reilly & Associates, Sebastopol, CA
- Sherwani J, Ali N, Mirza S, Fatma A, Memon Y, Karim M, Tongia R, Rosenfeld R (2007) HealthLine: speech-based access to health information by low-literate users. In: Proceedings of IEEE/ACM international conference on information and communication technologies and development, Bangalore, India

- Stump E (1989) *Dialectic and its place in the development of medieval logic*. Cornell University Press, Ithaca, NY
- Sudhir V, Srinivasan G, Muraleedharan VR (1997) Planning for sustainable solid waste management in urban India. *Syst Dyn Revolut* 13:223–246
- Taket AR, White LA (2000) *Partnership and participation: decision-making in the multiagency setting*. Wiley, Chichester
- Toffler A (1992) *Power shift: knowledge, wealth and violence at the edge of the 21st century*. Bantam Books, London
- UN India (2018) India ranks 130 on 2018 human development index. <http://in.one.un.org/un-press-release/india-ranks-130-2018-human-development-index/>. Accessed 15 Oct 2018

Chapter 13

Micro-insurance and Community Engagement



13.1 Introduction

In 2018, I published a paper with Dr. Nihar Jangle (Advisor, Climate Risk Insurance, GIZ Germany) in the *Global Journal of Flexible Systems Management*, in which we introduced a conceptual framework for the application of Critical Systems Thinking (CST) in micro-insurance from a community engagement perspective (Chowdhury and Jangle 2018). This followed an overall literature research that revealed that there was no previous research on approaching micro-insurance from a CST perspective; neither was there any evidence of the formal application of CST in design and implementation of micro-insurance schemes. Our framework was inspired by flexibility in systems design. Application of CST enables the system to be consciously agile and flexible so that it is adaptive and sustainable for the long run. We took the micro-insurance deployment model of the Micro-insurance Academy (MIA) in India as a reference for our work.

The case in discussion here is community-based micro-insurance. Community-led insurance models facilitate creation of a monetary corpus that can support families against unforeseen circumstances. The community underpins the success or failure of such models due to their very nature of operations. CST can lend a strong perspective for design and implementation of community engagement frameworks for micro-insurance due to its focus on challenging boundaries, application of flexible intervention methods and the innate desire to work towards the betterment of people.

In this chapter, I will present a critique of the arguments put forward in the paper mentioned above. I shall revisit the conceptual model that was earlier proposed in light of more recent deliberations I have had with the Founder of MIA, Dr. David Dror, and his colleagues. My discussions in this chapter will highlight a

Parts of this chapter have appeared previously in “Critical Systems Thinking Towards Enhancing Community Engagement in Micro-insurance” authored by Rajneesh Chowdhury and Nihar Jangle (2018). *Global Journal of Flexible Systems Management*; 19(3); pp. 209–224. Reprinted with permission from the publisher.

more qualified case for community engagement in micro-insurance; I will also discuss how the existing MIA model brings together a seamless combination of both hard and soft systems to address some of the most pressing socio-economic issues that exist in rural India. My discussions will reiterate the necessity of a CST approach for successful community-based micro-insurance schemes.

13.2 Setting the Context

The insurance market in India has witnessed rapid growth over the last decade fuelled by increasing awareness and customer sensitisation, product innovation and positioning, and multiple channels of market penetration by insurers. According to the India Brand Equity Foundation (2018), the insurance market is slated to reach USD 280 Billion in India by 2020. A growing middle class and increased financial literacy have provided a strong impetus for people to enrol more in insurance schemes.

The government can play a significant role in popularising insurance mainly through mandate or through subsidisation. A mandate requires a compulsory subscription to an insurance scheme, which is true for vehicles in India as an example. A subsidy is a financial waiver that lowers the premium amount for a subscriber with the difference being paid by the government, as it happens in the case of crop insurance for farmers in India. True that both mandating and subsidisation can bring a large number of people into the insurance fold; more so true for low-income groups when it comes to subsidisation. However, there are limits to both these models and community-based micro-insurance offers an alternative approach to extend the benefits of insurance to population segments that may not have the financial backing or access to otherwise subscribe to insurance schemes.

13.2.1 What Is Micro-insurance?

For the purpose of this paper, the term micro-insurance will be understood as defined by Dror and Jacquier (1999): “micro refers to the level of society where the interaction is located, i.e. smaller than national schemes, and insurance refers to the economic instrument. A more accurate descriptor of the proposed concept might perhaps be voluntary group self-help schemes for social health insurance. For ease of reference we suggest calling it micro-insurance” (pp. 77–78). By characterising micro-insurance as voluntary, group-based and self-help insurance, Dror and Jacquier (1999) focus on the process rather than on the socio-economic profile of the clientele or product characteristics. There are several models of micro-insurance that can exist from a service delivery perspective. The scheme that has been considered in this chapter follows a mutual/cooperative model. In such cases, the policyholders own the scheme, pool the risks among themselves; they are involved in product design and awareness creation, and are responsible for claims management. The policyholders are from the

local community sharing common value systems and characteristics, e.g. members of a Self-Help Group (SHG) federation or a cooperative. In such schemes, membership is voluntary, and the business model is inclusive and not for profit. The scheme considered in this chapter aligns to the definition of micro-insurance as defined by Dror and Jacquier (1999). Given the very definition of micro-insurance considered here, community engagement becomes a crucial factor for the success of the scheme as it is essentially owned and managed by the community itself.

13.2.2 Setting the Importance of Community Engagement

Community-based micro-insurance models operate in local settings where local solutions are driven by local actors. In such situations, there is a need for operations research/management science applications that are of a local nature and that reflect the realities of community life (Johnson 2012). Going by the very model of micro-insurance considered for this chapter, community engagement lies at the heart of success for such schemes. The community where the scheme is implemented needs to be involved, consulted and engaged in an intense and robust manner throughout the process. Being cognizant of the societal, religious and local issues is pivotal for the facilitators in driving the scheme to success. Community members need to be involved through the design and implementation process. Trust needs to be created through a sense of co-ownership and shared responsibility. Local communities need to be involved in setting up of guidelines that align with their norms and belief systems. Dror and Firth (2014) argue that in low- and middle-income countries the decision to buy insurance is not an individual, but collective. This adds more to the reason of why the community needs to be engaged.

The relation between community engagement and success of developmental schemes is not a subject of debate. However, it is important to note that the term engagement here does not refer to mere seeking opinions about what the community wants; it rather relates to empowering the community to make informed decisions and enable it to act as the agent of change for their own betterment. Here, a higher order of participation is referred to, which is about “empowering people to mobilise their own capacities, be social actors, rather than passive subjects, manage the resources, make decisions, and control the activities that affect their lives” (Brett 2003; p. 5). This perspective of engaging the community is important for this context because in a mutual/cooperative micro-insurance model it is the community that has to manage the scheme operationally, and the implementing agency just becomes a facilitator.

13.3 Critical Systems Thinking (CST) and Micro-insurance

A community exists in a complex ecosystem where there are multiple social, political and economic variables. To understand the interplay between communities and micro-insurance schemes better, a critical perspective needs to be undertaken so

that pre-set boundaries are proactively critiqued, established mindsets are constantly questioned and prescriptive approaches are challenged in the interest of greater agility and flexibility. Hence, a Critical Systems Thinking (CST) perspective can contribute significantly to understanding of community engagement in the select scheme that is considered. CST drives the fundamental commitments of boundary critique, pluralism and emancipation (discussed in detail in Chap. 3).

Bringing a CST mindset helps the interventionist to be flexible and accommodative in the system design. It helps the interventionist to approach the problem situation and design the system with more openness so that it is agile and adaptive for changing requirements. In the insurance environment, where uncertainty is the only certainty, there cannot be rigid structures to understand and intervene in the system. Issues and structures need to be looked at as a continuum, bringing in optimal methods and interventions with different steps, when required. Going by the definition of micro-insurance chosen for this chapter, the community is at the heart of the scheme. Also, the very same community is one that is at threat to be marginalised and not have equal access to life opportunities, the reason for which micro-insurance is relevant.

Working in a community scenario may present several challenges. Comprehending the situation itself is often ambiguous. Societal norms are often unstated yet stubborn. Behaviour patterns can seem unpredictable for an outsider. Let alone the volatility of the threats themselves that micro-insurance is trying to address. In such a situation, being able to stay flexible and agile is of paramount importance.

CST brings in a perspective that transcends both functionalism and interpretivism (these perspectives are discussed in Chap. 3) that can accommodate flexibility and agility in system design, informed with the values of justice and inclusion.

The reference case chosen for this discussion is based in India. The country itself offers a range of cultural sensitivities and uniqueness, given that it is bound in strong traditions and belief systems. These conditions still define the role of individuals within the community based on their gender, age, religion and caste. This in turn presents its own challenges in the part individuals play in the design and implementation of any scheme.

The context under consideration presents probable conditions most necessary for the adoption of CST—the situation is “messy” with multiple societal variables, where no one method can address the requirement of a holistic and effective community engagement model, and at the core of the model lies the objective of empowerment and improvement.

13.4 Understanding Micro-insurance Implementation Model

I ventured into this project by accident when I was discussing specific nuances of micro-insurance schemes being led by my (then) collaborator, Dr. Nihar Jangle, who was at that time Director at the Micro Insurance Academy (MIA). Based out of New Delhi (India), MIA is a leading global agency in the micro-insurance domain.

MIA seeks to bring insurance solutions to some of the world's most vulnerable communities. The organisation provides technical expertise to help design, implement and scale micro-insurance schemes. Its expertise includes research, implementation, advisory and insurance education. MIA has been serving four risk categories: health, life, crop and livestock, across various countries in Asia and Africa. MIA was founded by Dr. David Dror.

What excited me about my discussions with Dr. Jangle was how one of MIA's flagship projects, Climate Resilience through Risk Transfer (short form: RES-RISK), could bring about a sort of a positive social movement by increasing financial literacy and bringing substantially more people into the insurance fold primarily through community engagement. Prior to the initiation of RES-RISK, only 22.9% of target households in Bihar and 5% of those in Maharashtra were insured. These statistics radically increased to 47.2% and 32.8%, respectively, after MIA's intervention. Financial illiteracy, misconceptions and lack of trust were understood as primary hindrances for people to enrol themselves into insurance schemes.

Through my discussions with Dr. Jangle, I learnt that informal networks played a significant role for MIA in entering the community and understanding of local norms and values, which in turn acted as tools of paramount importance for the team. The MIA team also realised that the people in the communities had an inherent culture of risk sharing, where there was a lack of proper access to well-functioning insurance and credit markets. People were seen to be leveraging informal arrangements such as gift exchange, rotating savings and cross lending to support one another during hard times. This was a way for members to mitigate one another's risks. Within the community, people would always go to their friends and families as a first port of call for support in any financial hardships.

The particular scheme that has been taken up for reference in this chapter was based in Hajipur and Bidupur blocks in Vaishali district in the Eastern Indian state of Bihar. The implementation of the scheme was part of a larger project that was mandated by the Swiss Agency for Development and Cooperation (SDC), represented in India by the Climate Change and Development Division (CCD) of the Embassy of Switzerland, New Delhi. Called RES-RISK, this project aimed at enhancing community resilience to climate change and variability through the design and implementation of micro-insurance solutions. The overall project areas covered selected blocks in Vaishali and Muzaffarpur districts in the state of Bihar and Beed district in the state of Maharashtra. For the purpose of this discussion only the scheme in Vaishali is considered, where MIA partnered with a Non-Governmental Organisation (NGO) called Nidan for implementation of the project. The project started in 2012 with the field implementation.

Vaishali harboured communities rich in social capital including women's Self-Help Groups (SHG), organised around common interests. The SHGs represented change agents that focused on social and financial challenges in the community and mobilised resources to address the same by coevolving solutions. The NGO, Nidan, had been working for many years in several districts in the area. Nidan had an established credibility and was known to have served as a catalyst in the area by facilitating collective action and supporting structures which catered to the needs of the underprivileged.

MIA follows a nine-step implementation model for micro-insurance (Business Process Handbook, MIA 2015). These steps are: engage the community, identify the risk, appraise the risk, insurance education, selection of benefits package, setup of operating infrastructure, scheme enrolment, handholding and phaseout.

Through my discussions with Dr. Jangle, we realised that there were considerable overlaps between the steps. Often there was also confusion between the terminology of a step and what actually happens as part of the step. However, undertaking a critical analysis of the steps and recommending a refined model for MIA are outside the scope of this chapter. This discussion solely focuses on the experiences of community engagement throughout the implementation model. Technical detailing of the insurance scheme is outside the scope of discussion, and hence is not detailed out here.

In the following discussion, each of the steps has been defined and reflections are drawn from experiences from the RES-RISK scheme in Vaishali, specifically focusing on community engagement approaches, methods and impact. I will also refer to how specific methodologies and tools deployed by MIA were highly systemic in nature without having an obvious categorisation as systems methods.

13.4.1 Engage the Community

The foundation of the RES-RISK scheme was well laid in early 2012. MIA and Nidan agreed to enter into a Memorandum of Understanding (MOU) for the implementation of the scheme in Vaishali district. MIA employed one field manager located in Bihar State and Nidan allocated up to ten field coordinators to work for the implementation of the project.

MIA and Nidan brought together SHG representatives and community leaders for initial information sharing sessions about the objectives of the RES-RISK project; the concept of community-based micro-insurance and how it could help the community was shared. Interactive knowledge sharing sessions were carried out by the team with the community by the aid of PowerPoint presentations. MIA also conducted Focus Group Discussions (FGDs) to get initial impressions about the risks related to health, crop and livestock faced by the community, and their interest in the proposed approach.

Entering the community was the most challenging part as there needed to be trust and mutual understanding between both the change catalyst (MIA) and the community. In the case of the RES-RISK scheme, Nidan was already working with SHGs in the community; this greatly helped in easing the process.

Once the SHG and community representatives bought into the idea of micro-insurance, the next challenge was to bring the rest of the community on board. This was done by training the field staff on how to engage with the community and discuss topics related to risk and micro-insurance. Orientation workshops were carried out that included general information about the importance of insurance in their specific context, interactive question-and-answer sessions and through various games.

13.4.1.1 CST Perspective

The MIA team appreciated the nuances in the local situation and realised that a collective spirit enabled better community buy-in and support. Local residents in the village were used to personal subjugation and financial alienation at the hands of powerful moneylenders. In addition, there was a growing mistrust in commercial schemes due to inability to understand clauses of such schemes and being let down by large formal organisations at the time of actual claims. Such factors amplified hardships in individual families rather than helping them cope with hardships, the sole premise in which they would have associated with a moneylender or formal organisation at the first place. MIA recognised that the way to gain trust and break into the community was by challenging established status quo and educating residents on the power of the “we” versus “me” terms. If individual families had to approach moneylenders and formal organisations independently, they would be at the mercy of the powerful and would probably have an extremely low power leverage with respect to an external body. Hence, MIA educated the village residents on the advantages of forming groups and that could be better informed, be able to see a wider range of choices due to collective capabilities and would allow the poor to voice their needs against power odds.

Women’s participation was leveraged as a powerful mechanism to engage with and mobilise families. Vaishali was plagued with gender inequality where the position of men and women in the community was not just situated “differently” but also “unequally”. This ideology lands women to “get less of the material resources, social status, power and opportunities for self-actualisation than men do who share their social location” (Ritzer 1996; p. 449). Such ideologies put women at a position of inferiority and oppression where they are deprived from decision-making and access to resources. This is a vicious cycle that reinforces itself overtime.

MIA’s approach also served the unintended consequence of empowering women in a conventionally male-dominated setup. I shall discuss this more as we go through the case narration.

13.4.2 *Identify the Risk*

Once the specific intervention area and target community were identified, the second step was to capture the socio-economic profile of the community, identify the risks, understand their risk-coping strategies (financial and non-financial) and assess their need and demand for micro-insurance. Based on this assessment, initial operating imperatives were formed for the establishment of the micro-insurance scheme.

For the RES-RISK project, this step was carried out through a baseline survey which combined quantitative and qualitative techniques and collection of secondary data. For the quantitative study, a survey agency was appointed to carry out a baseline survey covering over four-thousand households. The survey collected data around household composition, education, income and expenditure, practices in agriculture

and livestock husbandry, health-seeking behaviour and risk-coping mechanisms. A quality assurance process was institutionalised and the field staff was trained to monitor the data collection and sanity.

As part of the qualitative study, FGDs, Question-and-Answer (Q&A) sessions and Key Informant Interviews (KIIs) were carried out.

Community members had a lot of queries for the field staff. These queries normally centred around the premium amount, frequency and the extent of coverage of the scheme. There was an initial preference for coverage of high-frequency events, such as medicine and consultation costs, but it was explained to the community members that these risks are better dealt with differently than with insurance. There were also trust-related concerns and operations-related questions, such as who will do what. The more the community members understood the model, the more specific questions came up. By giving specific responses to the questions and relying on the relationship with Nidan, the community members finally showed interest in participating in the scheme in the model that was presented.

As an outcome of this step, the overall risk exposure and coping capability of the community were understood in depth.

13.4.2.1 CST Perspective

The participatory nature of the model eased the risk assessment process. The interviewers were able to immerse themselves in the community due to mutual familiarity and trust. In any previous instances that involved discussions around financial provisions, lack of trust and transparency played a significant role in hampering constructive participation and beneficial outcomes for the community. The MIA model overturned power dynamics by bringing power directly at the hands of the community. Previously, residents in the village ended up signing contracts (if at all) that were unfavourable to them, or they were unable to fight for their rights at times when required. The MIA model engaged with the community through informal networks that existed with tried-and-tested institutions of the village to understand their risks collaboratively. The community saw familiar people who they could trust assessing their own risks. This drove away the fear of alienation and isolation, and allowed the community to share their responses openly in an inclusive and non-intimidating environment. Mutual networks and unwritten rules worked better in the situation and were based on the individual's local reputation that worked better than the formal structures.

In a way, MIA applied a participatory action research model where the interventionists worked alongside the community to understand their own situation better that would enable them to work towards their own betterment. Communities felt the ownership and that was likely to sustain for the rest of the process. Support was anchored bottom-up.

MIA's leveraged "soft" techniques to assimilate "hard" data about current financial status, risks, expenditure patterns and premium calculation estimates as part of the baseline study. This demonstrated openness and flexibility in MIA's approach itself

that could bring in a highly technical subject like insurance into an engagement medium with locals.

13.4.3 Appraise the Risk

This stage was about bringing in risk modelling for actuarial pricing of health benefits, crop index insurance and livestock mortality insurance by using locally relevant data, derived from the baseline and secondary sources, and not just relying on country- or regional-level average data. The baseline study provided local data on frequency and severity of costs generating health events to be potentially covered through health benefits (e.g. hospitalisation, lab testing, imaging, transportation and wage loss). The baseline also provided estimates on the mortality rate of livestock required for pricing of its cover. The design of the index-based crop insurance for the most important crops was based on secondary data for weather and crop yield, interactions with farmers from the intervention area and with agricultural specialists from local agricultural universities.

MIA deployed their in-house developed Treasure Pot game, which is played in group settings within the communities with locally available material. The game is played in four rounds to bring awareness to participants of the ups and downs associated with risk pooling should the community/family be hit with any adverse circumstance. This also brings home the message of the benefit of a community-owned fund as a viable solution for members.

To prevent the community-based insurance schemes face the risk of running out of money because of such covariate risk exposure, and also due to regulatory obligations that require to place risks of this nature with a licensed insurer, MIA first calculated the premium that fairly reflects the local risk, and then explored with several licensed insurers an agreement for them to accept to cover the risk on behalf of the community through group contracts. Health risks were not transferred to the commercial insurer, but fully pooled within the community, while crop risks were fully underwritten by the insurer. Livestock risks were partially pooled, partially transferred to the insurer.

13.4.3.1 CST Perspective

MIA brought in specialist knowledge with agriculture experts and academics to provide technical inputs into the risk modelling. This was in spite of in-house expertise present within the team. This demonstrated the organisation's willingness to be critical towards its own knowledge and bring in multiple perspectives to arrive at a strong value proposition for the community. MIA also gamified highly complex concepts to make them palatable and manageable for the community. Deployment of gamified techniques helps taking participants to an abstract plane of understanding that in turn aids them in formulating thoughts coherently and with clarity.

Considerable persuasion was required in part of MIA to bring on board licensed insurers into an agreement of risk acceptance through group contracting. This was another instance of the intervention to optimally intersect both hard and soft approaches to arrive at a win-win model for the community and the insurers.

13.4.4 Insurance Education

This is the step that covered all the activities from design of business processes, benefits packages, creating awareness tools and conducting the awareness campaign. Many of the activities included conducting training workshops in Vaishali with representatives of the community and the field partner.

During the business design workshop, the project team explained to the participants the business processes of the micro-insurance scheme. The training covered the ground structure required to run the scheme, roles and responsibilities of key functionaries, processes related to enrolment and claims management. The participants were requested to give feedback to fine-tune the business processes to local needs. They were also involved in planning the ground structure, i.e. how many claims committees were required and what SHGs they represented. Claims committees were comprised of SHG representatives and were responsible for taking claims decisions.

The objective of the benefits options consultation workshop was mainly to come up with four to five benefits package options for the health cover to be used in a consensus building exercise called CHAT (CHOosing All Together). Once the health risks had been appraised, the team could present a calculator to the community participants. The calculator allowed for seeing the impact on the premium when a health benefits package was changed. For example, health benefits could be added or removed, and for a selected benefit the caps could be changed to match the needs and willingness to pay. The community participants also found consensus on some specifics for the livestock cover. For the crop insurance, no discussion was required as indices were already designed for one to two main crops per season, and farmers could only insure those crops that they cultivated.

13.4.4.1 CST Perspective

MIA largely leveraged women as the community mobilisers. It is an irony that although rural women play a significant role in the agrarian economy (Ahmed and Hussain 2004), women's contribution is not adequately recognised, neither are women given their due rights of decision-making and a fair and equal livelihood (Akinsanmi 2005). Women's participation in decision-making in rural India when it comes to finances has historically been low (Raju and Rani 1991), and the same was also encountered by the MIA team when they initially interfaced with the communities in Vaishali.

The RES-RISK project went into reverse the gender gap and power equation. It achieved this by two ways. First, SHGs leveraged for discussions and participatory appreciation primarily had women as members. Groups of women were sensitised about the importance of enrolling their families into the scheme that could secure a better future for them. Second, it was made compulsory that if any household wanted to subscribe to the scheme, there had to be at least one woman member. This brought health benefits to the women directly as part of a family being covered under the scheme leading to a paradigm shift from a male-dominated system to one where everyone could be included irrespective of their gender. The CHAT Boards were being done by women in their homes and brought back to the MIA team with insurance priorities that in turn helped team in their product design. It was also mandated later that women handled the monetary corpus that was to be paid out during claims payment.

This brought about a near reversal of women's role in the community from being the "dependents" to being the "dependable", as said by Dr. David Dror (founder of MIA) when I interviewed him as an appreciation of the proposed CST models in my previous publication with Dr. Jangle.

13.4.5 Selection of Benefits Package

The benefits package options derived from the benefits options consultation workshop differed in terms of what was covered and the premium it entailed. The options were graphically presented on the so-called CHAT board. CHAT boards were extensively used for the selection of the one benefits package to be provided to the entire community. In the first round, CHAT was played at the local community group level. After the facilitator had explained the benefits packages in detail and played some awareness games, each SHG member was asked to choose a benefits package by marking the choice with a coloured sticker. After a group discussion on the individual choices, the SHG members carried their CHAT boards home to discuss their choice with their household members. They could reconsider their choice after those discussions. About a week later, the group met again for the second round of CHAT, where the group members discussed until they found consensus on the most optimal models that reflected the preference of the entire group. In the third and final round during the benefits package finalisation workshop, all the SHG choices were evaluated and the community had to find consensus on one package for the entire scheme.

This stage is highly interactive and involved creating a relationship of trust with the community. It also created peer pressure that later encouraged all community members to join the scheme.

13.4.5.1 CST Perspective

Benefits package selection was treated as an iterative process that brought in ease and comfort into the community. The MIA team continually engaged with the women from target households and invested significant time in orienting and educating them about options, packages, premiums and benefits. Women were equipped to lead such important conversations in households so that they could influence where and how the family's hard-earned money could be parked as insurance premium. This further empowered the women as "dependable" members in the family.

The CHAT boards clearly earmarked options based on possibilities and probabilities. This was also the first time the adults in the families were exposed to analytical decision-making at such levels where they had to understand base level probability charts and make conscious decisions.

Many factors shape the decision of the rural poor in the purchase of insurance schemes. Such schemes to be attractive, needed to have coverage of multiple risks and not coverage of one risk in isolation. The RES-RISK project included a bundled package of three risks—health, crop and livestock. Beneficiaries could bundle the risks as per their requirements. Bundled risks reduced the cost for insurance coverage; it also reduces supply-side costs due to reduction of duplication and logistics. Health remained the common denominator for members who subscribed to the scheme.

MIA demonstrated flexibility in its community sensitisation approach (soft aspects) and product offering (hard aspects) to enable more informed and better selection of benefits packages.

13.4.6 SetUp of Operating Infrastructure

This is a very critical stage where MIA builds institutional capability for the community to operate and sustain the scheme. Specific committees were formulated with identified roles that operated under a governance structure. The governance structure consisted of the following parameters (details of the governance structure are taken from the MIA Business Process Handbook 2015):

- **Oversight:** Making decisions and ensuring that the rules of the scheme are applied equitably to all the participants.
- **Executive:** Carrying out the activities following rules and regulations.
- **Mediator:** Resolving arbitrating disputes.

The governance structure for a typical scheme (in this case the RES-RISK scheme) is indicated in Fig. 13.1.

Following is a brief description of the governance structure:

- **General Assembly:** Consisted of all enrolled members who owned the scheme. They jointly decided on its operating rules based on mutual understanding and agreement. The General Assembly would decide on the utilisation of the funds

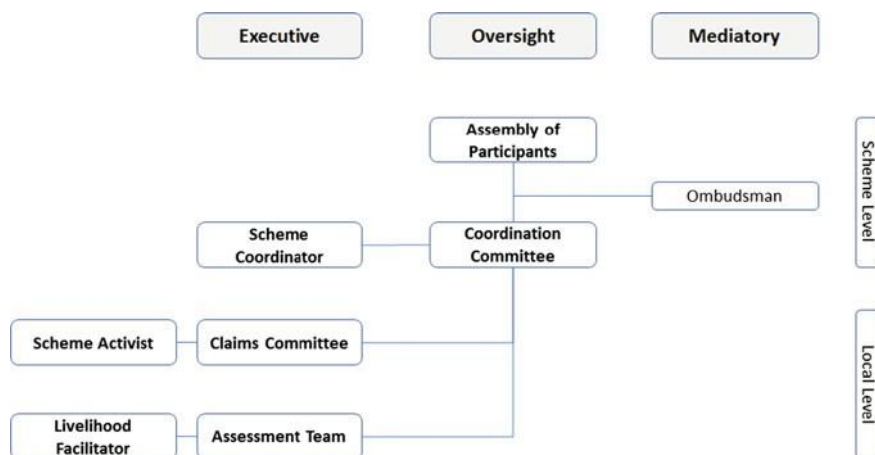


Fig. 13.1 RES-RISK governance structure

in line with the objectives of the scheme. There were specific “key actors” who ran the scheme and would have ownership of smooth operations of the scheme. They would be trained extensively by MIA so that they could carry out their responsibilities.

- **Coordination Committee:** Members of the Coordination Committee set out guidelines for the scheme and made sure that the rules were applied equitably to all. They ensured compliance with the decisions of the General Assembly and would also decide on the remuneration/honorarium for the “key Actors”. This Committee was also responsible for all record keeping and would oversee the functioning of the Claims Committee. The Coordination Committee reported to the General Assembly.
- **Claims Committee:** This resided at the local level to review and decide on the claims, and ensure that claims were paid within specified time. They would also maintain claims-related records for the duration of the cover. The Claims Committee would send a monthly claims status report to the Coordination Committee.
- **Scheme Coordinator:** The Scheme Coordinator would take care of the operational activities such as entering data related to enrolment, claims, participatory note modification, renewal in the MIS and generated reports/documents on demand. They would also maintain the scheme’s books of accounts, keep the bank book and ensure that the account passbook was updated. The Scheme Coordinator acted as a liaison between the internal and external stakeholders.
- **Scheme Activist:** They attend to households directly mobilising community members to become participants. They were involved in awareness creation before and after enrolment, and would help the participants to complete enrolment forms, collect contributions and distribute participant kits before the cover began. They would also help participants file claims and disburse the payout as decided by the Claims Committee.

- **Livelihood Facilitator:** They supported the Claims Committee in enrolment, claims, participatory note modification and renewals. They would also tag the insured animal, maintain records of the tags and update the records at every retagging, claim and participatory note modification. They were responsible for data verification, random checks and reporting. Livelihood Facilitators were responsible for coordinating with the Scheme Coordinator and “key actors” on scheme-related issues.
- **Assessment Team:** Each Claims Committee has one Assessment Team, composed of Scheme Activist, Livelihood Facilitator and two participants from the Claims Committee. This team would carry out livestock market value assessment, and decided on the maximum cover and payable contribution. It would also work with the Scheme Coordinator in resolving any disputes with the external insurer. The Assessment Team reported to the Claims Coordinator on all matters.
- **Ombudsman:** A respected scheme member would act as the Ombudsman. The Ombudsman would be responsible for disputes arbitration between the Claims Committee and the Coordination Committee. The Ombudsman’s role would come into play as the last resort for redressal of grievances. The Ombudsman would keep the General Assembly informed of significant arbitration decisions.

By choice, the RES-RISK scheme, like most of MIA schemes, mainly focused on women as an entry point to the community.

13.4.6.1 CST Perspective

MIA brought in consideration of communication and control elements in its operating infrastructure through a defined governance structure. Expectations, decision-making and reporting relationships were laid down clearly to enable the system function in a smooth and predictable manner. There was delineation of functions in terms of execution, coordination and decision-making. The system could recognise different scenarios and put in place teams and related guidelines for dispute resolution. Reporting mechanisms ensured accountability and process adherence.

Women were empowered to play a leading role in the system. The reason was that women are generally believed to be more reliable when it comes to managing risks, more trustworthy when handling finances and tend to think more holistically about money and risk management than men. That is also the reason for the large SHG and micro-finance movement in India to focus on women. Also, Nidan’s SHGs were all women’s groups. The Claims Committees were also comprised of women. The project not only supported better risk management but also empowerment of women who were trained to assume positions of authority.

The operating infrastructure was able to recognise variety at a certain level, but there is significant scope for greater appreciation of how the external and internal environment operated, understand what would happen if a breakdown occurred, and how to even pre-empt and address any deficiencies in the system. There were no

adequate provisions of external intelligence gathering that is an important element of a learning entity. An audit mechanism and development-oriented function could address such deficiencies, respectively.

13.4.7 Scheme Enrolment

The awareness campaign was followed by the enrolment carried out by the facilitators and supported by the field staff. Households were registered and premiums were collected individually from each household. The ownership of the scheme was in the hands of the enrolled members of the community, and no individual or stakeholder made any profit out of the same.

There were no significant challenges in RES-RISK Vaishali in enrolment of memberships. Two factors played a significant role in easing enrolment numbers. First, Nidan was a trusted name in the local region as a positive change agent. There was no extra effort required to establish its credibility. In addition, the community was effectively involved throughout the entire process of the situation assessment, scheme design and launch. However, MIA and Nidan did hire local people to mobilise households individually and the SHGs played a strong role as a catalyst to convince households of the benefits of the insurance scheme.

The scheme was launched in July 2014, initially to cover only health risks as health is generally and also the highest prioritised risk that is common to everybody in the community and especially in this case.

13.4.7.1 CST Perspective

The enrolment approach was based on relationship, familiarity and rapport. Personal trust was leveraged for a “mechanical act” of getting greater enrolment. The MIA team was able to spot these “soft” dimensions that could contribute towards achieving “hard” outcomes. It was also able to generate high interest in the target groups to an extent that they could themselves come up with innovative solutions. For example, there were farmers who formed groups to act as insurance mobilisers. Interactions happened amongst peers and there was no disparity in power any more that would otherwise set in with an external agency interface. This sense of equity in a business relationship established was almost like an unintended consequence of the intervention.

The team was able to engage with the target population and identify their core and common challenges, and leverage them not only for product design but also for scheme enrolment. For instance, health was recognised as the common denominator and was presented as a common factor in all product bundles. Technically, the ease of claim was also presented to the community by introduction of a “single window” system for claims and payments.

The RES-RISK scheme could challenge conventional insurance boundaries and come up with solutions and models that were contextual, relevant and meaningful for the community by combining both “soft” and “hard” perspectives.

13.4.8 Handholding

Once the scheme was launched, functionaries were made responsible for claims management (assessments and settlements) and administration. They were also responsible for re-enrolment/renewals after 1 year for the health cover. These activities were carried out with significant support from Nidan. After each cover period (yearly health and livestock), policyholders had the option to re-enrol or opt out of the scheme. In case of re-enrolment, minimum procedures were followed as the scheme already had all the details of the member. The due re-enrolment amount was paid into the scheme.

MIA in the meantime streamlined its implementation strategy and had worked on the training and educational material. The re-enrolments for the July 2016 health cover showed an increase beyond the 2014 and 2015 health enrolment numbers. The enrolments for the crop cover displayed a significant increase from the rainy season 2015 over the winter season 2015/2016 to the rainy season 2016. Livestock enrolments increased considerably from 2015 to 2016. Admittedly, the enrolment base was much lower for crop and livestock than for health.

The reimbursement process was being executed in a seamless manner.

13.4.8.1 CST Perspective

The MIA approach was to “teach a man to fish” rather than “to give the fish”; this came to light with the team spending significant time with the community and equipping them with the required knowledge and skills to understand the system, and the authority and controls to operate it. These communities need strengthening to be self-reliant, to be able to ensure their welfare on their own.

13.4.9 Phaseout

MIA constantly supported and reviewed the execution of the scheme through all the stages. Capacity building was done by adequate training and imparting of technical know-how through the programme. Once the scheme was self-reliant and self-sustaining, MIA phased out.

With MIA’s support in re-enrolment drive and constant partnership with the local field agency, capacity-building initiatives had since been a continual focus. The RES-RISK scheme in Vaishali was being encouraged to institutionalise a structured

monitoring process where regular audits could be carried out to assess systems and processes adherence during execution of the scheme.

13.4.9.1 CST Perspective

Through all the phases until phaseout, MIA attempted a whole systems transformation for the target geography through the RES-RISK scheme. In a discussion with Dr. David Dror, he told me that at a very fundamental level, MIA's approach challenged the Expected Utility Theory according to which the expected value of an investment is a statistical outcome of an individual's valuation of their investment and that can change from individual to individual. However, this theory would not hold water in a rural society where community bond and community investment often override individual decisions or individual confidence in any investment scheme. It is this fundamental understanding that MIA leveraged to enter the community and engage with its members. The community remained at the heart of the intervention. This was at the heart of the model of community risk pooling, community enrolment, community governance and community capacity building that induced open shifts towards "consensual positions".

MIA's approach through the nine stages was led with an appreciation of local norms and values. It is worthy to mention that RES-RISK created conditions where women would (eventually) achieve a position of influence, but this was also done with subtlety and in a non-confrontational manner. For example, when the new scheme was inaugurated, the traditional "ribbon-cutting" ceremony for a claims centre would be accorded to the village head, who would invariably be a male member. Additionally, for public gatherings, it was the influential men who would be invited to deliver the speeches. These were "covert tactics" adopted by MIA to ensure that the phaseout from the community did not upset the traditional power centres, and doing that would not have made the scheme sustainable.

The last phase sought to introduce the concept of audits, that was previously missing, to ensure system health. Implementation of the audit system would ensure a more sustainable and foolproof scheme.

13.5 Towards a Systemic Model of Community Engagement

With context of the RES-RISK scheme, an attempt has been made here to understand how Critical Systems Thinking (CST) can enable better community engagement for the MIA model incorporating the characteristics of flexibility and agility in the scheme. I discussed CST in Chap. 3. I will revisit some core ideas here to refresh our memories. CST brings to the forefront the argument for boundary

critique, methodological pluralism and improvement in the situation as core to a systems intervention.

Midgley emphasises on the concept of “boundaries” that lie at the heart of CST—why and how the interventionist draws their boundaries for the situation they are working on. And how these boundaries effect the intervention and those whose lives are being touched. A further nuance that Midgley introduces is the understanding of “marginalisation”. In any situation, where there is more than one party involved, each party (or each interventionist) will bring forward their own ethics and judgements to draw their own boundaries. These boundaries may or may not be amenable to the other parties involved. In situations where specific aspects, areas or people are left out due to inclusions in and exclusions from boundaries, may give rise to marginal areas. Hence, depending on the influence the parties have, there will always be a “primary” boundary and a “secondary” boundary, where the primary boundary is always the narrower one. The aspects, areas or people who are not included within the primary boundary are “marginalised”; this is the area where conflicts arise. Outside the secondary boundary lies the wider system that is not that relevant.

An effective interventionist is hence one who constantly critiques their own boundaries and the ones that exist around them. Midgley believes that boundaries are a prerogative of values judgements that people have, which defines what knowledge and considerations are taken as pertinent and what is left out. Boundaries therefore have consequences.

CST presents a direct alter-point to the classical concept of social science paradigms (Burrell and Morgan 1979), where each paradigm is founded on distinct ontological bases, with supposedly impermeable walls between them. Methodological pluralism breaks the myth of paradigm incommensurability and creates possibilities to operate across paradigms, making them permeable and complementary.

Midgley (2016) proposes to look at methodological pluralism from two stances—first, where a methodology can be seen as dynamic and evolving, accommodating learning on an ongoing basis; second, where methods and perspectives from other methodologies and schools of thought can be mixed and matched together.

A CST intervention is ideally directed towards improving a situation. People on ground need to be empowered in an inclusive environment so that they can own their actions to make change viable and sustainable. Midgley (2016) notes that “improvement” needs to be understood temporarily and locally. This is because what may seem as an improvement for one set of stakeholders may not be considered so for another. This again has a strong bearing on boundary critique itself with the question—whose improvement is it anyway? Referring to the temporary nature of all improvements, the point one needs to critique again is if the situation changes for betterment, how long will it last for. This introduces the need of looking for creating sustainable improvements.

The following discussion focuses on how CST can be extended to understand the nuances of every major phase that the MIA model goes through, and how CST can support each of these phases to bring them much closer in engaging with the community.

13.5.1 Applying CST to the MIA Implementation Model

The nine-step MIA model can be addressed better by approaching them under three distinct phases and understanding each phase in terms of the predominant principle that can be borrowed from a CST perspective. This leads to identifying systems methodologies that would enable the implementation model reap the best benefits from every step.

There are three main phases in MIA's implementation model:

- Appreciation and structuring,
- Modelling and setup,
- Sustenance and phaseout.

Given that betterment and empowerment are the essential elements driven by MIA's approach, each of the nine steps can be better aligned to its vision if specific systems methodologies can be leveraged for them, under the focus phases. This is explained in the discussion below. In no way, it is attempted to suggest that the current tools that MIA uses are replaced by the methodologies/approaches introduced below. Rather the methodologies/approaches below may further help in applying the existing tools within an informed ontological framework for better leverage. The essence of CST is to look at systems as a construct; hence, the specific systems methodologies/approaches we have discussed below may help establishing the construct in a more holistic manner.

13.5.1.1 Appreciation and Problem Structuring

This is the first phase where MIA enters a community. The two steps in the existing model are: engage the community and identify the risk. This phase is not only about information gathering but also about establishing trust in the community. The MIA interventionist here needs to work intensely with the community to establish the problem situation of the community with the community itself.

In this phase, maximum focus needs to be on what constitutes a problem and why, and how it can be best structured so that any intervention yields the desired results. Checkland's (1981) Soft Systems Methodology (SSM) can be a powerful methodology to help the interventionist appreciate and structure the problem situation taking into consideration multiple variables and viewpoints.

Checkland (2000) articulates that the central idea behind an SSM intervention is the understanding of human activity system. This understanding can be a viable perspective to approach the first phase of the MIA micro-insurance implementation model to bring in effective community engagement and agreement of working towards a feasible change in the community. The initial steps of engaging the community and identification of risks are strongly pinned on working in the context of a human activity system where logical inter-connections are to be understood that are often unarticulated or non-evident. It is also in this phase that purposefulness needs

to be identified through the appreciation of emergent properties in the community. This is only possible by working with the stakeholders with diverse worldviews to build systemic models of the situation. What is often perceived as a risk by one cohort of stakeholders may not be considered so by another, or the very definition of the degree of risk can vary from participant to participant. Hence, the mindset that the interventionist will need to adopt is a move away from considering “problems” to that of considering situations that are “problematical”. Identification of the risks will also involve prioritising and informed segregation of the risks themselves. This can be effectively facilitated by working with a variety of models, options and solutions within different human activity systems in the same situation.

This phase of Appreciation and Problem Structuring can be brought to life by an inquiring mindset, understanding different human activity systems that exist in the same situation and structuring models of the problem at hand.

SSM can offer a sound platform for surfacing of different viewpoints from stakeholders and the various tools it provides can enable effective problem-structuring approaches for the first two steps. This methodology may be placed in the interpretive domain of sociological thinking.

I discussed the seven steps of SSM in detail in Chap. 6. Some of the ways by which these seven steps can be leveraged for the Appreciation and Problem-Structuring phase were highlighted in my previous publication (Chowdhury and Jangle 2018).

1. Stage-1 involves the general recognition and thinking about the “situation considered problematical”. This is a highly engaging stage that is led by extensive dialogue and discussion with the stakeholders (individual and/or groups) involved in a common setting. The existing tools such as Q&As and FGDs can be leveraged for this stage.
2. Stage-2 involves creatively expressing the problem situation in the form of “rich pictures”. Rich pictures may be used here for anecdotes and life stages to be drawn out that can also facilitate greater involvement of the community as it helps them re-live some of the experiences they had in a collective sense. The idea of rich pictures is not to make the perfect drawing, but to let imagination and interpretation flow unhindered so that personal expressions and experiences are captured.
3. Stage-3 is the articulation of the “root definition” considering the CATWOE (Customers, Actors, Transformation, *Weltanschauung*, Owners and Environment). The interventionist will have to play a significant role here with communities (considering that they may be less literate) to help them understand the concept of each of the letters in the CATWOE and help articulate the root definition. This is an intensive stage and needs to be driven by adequate information and sound knowledge. Existing tools of Key Informant Interviews (KII) can be used by the interventionist to delve deeper into the problem situation.
4. Stage-4 involves the process of building “conceptual models” of the system based on the root definition. Conceptual models are ideal situations that should have occurred in the event of a life experience. These would include the ideal rehabilitation or financial buffer systems that would have emerged at the event

of the community being exposed to a risk factor. This stage may end up being highly technical and being aloof from the actual community. MIA's Treasure Pot game is a sound platform to simulate the insurance concepts arrived at for the community.

5. Stage-5 demands comparing the models with the real-world situation. This can be done pictorially or through engaging discussions. Existing use of PowerPoint presentations can be leveraged here.
6. Stage-6 involves the participants in debates and discussions about their world-views to bring about an accommodation of perceptions. This is where difference of opinions within the community can be overcome with informed dialogue and presentation of logical facts. The previous stages of working on the problem situation in a robust and engaging manner will greatly support this stage for agreement of risk priorities where there may be differences of opinions and perspectives.
7. Stage-7 is the final implementation stage where the derived plans are put to action. This stage of SSM is not relevant here as it will fall under the gamut of the second phase.

Teams of participants harbouring different thought processes can be clubbed in the above stages to represent different perspectives. Conceptually, SSM may aid the interventionist to be open to different viewpoints of individuals or groups. Greater is the diversity of thinking, richer is the appreciation and inclusion of perspectives. The interventionist will need to keep an open mind for interests that are less represented or marginalised and take proactive initiatives to include them in the problem-structuring process. The deliberative process can effectively enable "accommodation" of world-views and perspectives rather than seeking "compromises" of conflicting ideas arising between primary and secondary boundaries.

However, in a later discussion with Dr. David Dror, he suggested that a defined methodology such as the (mode-1) SSM may be too technical for an audience MIA would have to work with. In light of this feedback, I am bringing mode-2 SSM as a possible answer for the interventionist. Mode-2 SSM is the flexible and adaptive form of the methodology that is more contextual and of immediate relevance. Rather than going through the seven steps in detail, the interventionist can customise the methodology more as an approach for a specific situation with the following broad stages:

- **Rich Picture of the Problem Situation:** The interventionist can do their own groundwork on the area considered problematical and engage with the community in a free-flowing creative exercise to dive into their life experiences and risk appreciation with rich pictures with the required direction.
- **Models of Human Activity Systems:** The engagement can extend to a more sophisticated level of understanding of the human activity system (described in Chap. 3) through the aid of root definition and conceptual models. Dialogue and FGDs can lead to this modelling if any challenges are encountered whilst using specific systems tools.
- **Simulate Organisational Change:** This is a deliberative stage on the human activity system. Series of questions can be asked to appreciate how the situation

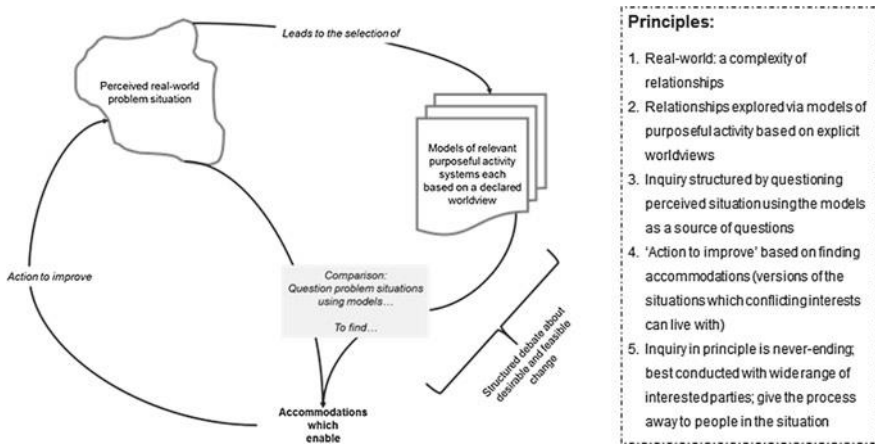


Fig. 13.2 Mode-2 SSM (cited from Checkland 1999)

could be different, what kind of a reality the community might want to see and how the community might want to engage to bring about the change they would like to see.

Mode-2 SSM can be represented in Fig. 13.2 (borrowed from Checkland 1999) that also talks about key principles to be followed during the process.

Mode-2 SSM is less linear and more interactive. The prescribed sequence and tools (in case of mode-1 SSM) need not be deployed and the approach can be more iterative, engaging and personal. This makes SSM highly flexible and relevant for local conditions that an interventionist faces (Atkinson 1986; Kreher 2017). Mode-2 SSM is in no way meant to replace mode-1 SSM, but it is only meant to be more contextual rather than prescriptive. Mode-2 SSM can ease the process for the interventionist when the situation calls for a more fluid approach.

13.5.1.2 Product Modelling and SetUp

This is the second phase of the MIA implementation model that covers five consequent steps after the first phase: appraise the risk, insurance education, selection of benefits package, set up of operating infrastructure and scheme enrolment. During the risk appraisal step, the baseline survey sets the tone for developing the risk covers that form the basis of the micro-insurance scheme design and process. This is an important step that determines the level of inclusion and benefits coverage for the “real” needs of the community. The concept of boundary critique can play a crucial role here to determine who/what is included or excluded from the baseline study itself, to start with, and whose interests are considered in the scheme design. Often the facilitator has the tendency to play the “expert” role that results in design of programmes from one vantage point. As Churchman (1970) suggests, the ability

to harbour different perspectives on the nature of the same context underpins the concept of boundary judgments. However, being able to critique one's own thinking and conceptual boundaries can bring them closer to the participants in an immersive environment. This establishes a commitment to the value systems of the community rather than to any individual value judgment.

As a researcher on the baseline study, the facilitator needs to be encouraged to think of their own and stakeholders' boundaries; therefore, the facilitator takes on the role of an interventionist.

Through the various steps of this phase, there are different priorities that come to the fore. For the baseline study and quantification of the risk benefits during the risk appraisal step, the design of the study itself will need to ensure that stakeholders and their interests are included. For insurance education that also involves product design, a commitment to the value systems will mean that it is unbiased to any specific stakeholder, and has financial empowerment of the community as an ideal state it is striving towards. For the selection of benefits package stage, where consensus seeking is strived for, the interventionist will have to ensure that both the personal requirements of the members and social requirements of the community are catered for.

The Critical Systems Heuristics (CSH) approach can offer an effective mindset to the interventionist. CSH offers an understanding of the core, intermediary and peripheral roles stakeholders play in a system, and appreciate the social and personal worlds of any problem situation. I introduced CSH in Chap. 8; here I present the set of 12 boundary questions that typify CSH asked in the "is" and the "ought" mode (Ulrich 1983). The questions are articulated within four dimensions of the problem situation that Ulrich calls sources.

Sources of motivation: that defines why a certain intervention is undertaken in the first place; the values and motivations driving the same.

1. Who is the actual *client* of the systems design?
2. What is the actual *purpose* of the systems design?
3. What is the built-in *measure of success*?

Sources of control: that defines the parameters leading to the success or failure of an intervention; understands the power structures influencing the situation and related decisions.

4. Who is actually the *decision-maker*?
5. What *conditions* of successful planning and implementation of the system are really controlled by the decision-maker?
6. What conditions are not controlled by the decision-maker (i.e. are in the *environment*)?

Sources of knowledge: that defines where subject matter expertise lies; availability of experience and related competencies.

7. Who is actually involved as *planner*?
8. Who is involved as *expert*, and of what kind is the expertise?

9. Where do the involved seek the *guarantee* that their planning will be successful?

Sources of legitimacy: that asks the question of “why” success is defined the way it has been and the moral basis on which we understand its impact on parties who have not been yet involved.

10. Who among the involved *witnesses* represents the concerns of the affected?

Who is or may be affected without being involved?

11. Are the affected given an opportunity to *emancipate* themselves from the experts and to take their fate into their own hands?

12. What *worldview* is actually underlying the design of the system? Is it the view of (some of) the involved or of (some of) the affected?

The boundary questions dig deep into judgements, perspective and worldviews that are shaped by deep-seated values that people harbour that in turn define their boundaries. The 12 questions around the four dimensions have the potential to reveal these judgements for an interventionist to work alongside stakeholders to shape the situation in a way that is mutually beneficial and sustainable. In the words of Ulrich and Reynolds (2010):

When people talk about situations, it often happens that their views differ simply because they frame the situations differently; more often than not, people are unaware of this source of misunderstanding and conflict, and even if they are vaguely aware of it they do not know how to examine its influence systematically. Thus seen, CSH offers a tool for understanding the multiple per-spectives people bring into situations. By examining the different underlying boundary judgements, we can better understand people’s differences and handle them more constructively (p. 245).

CSH makes an attempt to bridge the gap between conceptual abstraction and reality by the use of three interrelated terms that I introduce below (Ulrich and Reynolds 2010):

- **Maps:** This is a term that we commonly use to represent reality in everyday parlance. The interventionist needs to create a map of the situation through their critical appreciation to approximate the situation from where a direction can be charted out to move forward. Maps are always a near representation of the reality and not the reality itself.
- **Designs:** Serves as “signposts” of where we “ought” to be. A prudent design is realistic, practical and achievable. Designs assume a situational improvement of the current condition and serve the interventionist to always think better.
- **Models:** Serve as abstractions of reality that help the interventionist create maps and designs. In a rural community situation, the interventionist may take up creation of models as their own responsibility after holistic appreciation of the situation.

Maps, designs and models can enable the interventionist to continually remind themselves of practically bridging the gap between abstraction and reality. As the interventionist builds towards the specific steps for the product modelling and setup

phase, the 12 questions will constantly push them to consider their own value judgments in relation to others'. A drive towards genuine engagement will help identification of the primary and secondary boundaries that form in the scheme design and benefit selection process. Root causes behind emergent conflicts can be better understood with this perspective, which would have been earlier incomprehensible and the facilitator would have liked to make speedy decisions without understanding value systems and boundaries. Both social and personal worldviews and benefits can be unearthed as a result of the same, ensuring sustainability of the system design.

Setting up the operating infrastructure requires introduction of predictability and control. It involves setting up of subsystems with effective coordination and information flow between them so that operational aspects of the scheme are seamless. The Viable System Model (VSM) can lend a useful perspective in setting up the operating infrastructure by understanding of "shared communication spaces" (Espejo 2003). This understanding lets us approach an organisation as a live system and not a mere amalgamation of reporting relationships, and this is of significant importance in the community setting in rural India where social norms and cultural nuances have a tendency to define structures and processes rather than effectiveness or efficiency per se. I have discussed VSM in detail in Chap. 4.

Whilst I discussed VSM in the context of problem structuring in Chap. 4, here I am bringing in VSM for the design of a more optimal system. Here I will make a reference to how understanding of the five systems can be of leverage for a sound delivery model for MIA. This reference also lets us rethink the current delivery model critically and explore areas of improvement for a more effective system.

- System-1 is the *implementation* system where the actual operations or execution of work takes place. Therefore, there may be several systems-1, depending on the complexity of the overall system. In the case of a micro-insurance scheme, systems-1 may be constituted of Claim Committees, Scheme Coordinator and Activists, External Liaisons, so on and so forth.
- System-2 is the *co-ordination* system, which is responsible for maintaining a harmonious balance of functions between the systems-1. It also serves as a liaison between the systems-1 and system-3. System-2 ensures information is filtered and moderated between the systems-1 and the adequate amount of communication is maintained between systems-1 and system-3 for smooth integration of the system. The MIA model has an already identified Coordination Committee. Its role will need to be duly articulated to reflect its essence and expectations from its functioning.
- System-3 is the *control* system which ensures adherence to policies and goals in the subsystems of the larger organisation. It ensures compliance and optimisation. More specifically, it can also be looked at as playing the audit role. It is the "real" control system. In case of the design of the MIA delivery model, clear responsibilities and criteria for evaluation need to be introduced to enable the process of observation, collection of physical evidence, interviewing and reporting; these responsibilities are currently fulfilled by the Coordination Committee itself.

- System-4 is the *development* system. This system is responsible for gathering information for the organisation from the contingent environment and passes on information with the system to influence decision-making and adaptation to enable the system remain viable in its own environment. This element is currently missing in the MIA model, which needs to be introduced. This is an important function that will enable the scheme to be relevant with changing circumstances.
- System-5 is the *policy* making and executive unit of the VSM and is the highest decision-making unit in the system. It balances demands from different subsystems and steers the organisation forward in a holistic manner. MIA will need to work carefully to identify the one person or team to be this highest body for specific schemes.

These five systems follow the law of “recursion” throughout the subsystems, which imply that all the five systems exist and operate within each system.

Application of the VSM can help set up of the micro-insurance scheme operating infrastructure as a viable system. The Executive, Oversight and Mediatory functions identified in the existing governance structure will need to be revisited in light of this understanding of communication and control in a system where the external variety posed by the environment is more than the organisation’s variety. Borrowing from Espejo (2003), integrating sociocultural nuances can enable the interventionist create a viable system (in this case the operating infrastructure) that does not exist in isolation, but is also able to create meaning for the community. Otherwise, the operating infrastructure created for the scheme may end up being esoteric and lack alignment with what the community initially espoused to achieve. Insights brought in from CSH would be key here in setting up of a system that is integrated and meaningful, and capable of serving inclusive values towards achieving empowerment.

Further insights from Beer (1972) can help the interventionist constantly critique their own model of implementation towards making it optimised and more productive. For instance, Beer talks of the factors of actuality, capability and potentiality. Actuality is “what we *are* managing to do now, with existing resources, under existing constraints”; capability is “this is what we *could* be doing (still right now) with existing resources, under existing constraints, if we really worked at it” and potentiality is “this is what we *ought* to be doing by developing our resources and removing constraints, although still operating within the bounds of what is already known to be feasible” (Beer 1972; p. 207). The interventionist needs to work on their implementation model with these active considerations to continually build human capability, and optimise resource allocation and control systems within the operating infrastructure of the scheme so that it is viable in the environment it exists in.

13.5.1.3 Sustenance and Phaseout

MIA endeavours to enable a sustainable scheme in the community and transition out after building adequate capacities in the system. It also focuses on building characteristics in the system that will enable it to be agile and adaptive to changing

requirements on the ground. In this phase, MIA undertakes the primary responsibilities of scheme membership enrolment and capacity building. This phase includes the last three steps: scheme enrolment, handholding and phaseout.

MIA undertakes significant community mobilisation to heighten enrolment of membership in the scheme. Individual family outreach, awareness building and facilitations through SHGs are undertaken. Some methodologies for breaking the ice and engaging with the community have already been discussed earlier in this chapter that can be used for this phase as well.

Focusing attention to the intent of capability building to enable a sustainable system and phaseout, specific approaches can bring in valuable perspectives; these include Scenario Planning and Drama Theory.

There may be various situations the system will have to encounter after launch. These may include severe drop in re-enrolment rates, acts of violence and theft, serious case of transmittable diseases in the community, etc. Such circumstances may also call for structural changes in the delivery model or scheme structuring. These may call for expert help from MIA even after MIA moves out, and the community needs to be aware of such contingencies. For the scheme to be self-sustaining, it has to be made future-ready by building capacities for it to react to adverse situations. Often these situations may not even be adverse, but certain cases that the scheme has to deal with may be quite complex.

Scenario Planning is about considering challenges and constraints that may encounter the community in the short, medium and long term. Situations that are most uncertain and liable to create the most impact need to be specifically articulated (Williams 2008). Here, a specific assumption-rating tool from a systems methodology, Strategic Assumption Surfacing and Testing (SAST) can be leveraged to agree on which scenarios could be most probable. I have discussed SAST in detail in Chap. 6. SAST was developed by Mason and Mitroff (1981) to enable managers to deal with complexity; they call such situations “wicked problems” where issues are multidimensional, interconnected and uncertain. The interventionist may facilitate stakeholders to surface the possible assumptions from their perspectives and use a simple tool with two axes and four quadrants representing degrees of “importance” and “certainty” of their own assumptions of the likelihood of an event to occur. Assumptions and probabilities clustering in the high-importance and high-certainty zone need to be focused on with high priority. Refer to Chap. 6 for examples of assumption-surfacing charts.

Van der Heijden (1996) and Heyer (2004) talk of five steps for effective scenario planning. The approach starts with identifying the issues that may arise and that need agreement. This is referred to as the focal issue. This is followed by identifying some of the driving forces like—societal, political and economic, amongst others—that directly impact the focal issue. Once this is understood, those issues forces need to be identified that are within the span of control, and those that are completely outside one’s span of control. Appropriate cautions and contingencies need to be worked on. Critical uncertainties are then identified that are at the macro or policy level, beyond the scope of the community. Based on all the above considerations, finally scenarios are fleshed out.

Once the Scenario Planning is completed, it is about exposing the community to these scenarios in a simulated environment and give the members real-time feedback on how they have handled the same. This can be facilitated by the learnings from Drama Theory that proposes studying problem situations and articulating resolutions through the use of enactments, as in a drama. Here, the problem context is seen as a story plot and the participants as actors. The plot is amplified by introducing planned or unplanned events and the actors are observed on how they react to the same. Levy et al. (2009) articulate the sequence:

- The scene is first set with the context and story plot; individual actors and roles are identified.
- The build-up of the story happens as a usual plot develops and the story is built towards the specific situation aimed at.
- The climax arrives towards the end of the plot where unfinished decisions/resolutions are exposed.
- The final part is the decision, where the way forward is agreed upon by the actors themselves or in discussion with the onlookers for the benefit of shared learning.

Scenario Planning and Drama Theory can be used jointly, where the former is applied to identify futuristic circumstances and the latter is used as a capability-building tool to generate awareness and enable decision-making skills.

13.6 Reflections

CST can be a powerful approach for the MIA micro-insurance implementation model, from a community engagement standpoint. The CST mindset brings about a consideration of wide-ranging philosophical and practical considerations that enables the interventionist to focus on the betterment and emancipation of the ultimate “beneficiary”. Heavily drawn from Kant, Ulrich aptly conceptualises the understanding of systems as “referring to the totality of relevant conditions on which theoretical or practical judgements depend, including basic metaphysical, ethical, political, and ideological a priori judgements” (Ulrich 1983; p. 21). Therefore, a system is always to be regarded critically as its boundaries are always changing based on judgements of the parties involved and affected in/by the system. Hence, the importance of the system to be flexible and agile.

Select approaches and methodologies recommended in this chapter can support the interventionist to work towards the same by virtue of their philosophical underpinnings and handy tools for application.

In the case of SSM, the intervention itself becomes a process of “inquiry” that lends the benefit of approaching the situation as a learning system where the best solution can never be arrived at one go, but becomes an iterative process to enable learning and evolution. This being the case, there is greater fuel for the system to be more agile and sustainable.

A heuristic inquiry led by CSH will constantly push the interventionist to unearth stakeholders and/or perspectives that would have been earlier regarded “profane” and not even considered due to a vantage point that the “sacred” space would have unquestionably imposed. Therefore, CSH provides a platform to “sweep in” considerations and implications that can enable setting up of a system that is more inclusive, engaging, ethical and sustainable.

VSM makes the scheme implementation model more robust drawing references to the concepts of actuality, capability and potentiality. The interventionist is encouraged to incorporate enablers in the scheme’s audit system to ensure that any under-utilisation of resources is promptly spotted and the scheme members are constantly looking for opportunities to make the system more efficient and effective.

Finally, both Scenario Planning (SP) and Drama Theory (DT) can be leveraged towards building a system that is future-ready. These approaches can also contribute immensely towards facilitating strong engagements with the communities. Scenarios can be built in participative ways with the community. Tools like rich pictures (discussed earlier in this chapter) can be used to portray them in more user-friendly ways. Community members can be involved again to enact the roles, therefore enhancing their understanding of the situations by exposing them to a near-real portrayal.

Table 13.1 attempts to capture the recommendations and anticipated benefits if the above framework were to be followed.

The framework proposed above thrives on the concept of flexible integration of methodologies and tools to achieve set goals optimally in different stages of the MIA implementation model. Referring back to Chap. 3, five different types of integration of techniques have been proposed in this framework, represented in Fig. 13.3.

In our previous work (Chowdhury and Jangle 2018), reference was made to only two kinds of integration: both-ways integration in which different parts have specific objectives and the methodologies/tools proposed are aligned to the serving the respective objectives, and submerging with identity, which is about using a technique completely as a sub-set of a larger technique purely to optimise the effectiveness of the latter, yet retaining the distinctiveness of the former. However, as I revisited the framework as part of this chapter, I realise that all five kinds of integration proposed by Sushil (1994) are achievable here by the adoption of the recommended framework.

13.6.1 Benefits of Applying the Framework

Following are some of the anticipated benefits from three standpoints—ethical, operational and sustainability—of this application.

- **Ethical Standpoint:** CST constantly pushes the interventionist to be open to perspectives, be conscious of hidden agenda and be accommodative of divergent worldviews. A methodology like SSM will not only enable the interventionist to be open to diverse viewpoints, but will provide them with the right structure to be

Table 13.1 Conceptual framework for the application of CST in micro-insurance

Phase	Core objective	Recommendation	Anticipated benefit
Appreciation and problem structuring	Understanding the on-ground realities and establishing trust with the community	Soft systems methodology	Thrives on embracing and absorbing flexibility in the most fundamental level in understanding the situation with diverse perspectives. Driven by the spirit of understanding and accommodating different human activity systems, SSM prepares the system to be resilient and agile right in the design stage. Through the learning character ingrained into SSM, it enables the system to embrace an approach that is on the continual look out for betterment by incorporating change in a positive and agile manner
Product modelling and setup	Research-led scheme structuring, aligned catering to the community needs	Critical system heuristics	Enables explication of the core, intermediary and peripheral roles stakeholders play in the system, and the articulation of both stated and unstated community dynamics. Helps to understand the context in a detailed manner with the appreciation of both internal and external flexibilities, which helps in creating a resilient and sustainable product model
		Viable system model	Operating in the insurance space, it is essential for the system to be viable and predictable to ensure fairness and consistency. VSM does exactly this. Well-defined loops and relationships between subsystems ensure flexibility to be curated and channelized effectively. This enables addressing maturity of the system at an evolved level to effectively navigate through processes, interfaces, actors and strategy
Sustenance and phaseout	Building on-ground operational capability in the community and enabling a sustainable scheme	Scenario planning	Crafting contingencies by considering challenges and constraints that may encounter the community and the scheme in the short, medium and long term. Scenario planning is based on the understanding that change is the only constant and that flexibility is a must for the approach undertaken to be able to react and respond to change. Flexibility is at the heart of Scenario Planning
		Strategic assumption surfacing and testing	Directing focus on the most probable assumptions and scenarios to make scenario planning more effective, hence, giving a direction to uncertainty and flexibility. This leads to enhanced performance of the system in the wake of continual change
		Drama theory	Awareness generation, capability building and enabling decision-making skills towards building a system that is future-ready. This addresses the requirement of capability building and learning of actors to make them more equipped to operate in a changing system

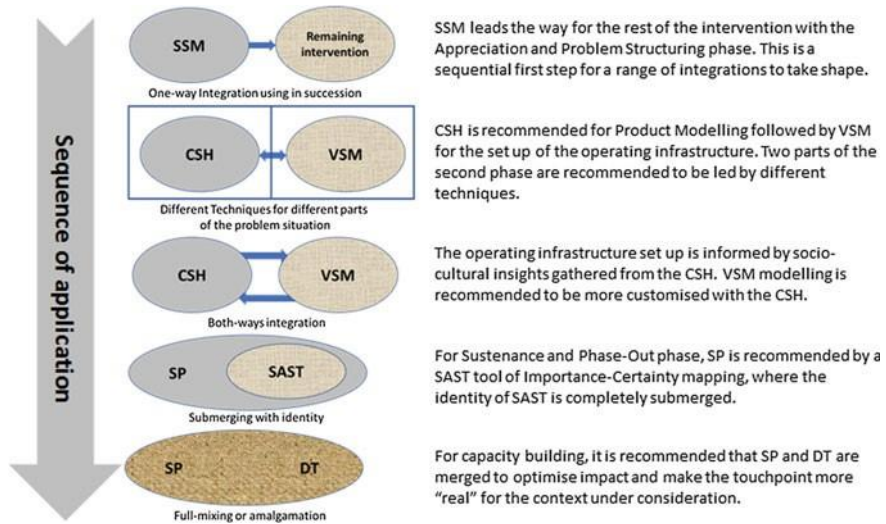


Fig. 13.3 Integration of techniques

open in an effective manner. “‘Action to improve’ based on finding accommodations” (Iles and Sutherland 2001) is one of the main principles behind the SSM methodology. CSH, on the other hand, will help the interventionist question the system itself—its fundamental definition of boundaries. Ulrich’s conceptualisation of systems is heavily drawn from Kant, where he says that Kant “understands it [systems] as referring to the totality of relevant conditions on which theoretical or practical judgements depend, including basic metaphysical, ethical, political, and ideological a priori judgements” (Ulrich 1983; p. 21). Judgments are challenged through the set of 12 powerful questions and the result is the founding of a social infrastructure that is stronger, more robust and ethical.

Select systems methodologies discussed above help, not only with creating the mindset of ethical considerations and strive towards accommodation but they also provide the interventionist with the adequate flexibility, tools and methods to enable the same. Hence, from an ethical standpoint, it is not just about the outcomes that such tools provide, it is also the process of inquiry that they promote; “improvement” in the situation remains the core of the change process.

- **Operational Standpoint:** VSM, a methodology inspired by the functionalist school of thought, brings in predictability and control in the system. It clearly delineates the multiple decision points in the organisation’s structure and lays the foundation for operational processes to be efficient and effective introducing a systemic maturity in a state of constant evolution. It also leads the interventionist to think of previously non-existent functions that will enable operations to be more balanced and resilient. The whole system becomes more standardised enabling ease of understanding for the owners of the system.

The assumption-surfacing tool and approaches like Scenario Planning and Drama Theory are also introduced. They support the interventionist and target stakeholders to collectively and objectively visualise contexts and prepare themselves aptly to face the same. The environment in which the organisation operates is dynamic and boundaries are constantly evolving. These tools and approaches help the organisation to be more agile and resilient.

Use of systems approaches like the ones proposed above is expected to bring in greater operational advantage to the micro-insurance scheme model.

- **Sustainability Standpoint:** The above discussion clearly leads to convey that following a CST mindset for micro-insurance model deployment from a community engagement standpoint will enable MIA schemes to be more sustainable in the long run. Feedback plays a critical role here. To understand the interplay between communities and micro-insurance schemes better, a critical perspective needs to be undertaken so that pre-set boundaries are proactively critiqued, established mindsets are constantly questioned and prescriptive approaches are challenged towards greater agility and flexibility. CST brings in an intersection of both the functionalist and interpretive perspectives and takes this forward towards a higher order of evolution, informed with the value of justice and inclusion. Here, a higher order of participation is referred to. Tracing to Brett (2003), this is about bringing people to the centre stage to take control of themselves and their surroundings rather than being the subjects. This is about mobilising intellectual resources of the people to make decisions with available resources—decisions that affect their lives for the current and future times.

My discussions on the proposed integration of CST in the MIA engagement process was greatly appreciated by Dr. Dror. However, he also felt that going to the field with the methodologies recommended would also need capacity building of the interventionists. The concept of systems thinking and flexibility is known to the team; however, there is a lack of training of actual application of systems tools and methodologies.

13.6.1.1 Policy-Related Implications

A sound community engagement strategy can also serve as an enabler for the government's financial inclusion initiatives to craft systems that are more inclusive, relevant and sustainable (MIA Issues Brief 2017).

If individuals are engaged through the process and if they are able to understand how the insurance mechanism works, they are more likely to enrol for such schemes. In a vast country like India where every state and every village is likely to have their own nuance, having an overarching model of financial inclusion may not be the most effective way forward. Rather the government can look at approaching the situation with multiple groups and as an amalgamation of diverse subsystems coming together to make the bigger system. Risk pooling will reduce cost not only for beneficiaries but also for the operating system as the mechanisms to manage funds and resources

can be made more decentralised, which in turn can act as employment generators in self-managed communities. MIA calls this approach a combined effort towards combining financial inclusion and financial protection.

Coming to the issue of gender equality and women's empowerment as we have seen, MIA's approach can leverage the position of women as an advantage to mobilise scheme implementation. Women can be intelligently brought in the forefront of power dynamics without causing any disharmony in traditional societies. A bottom-up approach with women at the principal enablers can not only address the issue of women's subjugation but also generate greater awareness about the benefits of enrolment to insurance schemes.

Policymakers need to be open to more flexible guidelines and provisions when it comes to handling situations in diverse rural communities. An effective community engagement model can enable policymakers to understand local nuances and requirements that can make the government's financial inclusion initiatives more customised and acceptable at the local level. Enabling financial literacy and involving the locals in finding their own solutions and creating their own insurance models can serve as best practices for the government to create communities that are financially literate, independent and harbour the desired minimum level of risk management acumen.

An effective community engagement strategy will certainly contribute to the following already visible impacts of MIA's micro-insurance schemes (Dror and Firth 2014):

- Shift from direct government reliance to individual autonomy.
- Enhanced information flow and transparency between the community thereby reducing the risk of adverse selection and moral hazard ('Moral hazard' is the tendency of an individual to expose themselves to a risky behaviour because they know that they are protected against that risk).
- Capacity development in the local community thereby elevating them to positions of influence in the governing council.

MIA's Business Process Handbook (2015) talks about how micro-schemes as the one discussed here can act as prototypes for the government to support and scale in cases where the government may not want to make large-scale regulatory changes without a proof of concept. In this context...

... promoters of social or commercial insurance sometimes argue that the community-based approach to insurance is limited in scale, because interventions are localised and membership is voluntary. The history of the development of insurance coverage in Europe shows that governments and commercial insurers stepped in only after economically challenged people developed the social protection they needed. As the key actors steering the process, their favoured model was the mutual aid or cooperative, which federated into larger groups. Moreover, empowerment of communities to operate complex financial tools (like insurance) through tried, tested and locally trusted processes, coupled with capacity building, constitute a development model that is sustainable, replicable and robust. Considering that risk exposure is not identical everywhere, the business processes must be flexible and the resulting benefits packages adapted to needs. The MIA Implementation Model focuses on processes for customising context-relevant and evidence-based solutions rather than promoting "one-size-fits-all" products (Business Process Handbook 2015; p. 8).

It will be of great benefit for the government of India to take a closer look at the recommended framework for community engagement in context to micro-insurance. The proposed community engagement model can have the potential to facilitate governance as a process of citizens' empowerment and involvement, bringing the government in closer ties with people.

13.7 Conclusion

This chapter worked on building towards a conceptual framework for the application of Critical Systems Thinking (CST) for micro-insurance deployment, with a focus on community engagement, with reference to the Micro Insurance Academy (MIA) implementation model. I began by introducing the background of when the framework first appeared as a joint paper with one of my research collaborators (Dr. Nihar Jangle) and I set the stage for further refinement of the same given my deliberations following its publication. The element of flexibility has been woven through the concept and the framework, being an integral part for the effective functioning of the system. I defined micro-insurance in the context of different existing models of its delivery. I argued for a case for the criticality of robust community engagements for schemes to be successful. I carried the argument further to talk about why CST can shed light for creating a more robust perspective for community engagement strategy. I drew references from a case from MIA and relied on experiences of Dr. Jangle as a lead for the RES-RISK scheme. I revisited our previously proposed three-phase MIA implementation model and deliberated on how specific systems tools and methodologies can be of value for every phase. I provided a critique for specific methodologies in light of the realities and feedback that I received from Dr. Dror post the first paper was published. The proposed framework can address a variety of flexibility models for combining techniques. I finally presented my view on certain policy implications that the MIA model and this framework can bring as a special value-add in the sector.

References

- Ahmed N, Hussain, A (2004) Women's role in forestry: Pakistan agriculture. Agriculture Foundation of Pakistan, Islamabad, pp 79–81
- Akinsanmi A (2005) Working under constraint: women, poverty and productivity. *Women Environ Int* 66(67):17–18
- Atkinson CJ (1986) Towards a plurality of soft systems analysis. *J Appl Syst Anal* 13:19–31
- Beer S (1972) *Brain of the firm*. Allen Lane, London
- Brett EA (2003) Participation and accountability in development management. *J Dev Stud* 40(2):1–29
- Burrell G, Morgan G (1979) *Sociological paradigms and organisational analysis*. Heinemann, London

- Business Process Handbook: Microinsurance (2015) Micro Insurance Academy and Social Re Consultancy, New Delhi
- Checkland PB (1981) Systems thinking, systems practice. Wiley, Chichester
- Checkland PB (1999) Soft systems methodology: a 30-year retrospective. In: Checkland PB, Scholed J (eds) Soft systems methodology in action. Wiley, New York, pp A1–A66
- Checkland P (2000) Soft systems methodology: a thirty year retrospective. *Syst Res Behav Sci* 17(S1):S11–S58
- Chowdhury R, Jangle N (2018) Critical systems thinking towards enhancing community engagement in micro-insurance. *Glob J Flex Syst Manag* 19(3):209–224
- Churchman CW (1970) Operations research as a profession. *Manage Sci* 17:37–53
- Dror DM, Jacquier C (1999) Microinsurance: extending health insurance to the excluded. *Int Soc Secur Rev* 52(1):71–97
- Dror DM, Firth LA (2014) The demand for (micro) health insurance in the informal sector. Geneva Papers on Risk and Insurance. <https://doi.org/10.1057/gpp.2014.24>
- Espejo R (2003) The viable system model: a briefing about organisational structure. *Syst Pract Action Res* 3(3):219–221. <https://doi.org/10.1007/BF01062728>
- Heyer R (2004) Understanding soft operations research: the methods, their application and its future in the defence setting, command and control. Division Information Sciences Laboratory, Australian Department of Defence. <http://bayanbox.ir/view/2159266497151440758/Understanding-Soft-Operations-Research.pdf>. Accessed 15 Jan 2017
- Iles V, Sutherland K (2001) Managing change in the NHS: organisational change. NHS Service Delivery and Organisation Research and Development, London
- India Brand Equity Foundation (2018) Indian insurance industry overview & market development analysis. <https://www.ibef.org/industry/insurance-sector-india.aspx>. Accessed 12 Nov 2018
- Johnson MP (2012) Community-based operations research: introduction, theory, and application. In: Johnson MP (ed) Community-based operations research: decision modelling for local impact and diverse populations. Springer, New York, pp 3–36
- Kreher H (2017) Some recurring themes in using soft systems methodology. *J Oper Res Soc* 45(11):1293–1303
- Levy JK, Hypel KW, Howard N (2009) Advances in drama theory in managing global hazards and disasters. Part I: theoretical foundation. *Group Decis Negot* 18:303–316
- Mason RO, Mitroff II (1981) Challenging strategic planning assumptions. Wiley, Chichester
- MIA Issues Brief (2017) Climate resilience through risk transfer using pro-poor micro-insurance solutions. Micro Insurance Academy, New Delhi
- Midgley G (2016) Systemic intervention. Research memorandum 95, Centre for Systems Studies, Hull University Business School
- Raju VT, Rani S (1991) Decision-making role of women in agriculture. *Indian J Home Sci* 20(1):13–17
- Ritzer G (1996) Sociological theory, 4th edn. The McGraw Hill Companies, USA
- Sushil (1994) Flexible systems methodology. *Syst Pract* 7(6):633–652
- Ulrich W (1983) Critical heuristics of social planning: a new approach to practical philosophy. Haupt, Berne
- Ulrich W, Reynolds M (2010) Critical systems heuristics. In: Reynolds M, Holwell S (eds) Systems approaches to managing change: a practical guide. Springer-Verlag, London, pp 243–292. https://doi.org/10.1007/978-1-84882-809-4_6
- Van der Heijden K (1996) Scenarios: the art of strategic conversation. Wiley, Chichester
- Williams T (2008) Management science in practice. Wiley, Chichester

Part III

Consulting Considerations

The final part of this book culminates in articulating the concept of “holistic flexibility” bringing together the perspectives, experiences and insights presented thus far. Holistic flexibility is qualified by its characteristics that have been defined. A detailed discussion is presented on the considerations a consultant needs to keep in mind, specifically when consulting in the areas of organisational development, social impact and corporate reputation. Although holistic flexibility is applicable in all areas of consulting, these areas are chosen based on the author’s experience.

Essence of Part III

The pace of change and emergent complexities in the world today are greater than what has been ever seen before. Holistic flexibility can serve as a ready reckoner for consultants to remain relevant and responsible as they traverse the journey.

Chapter 14

Holistic Flexibility



14.1 Introduction

This chapter is in a way a culmination of my thinking as a management systems consultant working in the public, private and not-for-profit sectors. Being formally trained with a higher degree in systems thinking and practice (which is not common) and having been exposed to a variety of situations where I have had the opportunity to apply the same, I realised that the systems approach exists at the intersection of holism and flexibility. This intersection has been manifested in the various case studies and conceptual frameworks that I have presented in this book.

As a management consultant, I have come to realise certain key tenets of holistic thinking and flexibility that play an active role in bringing this intersection to life in an effective manner. I call this dynamic interplay “holistic flexibility”. In this chapter, I will define the concept of holistic flexibility and reflect on how the same needs to be regarded as an important consideration for systems consultants.

A previous attempt has been made by Sushil and Chroust (2015) that can be considered close to the conceptual model I have presented here. Their work on “systemic flexibility” and business agility draws on a range of research and case applications in various types of flexibility and agility in business that has been published as an edited book (Sushil and Chroust 2015). My discussions here attempt to create an independent model for the concept of what I call holistic flexibility that, although draws learning from Sushil and Chroust (2015), is a distinct addition to the discipline of systems thinking.

14.2 Holistic Flexibility

As I worked through my various avatars, I realised that systems is a state of mind. The ability to critique one’s own boundaries, see interconnections and appreciate emergence, as much as it can be facilitated by frameworks and models, is more a

function of what we believe in, how we think, and how we perceive. Developing into a systems thinker is a matter of evolution that enables one to appreciate holism in the contexts we exist in. I will use holism and holistic thinking interchangeably. When I started reflecting back on the learnings from systems thinking and application in the light of flexibility, I seem to find great complementarity between the two. It is flexibility of thinking that ignites the curious mind to question boundaries and challenge reductionist thinking. It is flexibility of methods and frameworks that enables a systems interventionist to work with accommodation and ease in complex environments. It is flexibility of resources that make decision makers and change agents actually bring about systemic change. I call this consummate relationship between holism and flexibility “holistic flexibility” that I define in the following paragraph.

Holistic flexibility is a dynamic interplay between a state of mind that has the ability to absorb systemic complexity, and a state of intervention that has the ability to embrace flexibility both in intent and form. I identify two arms of Holistic flexibility: state of mind and state of intervention. These two states are mutually enriching and reinforcing in the form of a dynamic interplay. I call the first arm the state of mind because I consider holism as the all-pervading perspective with which one appreciates the world around them. I call the second arm the state of intervention because flexibility in consulting needs to be a demonstrable quality that emanates from thought and culminates in action. The concept of holistic flexibility is represented in Fig. 14.1.

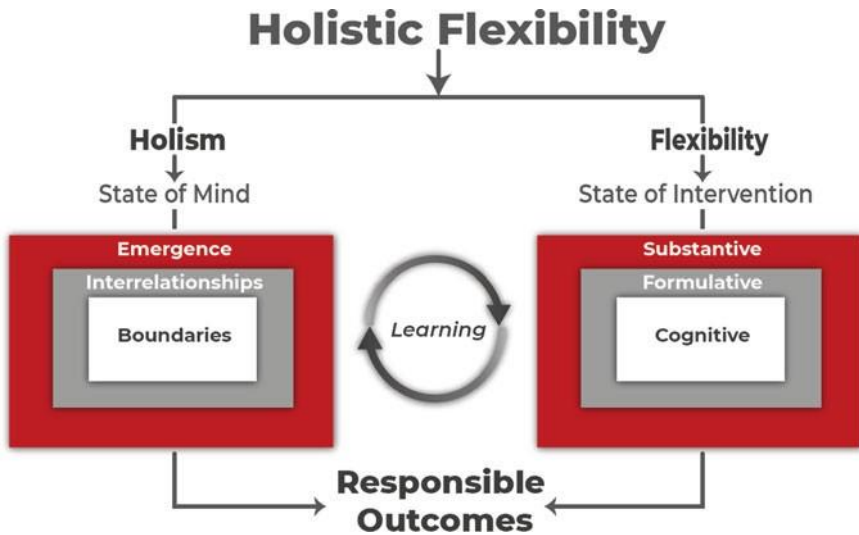


Fig. 14.1 Holistic flexibility (Graphics of holistic flexibility created by Vasvi Srivastava, Vasvi@abhyaantar.com)

I will now elaborate the conceptual model of holistic flexibility. As I do this, I will refer to existing theories and philosophies to qualify my model, and experiences and learning from where I infer my perspectives.

14.2.1 Holism as a State of Mind

A state of mind is about how an individual thinks and feels at a particular point of time. Thought is an “aim-free flow of ideas and associations that can lead to a reality-oriented conclusion” (Jovan 2005). Holism as a state of mind enables a consultant to appreciate systemic characteristics through all interactions and in all social systems covertly and/or overtly. The state of mind all-encompasses thinking as a mode of evaluation based on intellectual comprehension. A management consultant will need to deliver to their clients and often clients look at value creation in identifiable outcomes. Hence, a consultant will need to thread disparate strands with analysis and logic and yet need to transcend the same in the passage through lateral thinking and connected rationality. Going with purely an analytical and logical thinking defeats the very purpose of systemicity; however, this serves the purpose of understanding client delivery. As I will discuss more in the next section of flexibility as a state of intervention, a consultant needs to demonstrate a variety of styles and personalities. Systems thinking uses judgement to make systems references based on which facts are perceived. Values lie at the core of judgements that shape all subsequent inferences. Holism is the state of mind that is able to make associations based on judgements on interrelationships, and creates mental models that are inherently based on systems concepts such as recursion, autopoiesis and emergence (these concepts are elaborated in Chap. 1).

Whilst elaborating this concept, I will make reference to the three concepts of values, system and facts as identified by Werner Ulrich in his work on systemic triangulation (Ulrich 2017). Ulrich also uses these parameters as the basis of his framework for Critical Systems Heuristics that I have discussed in Chap. 13. A systems thinker continually transitions through an interaction between values, system and facts as an act of active negotiation and engagement.

A consultant is always engaged in an act of “judging” manifested in having an opinion about something based on opinions and impressions they form over a period of time. Judgement is not stand alone as it is based on knowledge and interpretation that is always dynamic and evolving. A consultant exercises judgement in defining issues, structuring problems and recommending or agreeing on a resolution. Judgements are definitive and they direct the course of action for a problem situation.

Consultants are brought into a situation as experts who are often believed to provide “solutions” for pressing problems that the client is facing. These problems can be at an operational level covering people, processes or technology, or at a business level covering visions, values and strategy. A consultant walks into a situation with judgements that are both pre-existing and evolving.

- **Pre-existing Judgement:** This is shaped by a variety of factors. The very act of being inducted into a situation creates the understanding that something needs to be changed or improved. An outcome is expected that leads a situation to be different from what it was at the beginning of the intervention. Change becomes an obvious expectation. The consultant undertakes preparatory steps before entering into a situation. This includes self-orientation with publicly available information or speaking to colleagues and other contacts who may be able to provide any insight. Often these information sources are also chosen based on the consultant's judgement of where adequate information may rest. This involves an active act of accepting and rejecting, selecting and deselecting, and absorbing and ignoring. Pre-existing judgements of the consultant from the situation intervention and other related experiences also lead them to select approaches and methodologies to be deployed in the formal mandate that in turn shape the evolving judgements.
- **Evolving Judgement:** This is shaped by the formal and informal interactions that a consultant engages in after their entry into the client situation. As part of any intervention, the consultant would normally chart out a plan of interviews, focus group discussions and creative exercises, apart from "objective" business analyses. The consultant normally carries out such engagements with predefined toolkits that may or may not involve critiquing the ontology of the same. These toolkits are inspired or selected by judgements that are harboured by the consultant due to some deep-seated beliefs and values that in turn is a factor of pre-existing judgements.

Reed (1992) talks about four kinds of four models of theoretical selection of approaches that an interventionist can apply. First, *pragmatism*, where the consultant can use an approach due to their familiarity with or awareness of the same. There may be trial-&-error in such situations and optimal outcomes may not always be reached. The intervention may lead to predetermined outcomes. Second, *isolationism*, that is directed by clear ontological bases and standpoints. This overemphasises one way of doing things completely negating other approaches. Such an approach can be totalising and oppressive. Third, *imperialism*, is similar to isolationism in the sense that imperialists favour one dominant way of thinking and approach; however, they are open to borrowing perspectives from others as well as long as these perspectives work in favour of their own viewpoint or help in furthering the same. The danger of imperialism is similar to that of isolationism that is negation of other viewpoints at the hand of a dominant approach. Finally, *complementarism*, which is a way of bringing different viewpoints and paradigms together in order to democratically move in a direction that is to the best interest of the client. A complementarist mindset is liberating and accommodating.

The consultant's values play a significant role in not only shaping their judgements (both pre-existing and evolving) but also in the choice of a model or a theoretical selection of an approach. These value-based judgements not only work towards addressing a problem situation in hand but also in defining them. A consultant in essence constantly "judges" a situation and intervenes into the same with the intent to bring about a change. But if the consultant is constantly influenced by value-based

judgements, there are few questions we need to ask about how the system is defined, how boundaries are drawn and what problem the consultant is trying to address. These are the boundary questions of Critical System Heuristics that we discussed in Chap. 13.

Boundaries lie at the heart of defining a system and deciding what needs to be included in or excluded from a boundary. We have also discussed that if there is more than one party involved in defining the system, there can be more than one boundary resulting in a conflict situation between the “sacred” and the “profane” and deciding on the parameters of success of an intervention. When a consultant enters into a situation, their role of first understanding the problem and stakeholders is based on defining the system of intervention itself by defining boundaries of the system. Here, value judgements play a significant role in identifying, appreciating and interpreting facts, whether the consultant is aware of the same or not (Ulrich 2017).

A consultant needs to engage in an exercise of self-critique to understand how their value judgements are interfering in the problem structuring and the implications the same may have in the intervention. At this point, one may realise that boundaries are malleable as there may be conflicting, overlapping or complementary boundaries. This is a healthy phenomenon to achieve as every judgement and boundary definition is limiting in its own way. In the words of Ulrich (2017):

Since there is no such thing as perfect boundary judgments – perfect boundary judgments would be those we can avoid – the crucial issue is not so much what they are but how we handle them. We cannot avoid the deficits of knowledge and rationality they imply; but we can at least try to handle these deficits in transparent and prudent ways (Ulrich 2017).

Selection, analyses and interpretation of facts for problem-solving at the hands of the consultant normally happens based on multiple boundaries. The ability to understand and accept the same can play an important role for a consultant to navigate through the complexities of a human activity system. Ulrich extends the debate to say that interpretation of the facts and resulting insights in turn affect the reference system that was defined based on value judgements. This can result in a mindshift for the consultant to approach and understand facts in a different or evolved manner from the initial approach they would have taken. This is a constant iterative process that Ulrich (2017) calls systemic triangulation between values, system and facts, the eternal triangle.

The very act of negotiating and renegotiation of boundaries, and the surfacing of new perspectives automatically imply newer perspectives on the interactions within and between the systems—the concept of interrelationship; I began defining systems with the same in Chap. 1. Interrelationships are brought to life with exchange of information and energy between systems and subsystems. It is these interrelationships that brings the system to life. In an organisation setting, an organisation structure is lifeless if there are no interrelationships.

Consider the organisation as a closed system. A sales department does not exist in isolation, but furthers the strategy articulated by the marketing department. Marketing needs to be in constant interaction with production to reach an understanding of production targets and semblance in delivery. Production does not operate by itself,

but with inputs from customer feedback through marketing and research, and strategic inputs. For organisations focusing on innovation, a Research & Development function constantly works on new product/services development based on knowledge and marketing intelligence. Support functions such as HR, finance, administration, supply chain and procurement exist solely to enable the function of the business towards a common objective. But an organisation is not a closed system. An organisation exists to serve the purpose of a larger ecosystem, may it be profit, governance or development focused. Consider the example I used as one of a garment manufacturing organisation. Here, the organisation will exist to produce garments for consumers who exist outside the organisational boundaries. Marketing will have to understand consumers and their tastes in order to feed back into research and manufacturing functions to produce garments that are marketable. It will have to work with suppliers to procure raw materials and distributors to ensure that the garments reach the desired points of sale. Finally, logistics service provider who will ensure timely and safe passage of goods and products.

But the boundary of the organisational system is yet not complete by virtue of the fact that it operates in a social and regulatory environment. Being a manufacturing unit, it will have a commitment to the communities its plants are situated in and would be responsible for the health, education and well-being for the workers' families. It would ideally need a Corporate Social Responsibility (CSR) function that focuses on aligning funds to developmental activities for the larger community. The organisation will be required to function within regulatory guidelines including those pertaining to minimum wages, child labour, taxation and other compliances. Often large organisations will institute a corporate affairs department to navigate the complexities posed by the political and regulatory bodies.

Imagine if the government decides to drastically reduce import tariffs for ready-made garments. This could flood the local markets with imported garments that could be available at reduced pricepoints. This may result in drastically reducing sales for the organisation we are discussing. Low production requirements may result in job losses and reduced revenues for the company and eventual job losses and reduction (or even elimination) of funds for its CSR initiatives. This anecdote pushes the boundaries of the system beyond the country in which the organisation exists in and so does consideration of interrelationships.

A consultant who may be engaged in a supply chain effectiveness project for a large garment manufacturing company cannot afford to work in isolation focusing on just reducing time and cost of the supply chain. But will need to critically consider their boundaries to understand the factors impinging upon the function from various factors and importantly the risks the organisation goes through in the global economy. Understanding of interrelationships between the system and subsystems is the start point for a holistic programme that can not only be effective but also sustainable. These interconnections are rich in feedback loops as carriers of information and communication that make the system reinforcing and evolving. At a given point of time and space, the system is a self-regulating and self-perpetuating unit within a defined boundary. Maturana and Varela call such self-regulating systems autopoietic systems. In their words:

An autopoietic [system is] (defined as a unity) a network of processes of production (transformation and destruction) of components that produces the components which: (i) through their interactions and transformations continuously regenerate and realise the network of processes (relations) that produced them and (ii) constitute it as a concrete unity in the space in which they (the components) exist by specifying the topological domain of its realisation as such a network (Maturana and Varela 1980; p. 78f).

My interest here is autopoiesis in the social system as I identify organisation as a social system. Whilst for Luhmann (1988), the unit of social autopoiesis is communication, for Fuchs and Hofkirchner (2003), the unit of social autopoiesis is human actors who permanently reproduce and/or transforming social structures. Organisations are nothing but an agglomeration of human actors communicating with one another to achieve a common objective. The biological reproduction of humans is not of interest in this discussion, but what the humans do in a social setting through their fundamental quality of “sociality”. In an organisation setting, individual humans and set norms of social bond specific to that context determine interactions and outcomes of their interactions towards an organisational objective. In an organisation, this sociality exists for a purpose that is defined in time and space, where humans and their communication continually redefine their organisations and vice versa; this is the concept of emergence.

This understanding is particularly important for management consulting interventions. True that in actuality boundaries are always extendable and malleable, and system can be defined ad infinitum, but consultants operate in a professional environment where they are expected to deliver on specific expectations within a time and space construct. These results are defined in specific, measurable and time-bound manner as per relevance of an organisation as a social system. In such situations, consultants need to work with defining a boundary, articulation of interrelationships, appreciating risks and clarifying dependencies for a systems intervention that can focus on outcomes and achievement of results. Autopoietic systems define, maintain, and reproduce themselves, and appreciating the same can enable consultants work with directed energy towards a common goal.

We cannot lose sight of emergence as a fundamental systems characteristic. I led a discussion around the same in Chap. 1 in the context of complexity thinking. Using the bird-flock example, I talked about the whole as more than the sum of its parts. Emergence is a characteristic of a new “order” emerging out of an existing set of interrelationships and interactions between elements in a system. I carried the argument forward to talk about dissipative structures in Chap. 2 to describe a thermodynamically open system that operates in a far-from-equilibrium state with a constant exchange of energy and matter with the environment around it. This leads to a state of self-organisation within the system that lets it survive and evolve. This follows the logic of nonlinear dynamics for the system to emerge in new states of order. Emergence is natural both in the physical and social world due to nonlinear dynamics of information and energy. In the words of astronomer and Pulitzer-Prize-winning author, Carl Sagan:

Emergence is a process, continual and never-ending. It emphasises interactions as much as it does the people or elements interacting. Most of us focus on what we can observe—the

animal, the project outcome, the object. Emergence involves also paying attention to what is happening — the stranger arriving with different cultural assumptions that ripple through the organisation or community.

Management consultants need to be conscious of the fact that emergent behaviour can be either desirable or undesirable. Often termed as “unintended consequence” (discussed in various chapters in this book), consultants need to anticipate and plan for the same, and also build adequate capacities in the system to absorb and evolve with the new realities. To further this understanding, one may note that emergence can itself be of different kinds. Archer’s (2005) research on social realism delves into emergent properties as a result of the interaction between and within individual and social settings and the identities it generates as a result of such interactions. Individuals and societies (or an organisation) contribute to both each other’s emergence and distinctiveness. Archer (2005) identifies three emergent properties:

- **People’s Emergent Properties:** As a result of certain interactions, the individual may themselves face a new sense of being and arrive with a worldview that is different from the past. Such change can be witnessed often in intended organisation development and leadership transition interventions where a senior employee is supported with coaching programmes to move from an individual-contributor role to one that requires significant degree of team management in a larger business setting. Organisational systems and processes may be set in place to support the individual to emerge as a “new” leader.
- **Structural Emergent Properties:** It is common to witness consultants to be brought into an organisation for process interventions to enhance effectiveness and efficiencies. Business process reengineering exercises work on bringing about significant and often disruptive changes in systems and processes that often transform organisations in terms of reporting relationships, technology interface and work processes. Such structural change may involve inducting people into a new organisation chart or taking people along a new technology platform implementation or deploying revised service level agreements. Unintended consequences may witness challenges such as rejection, time lag in people’s acceptance or change in human resources. Several of these emergent properties can lead to cultural emergence (the next point).
- **Cultural Emergent Properties:** The moment a consultant enters an organisation, there is invariably human contact and every human contact has a cultural consequence. Organisational change cannot be realised without the people’s involvement, and people in organisations are never individualistic, but collective; as the purpose of existence is collective. Just as carefully planned and sensitive consulting interventions can lead to outcomes with desirable cultural behaviour, unplanned and insensitive interventions can lead to equally undesirable results.

It is not easy to model the concept of holism as a state of mind. I have however attempted to highlight some key aspects that I think shape the systems mindset drawing from my experience of systems consulting over the years. The aspects presented here may not be exhaustive, but certainly lie at the core of the systems thinking. These aspects are in a way progressively interconnected, and can only be better

understood in union with one another rather than in isolation. Systems thinking is neither a technical skill or a toolkit, although it can influence development of technical tools and approaches. The systems state of mind is driven by the thinking ability that appreciates boundary critique, sees interconnections and anticipates emergence in the situations it engages with. Driven by rationality, analysis and logic, this characteristic of the mind does not need to be imposed but is existent as a state of being. The state of being need not be a priori, but can be developed through training and practise in systems approaches. But once the systems state of mind is established, it almost becomes second nature for the interventionist.

In part-II of this book, I have presented case narrations of a range of projects. The reader will appreciate that in several of these, systems approaches have been used as an intended strategy, and in many others, systems has influenced the approach and the working models. In the latter case, I have not planned in a “systems-way” in the consulting mandate, but my pre-existing association with systems thinking let me approach the situations in a manner that appreciated boundaries, interrelationships and emergence—either during the project or retrospectively.

Critical Systems Thinking has led me design, approach and implement initiatives that have always considered people’s participation and empowerment as a key tenet in my work. As my understanding and experience grew in the field, my approaches and proactiveness in involving people also evolved. My work during the later part of my professional career had a more evolved approach to people’s participation and stakeholder involvement compared to some of my earlier work.

Holism as a state of mind creates mental models that accept change, critique and evolution in its very nature. Although I talk about rationality, analysis and logic as the systems mindset—seemingly “hard” concepts, at the hands of the systems thinker they become “soft” concepts due to the fundamental acceptance of malleability and permeability of the social context that a systems thinker grows into accept and celebrate. A systems thinker is able to merge both the “hard” and the “soft” as a mental process that gets reflected in their work, whether by design or by default. Once a systems thinker is always a systems thinker; and this state of mind can be best enabled in practise with flexibility as a state of intervention.

I will discuss flexibility as a state of intervention in the next section and appreciate how this can bring to life holism as a state of mind in the context of management consulting.

14.2.2 Flexibility in the State of Intervention

I discussed the concept of flexibility in detail in Chap. 2 and talked about various kinds of flexibility in different contexts. I took the reader through the influence of flexibility in thinking and application through my case narratives in part-II of this book. As I reflect back on my association with flexibility formally, I can visualise three dimensions of flexibility that I believe are central if consultants have to realise its benefits fully: cognitive, formulative and substantive. Cognitive flexibility is the

ability to think flexibly, formulative flexibility is the availability of methods and approaches that enable the application of flexible thinking, and substantive flexibility is the access to resource alternatives that can bring flexibility to life. I will now explore this in detail.

I begin by quoting Bergland (2015) to establish cognitive flexibility as a concept:

Cognitive flexibility represents someone's ability to shift thoughts and adapt his or her behaviour to an ever-changing environment. Levels of cognitive flexibility are reflected by your ability to disengage from a previous task and respond effectively to another task — or to multitask. The more cognitive flexibility an individual has, the greater the chances are that this person can optimise his or her human potential.

Cognitive flexibility lies at the very fundamental level of flexibility as *it all begins with the ability to think*. To be flexible in thought, a person needs to be able to transcend silos of affiliation to specific concepts, mental models, actions and tasks. Presented with different and/or differing responsibilities, he or she needs to be able to move between thoughts and effectively shift between tasks. Psychological studies have established that if there is no perceived negative consequence, human beings are open to experimentations and trying something new. This trait is referred to as “neophilia”. To quote Le (2018):

Only a part of us, a part that has emerged recently, designs buildings as boxes with uncompromising straight lines and flat surfaces. Another part of us recognises on every scale from the microscopic to the macroscopic. That part of us makes Gothic cathedrals and Persian carpets, symphonies and novels, Mardi Gras costumes and artificial intelligence programs, all with embellishments almost as complex as the ones we find in the world around us.

Due to the nature of the subject, relevant disciplines engaged with the study of cognitive flexibility include psychology, psychiatry, neuroscience and sociology.

Cognitive flexibility can be honed through training and capacity building, but only to a limited extent. It exists in a much deeper level in individuals as a cognitive skill. It can be traced back to early childhood of an individual on how a child's mental capacities are formed and developed. Reference to cognitive flexibility is found commonly in discussions on Executive Function that is a combination of working memory, flexible thinking and inhibitory control that enable children to manage thought, action and emotions in order to get work done, according to American child support organisation *Understood* that works extensively in enabling children to unleash their psychological and mental potential (Understood 2018). Referring further to the work of *Understood*, working memory is the ability to retain information in mind for its further application. For instance, a person may have a specific piece of information that he or she carries forward to use the same for a different task at a later period of time; flexible thinking is transient knowledge across application areas over a time span. It is the ability to draw connections and make cross reference. Flexible thinking is the ability to think about the same situation in more than one way. For instance, one may be able to understand and approach the same problem in different ways. Inhibitory control enables one to control oneself and keep away from distractions. It can keep a person from containing their attention and keeping their reaction to stimulus balanced and focused. A sound balance of these three

aspects ensures a person's stability in perspectives and ability to rationally transition between spectrums of thoughts and related actions. Flexible thinking therefore forms a fundamental aspect of a person's thinking ability and forms their capacity for manoeuvrings through complexity.

Flexible thinking is cognitive flexibility. It is a combination of both nature and nurture, and varies during the lifespan of an individual (Chelune and Baer 1986). The variation occurs due to a person's life experiences, exposure to situations and training, with multiple brain functions acting as the network of influence. Higher the complexity of situations, greater is the requirement of cognitive flexibility that comes handy for planning, multitasking, problem-solving and strategic thinking. Operating in a world of complex change and flux, executives must be able to make regular shifts between mental models and tasks to stay abreast of changing demands of the managerial environment. Effective shifts between tasks are only possible if the person is able to harbour what Bergland (2015) calls a "superfluidity" of thoughts and actions.

Taking the deliberation on cognitive thinking further, Leonard Mlodinow, theoretical physicist and best-selling author, introduces the concept of "elastic" in the context of flexible thinking, a higher order cognitive state that capacitates the human brain to integrate divergent perspectives and transcend conflicting thinking to enable people address and work with complexity with ease and effectiveness (Mlodinow 2018). Mlodinow argues that every person possesses specific codes in their brains that help them to demonstrate elastic thinking; these codes need to be harnessed for people to be comfortable with ambiguity and conflict, and make mental shifts that can help them ask the right questions in a complex world. This is the key to achieve success in roles professionals play today as business leaders, social custodians and regulatory guardians. In an interview with the Scientific American, Mlodinow says (cited by Cook 2018):

The human brain doesn't act like a single information processor grinding through an algorithm on its way to solving a problem. Instead, it acts as a set of interacting and competing systems. That's why scientists often speak of distinctions such as conscious/unconscious, reason/emotion, or right-brain/left-brain. When it comes to elastic thinking, those structures that generate new ideas must compete with other structures that censor them. We need the latter because our minds are so amazingly prolific that without some filter, we'd be unable to focus, and drown in our own thoughts.

Mlodinow goes on to articulate specific "tools" for elastic thinkers that he believes are necessary for executives to navigate through the current environment to offer the required "variety" to face the complexities posed by the business environment. According to him, these "tools" can help an executive challenge mental models, take risks and demonstrate benevolent pragmatism. The identified "tools" are: capacity to let go of comfortable ideas, accustom to ambiguity and contradiction, rising above conventional mindsets, reframe questions we ask, abandoning ingrained assumptions, relying on imagination as much as logic, willingness to experiment, tolerance of failure, and generation and integration of a variety of ideas.

If an individual is unable to demonstrate the above traits, it can the condition may be referred to as cognitive inflexibility (Canas et al. 2006). Whereas cognitive

inflexibility poses limitations on a person's ability to absorb variety and celebrate diversity, cognitive flexibility provides the intellectual stimulus to critique boundaries, think new and see situations differently. Cognitive flexibility helps a systems consultant to manoeuvre through the array of systems paradigms including hard, soft and emancipatory thinking (these paradigms are discussed in Chap. 3). A systems interventionist, however, needs an enabling platform that allows them to bring together various approaches and tools for optimal application during a consulting situation. Such platforms and frameworks induce creativity, streamline thinking and optimise efforts in the right direction to work with variety and absorb diversity. I call this formulative flexibility—flexibility that allows for optimal complementarism of approaches and tools required by a consultant for effective intervention in a problem situation.

Education through the formative part of one's life plays a major role in enhancing their ability to be comfortable with variety, think flexibly and adapt to changing situations. Drawing from psychology and psychotherapy, Rogers (1983) says:

We are, in my view, faced with an entirely new situation in education where the goal of education [...] is the facilitation of change and learning. The only man who is educated is the man who has learned how to learn [...] how to adapt and change [...]. Changingness, a reliance on process rather than upon static knowledge, is the only thing that makes any sense as a goal of education in the modern world. [...] Out of such a context arise true students, real learners, creative scientists and scholars, and practitioners, the kind of individuals who can live in a delicate but ever-changing balance between what is presently known and the flowing, moving, altering problems and facts of the future (Rogers 1983; pp. 196–197; as quoted by Motsching-Pitrik 2015; p. 133).

Rogers (1983) talks about whole-person development and integrating personal and psychological aspects as a significant factor of the early education system and how this moulds an individual into the person he or she is. This kind of learning can be achieved by an integration of feelings, experiences and ideas that prepares an individual to think differently with ease and comfort when posed with new and different situations. Education, as much as it has to do with societal setting, is a person-centred approach. Motsching-Pitrik (2015) relies on this thought to build his argument of developing personal flexibility as a key to agile management practice. He selectively highlights the following five features from Rogers (1959) that he believes are central to building a person-centred climate and for the development of inner flexibility (Motsching-Pitrik 2015; pp. 134–135):

- Openness to one's experiences.
- Changing flexibility in the process of assimilation of new experiences.
- Abstinence of self-worth.
- Creative adaptation to new situation with new behaviour.
- Reciprocal positive regard between people.

Earlier in this book (in Chap. 3), I discussed select platforms that accommodate diversity and bring together systems approaches inspired by different paradigms for a consultant to exercise formulative flexibility. Different systems methodologies bring to the table their own strengths suited to different situations and this has

been aptly articulated by Jackson and Scholes in their System of Systems Methodology (SOSM). The SOSM helped overcome methodological wars that over the years fought to establish their dominance in systems interventions claiming their own value propositions. It made an apt case to establish the relevance of different paradigms and systems methodologies for different contexts as per the complexity of the situation and the nature of participation. The SOSM in many ways forms the base of Jackson's Total Systems Intervention (TSI) who calls it a meta-methodology that exists "at a higher level and explores the nature and use of methodologies" (Jackson 2007; p. 11). Through creative thinking and deliberative critique, TSI offers a platform to the interventionist to methodically assess a situation at hand and prepare for the appropriate systems methodologies to be employed, establishing clarity in thought and action. Mingers and Brocklesby's Multimethodology presented a framework on mixing methods based on the social, personal and material appreciation of a situation. They introduced four iterative phases that facilitate combining methods to enhance a robust formulative base for a range of systems methodologies. Similarly, Taket and White attempt to embrace complexity through their Participatory Appraisal of Needs and the Development of Action (PANDA) framework. Formulative flexibility is planning related; relevant disciplines include management science and administration.

A systems consultant does not need to adhere to any of the already proposed meta-methodological frameworks presented in this book or elsewhere, but may create their own. Every problem situation is unique and although meta-methodologies are designed to be suited for all situations, consultants can, and often need to, introduce their own nuances and specificities. These specificities may depend on the intensity of the problem situation, nature of organisational ownership, complexity of the environment (internal and external), client intent, and values and culture.

Formulative flexibility is the bridge between cognitive and substantive flexibility. If cognitive flexibility brings in the "thought", formulative flexibility brings in the "form". This is important because unless there is a platform to assess, combine and adapt the rich systems methodologies, highly transient thinking without a formulative direction can lead such thoughts to disarray. Sushil talks extensively of flexible systems management and presented possible schemes of integration of systems techniques. Awareness of these schemes can help the consultant to be aware of how certain techniques are leveraged and integrated so that in a state of constant mix-&-match and integration of techniques, the real essence of the directional approach (if at all) does not get lost.

Finally, substantive flexibility is the realistic and practical access to resources and one's ability to promptly select and/or adapt those resources depending on an intervention. Resources can imply both tangible and intangible resources. Tangible resources can include capital, infrastructure and workforce; intangible resources can include time, competencies, and even goodwill and support.

I have considered three different aspects of intangible resources although it is not common for all of the factors included here to be considered "resource" if we have to take a purist definition of the term. Often tangible resources may be available but the time required to adapt and adopt may be highly insufficient. In such cases,

Table 14.1 Three kinds of flexibility

	Aspect addressed	Dependency	Related discipline
Cognitive flexibility	Thinking	Nature, Nurture	Psychology, Psychiatry, Neuroscience, Sociology
Formulative flexibility	Planning	Frameworks and models	Management, Administration
Substantive flexibility	Action	Resource availability	Material Sciences, Finance, Human Resource, Supply Chain

agility is the virtue to overcome the time challenge. Consultants need adequate competencies—defined as the optimal congruence of knowledge, skills and attitude—to complete a task. In a fast-paced situation, consultants must be able to constantly learn and adapt their competencies to stay relevant and demonstrate what I call competency immediacy. Finally, the organisational context one is working within needs to support the direction an intervention is taking. Leadership needs to be challenged of their own mental models and embrace diversity and flux in business interest and extend goodwill in intent, over-&-above goodwill with tangible resources. Relevant disciplines for the study of substantive flexibility may include material science, administrative support and supply chain.

Refer to Table 14.1 that summarises the three kinds of flexibility.

An optimal combination of the three kinds of flexibility can enable consultants deliver great work and great results. Human beings carry a combination of both a planned and creative mindsets and it is the self-understanding and self-organisation of the same that can streamline our passion and energies to achieve results.

Holistic flexibility is a dynamic interplay between holism as a state of mind and flexibility in the state of intervention. A systems consultant needs to constantly critique their own boundaries, appreciate systemic interrelationships and foresee emergence. They are under pressure to deliver results for clients demonstrating out-of-box thinking bringing in various perspectives and within resource constraints. For such situations, the consultant and executives need to constantly learn and evolve. Learning is the binding factor that makes the interplay between holism and flexibility evolve and create progressive value.

14.2.3 Learning

A management consultant is continually exposed to new situations, have to work with new people (both in the terms of clients and teams) and is always exposed to unique problems by virtue of the fact that even though the problem could be similar, a

new context makes it unique. In addition, there is the requirement to work in a highly complex world where values are no longer taken for granted, regulations transcend national boundaries and where we see increasing activism at the hands of the civil society. A consultant needs to continually learn and adapt to changing circumstances, expectations and complexities. It is this learning that brings in a dynamic interplay between holism as a state of mind and flexibility in the state of intervention to result in holistic flexibility.

Argyris and Schon (1974, 1978) talked about two levels of learning—proto-learning and deutero-learning—meaning single-loop and double-loop learning, respectively.

Single-loop learning is about doing something right. The end objective is not questioned as is taken for granted; so are strategies adopted to reach the end objective. From a project perspective, reviews are institutionalised to monitor work that is well defined and bring in course correction when and where required. There is great focus on the methodology and technique that has been agreed. The learning process can lead the consultant to introduce changes in the technique and bring their stakeholders in alignment with the same. Adherence to time, quantity, quality and cost is emphasised. Argyris et al. (1985) talk of certain values that drive a consultant operating under single-loop learning. The focus is on an optimising system operating with empathetic rationality. Strategic imperatives include environmental control and unilateral task processing. The consultant may be driven by the belief that their approach is always right and this may lead to a certain kind of command-and-control environment. Consequences can include defensive relationships, low freedom of choice, reduced production of valid information and little public testing of ideas (Argyris et al. 1985). Underlying values and assumptions that shape the objective are not questioned. Single-loop learning is represented in Fig. 14.2.

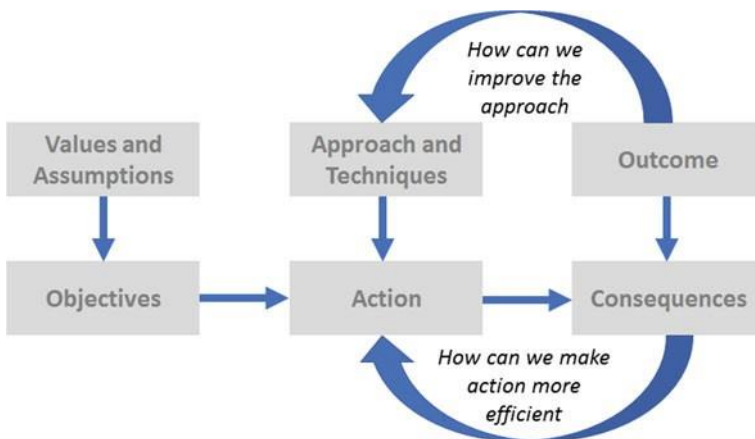


Fig. 14.2 Single-loop learning

Double-loop learning, on the other hand, involves doing the *right thing* (as opposed to doing *things right*). This involves critiquing the end objective of an intervention itself rather than the technique to reach the same. Double-loop learning shifts the mindset from a “goal-seeking purposive system” to a “goal-searching purposeful system” (Ackoff and Emery 1972). The consultant questions why an objective was chosen at the first place and explores the rightfulness or wrongfulness. It is more creative and reflexive and involves engaging with a wider range of stakeholders to collaboratively approach a problem situation. Anderson (1997) talks of an “internal commitment” for the interventionist driven by double-loop learning. Strategic imperatives include sharing control and stakeholder participation in design and implementation. Conflicting views and public evaluation are welcome along with an atmosphere where there is high freedom of choice. Double-loop learning will involve a consultant questioning their client about why a certain objective is considered for an intervention. It involves an emphasis on problem structuring rather than problem-solving. Effectiveness is cherished more than efficiency and a consultant does not shy away from radically reshaping the journey midway in the larger interest of the client and its stakeholders. The double-loop learning mindset touches the fringes of value systems as creating purposeful systems involves questioning underlying assumptions that influence crafting of objectives. Double-loop learning is represented in Fig. 14.3. The loop of critique from objectives to values and assumptions is represented in grey because double-loop learning still does not address the larger question of why certain values exist that in turn influence assumptions and consequently objectives.

Triple-loop learning takes the argument a step beyond to address learning at a deeper level of values and ethics. Bateson (1972) talks of triple-loop learning as one where an interventionist delves into the fundamental question of what is believed to

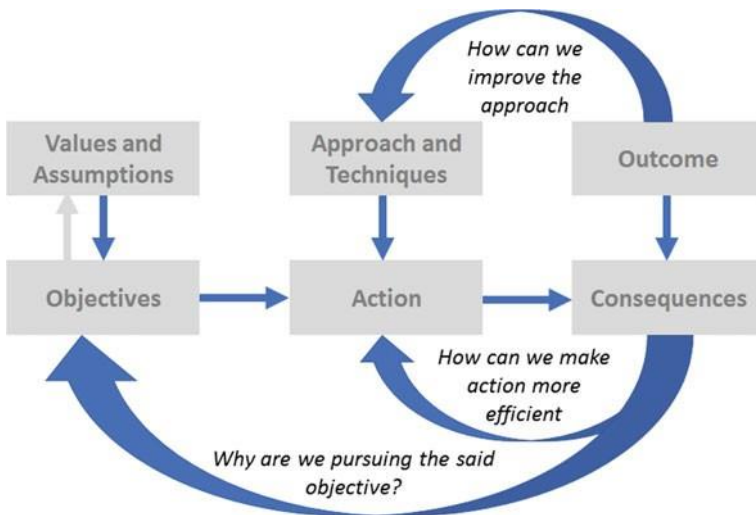


Fig. 14.3 Double-loop learning

be right or what is believed to be wrong. It offers what Reason (1991) calls “meta-framework” under which the consultant is driven to ask crucial boundary questions and critically approach power structures within which an intervention may have been commissioned at the first place. Translating this in terms of systems practice is understandably more challenging. If single-loop learning is about doing “things right”, double-loop learning is about doing the “right things”, triple-loop learning is qualified with third dimensions that Flood and Romm (1996) introduce with the question, “is rightness buttressed by mightiness and/or mightiness buttressed by rightness?”. This question places the consultant in a position of “responsible choice making” as the question is no longer about efficiency or effectiveness, it is about who defines what is right and what is wrong—the fundamental question of ethics and value judgement. It is about questioning whose ethics are being followed for the assumptions that surface and how power plays a role in the same. It is often noticed that ethics of the intervention sponsor has the upper hand and this defines the value system. Triple-loop learning is about breaking such power relations and placing established ethics into scrutiny. Flood and Romm (1996) say that triple-loop learning greatly enhances diversity management; in their words, “Triple loop learning is about increasing the fullness and deepness of learning about the diversity of issues and dilemmas faced. It is about ways of managing them. It is the dénouement of single-loop learning and double-loop learning” (p. 157). This mindset can enable management consultants to deal with pressing global issues with responsibility and human accountability without blindly accepting mandates passed on to them by higher authorities. Boundary critique lies at the heart of triple-loop learning. It is important to note that both single- and double-loop learning are encompassed within triple-loop learning in the context of the question of value and ethics. The concept of triple-loop learning is represented in Fig. 14.4.

Systems thinking has boundary critique at its very centre that involves challenging mental models and value systems. I propose a systems interventionist to celebrate

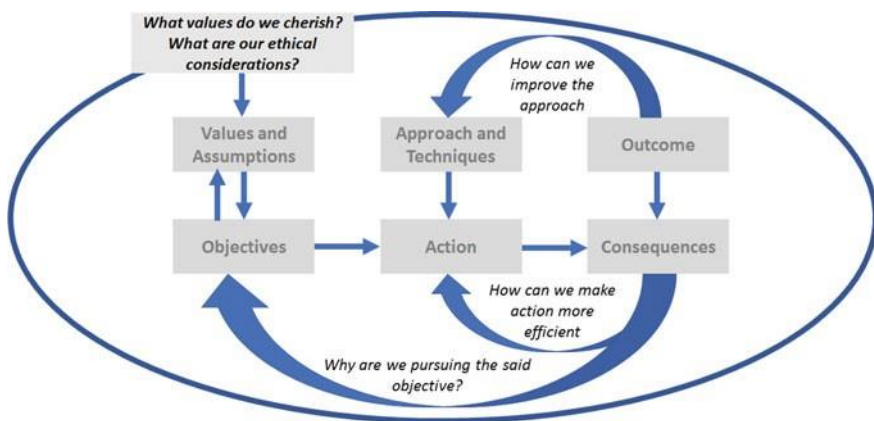


Fig. 14.4 Triple-loop learning

diversity and absorb variety, and the only way to do that is to consciously exercise triple-loop learning. The consultant and the intervention environment have to display flexibility and adaptiveness to leverage the same. The consultant is always answerable to their client and hence single- and double-loop learning remain critical success factors to deliver outcomes that yield results in the short term and sustainable impact in the long term. The learning angle can bring to life this dynamic interplay between holism and flexibility.

Finally, I would like to talk about the focus on responsible outcomes of a systems consultant, given the state of existence in the world and the universal issues that not just organisations, but humanity faces.

14.2.4 Responsible Outcomes

I would like to articulate what I think should be the three core outcomes for systems consultants—systemic value-add, emancipation and sustainable solutions—what I call responsible outcomes. I would like to propose these as espoused outcomes for consultants. The relevance of these outcomes will be more pronounced as I take the reader through a consultant’s journey in specific fields of intervention in the following three chapters on social impact, organisational development and corporate reputation.

When a consulting intervention is able to create value for all stakeholders *as identified in the mandate* it can be regarded as systemic value-add. I place “as identified in the mandate” in italics because the identification process is itself contextual and temporal that is informed by the boundaries that the team chooses to draw in the stakeholder map and intervention design process. An idealistic whole systems intervention would mean addressing the economic, environmental and social parameters in a project or for a client, or what John Elkington calls the triple bottom line. Economic parameters mean taking into consideration financial objectives of shareholders, profitability, employee payouts and overall financial wealth creation—the primary reason why corporations exist. Environmental parameters would mean considering adherence to clean and green means of operations, manufacturing management, waste disposal, recycling and overall respect for the global commons. It is a process of meeting the demands of the present without jeopardising the needs fulfilment of future generations. Social parameters would mean considering the commitment of a corporation to the communities it exists in that can be realised by equitable wealth distribution, community welfare, and enablement of a fair and just society.

Consideration of the triple bottom line will always lead consultants to engage in an intense boundary critique of the stakeholder map.

At the same time, the consultant needs to work under constant limitations posed by their client in terms of time, resources and expectation of results. With systemic value-add, I am not proposing that a consultant disregards their client mandate; but they certainly need to engage in a dialogic process where goals are evaluated, mental models are challenged and outcomes are critically approached keeping in mind

sustainable solutions. It is commonplace to equate the term “sustainable solutions” with environmental sustainability. But my definition of sustainable solutions, specific to management consulting, are those that will lead to long-term value creation and not just short-term results. Short-term results and long-term value creation are specific to the client mandate and the consultant needs to facilitate a dialogue to articulate the same with the client. For instance, a consultant may be called in by a large corporation citing the issue of employee attrition with the assumption that pay structures need to be revised so that employees are able to have more “cash in hand”. If a consultant has a short-term results mindset, they would jump into the mandate and carry out the project as articulated by the client through a compensation restructuring exercise. This may hold back employees for a finite period of time as they would have more money to take back home. However, the real issue of employee attrition could actually be leadership problems and lack of effective manager skills. If a consultant has a long-term value-creation mindset, they would delve deep into the issue of employee attrition at the beginning and undertake an organisational discovery exercise to understand the triggers behind what is pushing people out of the organisation. Unearthing the real issue will enable them to undertake a whole systems intervention of the organisation addressing several aspects of management; compensation can as well be one of them. But if leadership, culture and compensation are addressed as systemic value-add, this would probably address the issue of employee attrition for the long run. This is a sustainable solution, as opposed to a short-term result.

The above example touches only one dimension for a specific anecdote—employee attrition and organisational development. But similar approaches can be taken for mandates in other sectors and industries where the consultant puts in practise the spirit of triple-loop learning. For instance, for a manufacturing excellence project, environmental sustainability needs to be a key dimension apart from process and production efficiency. Therefore, it will encompass aspects like sourcing, personnel, core processes, waste management, supply chain and market interface. To stay relevant and realistic, the consultant needs to define the most important drivers of an organisation’s value-creation system that O’Malley (2018) calls “Strategic Balance Sheets” focused on customers, employees, processes and investors (the reader should refer to these just as indicators and this is by no means comprehensive list). O’Malley (2018) goes on to give the example of employee learning and job satisfaction as two important drivers of the Employee Balance Sheet. Similarly, Customer Balance Sheet may include product/service satisfaction and customer reference, Process Balance Sheet may include breakdown reduction and innovation, and Investors Balance Sheet may include return on investment and brand reputation. Definition of such drivers keep consultants and their clients on track to deliver on intended outcomes rather than making consulting mandates short term and myopic at one end and idealistic and unachievable at the other end of the spectrum.

Systems thinking is often criticised for being idealistic and a topic of academic deliberation rather than having implementation validity. I propose the focus on responsible outcomes to rise above this debate and remind the reader about client mandate as an iterative process to make the same more meaningful for the long run.

Being realistic and being cognisant of the limitations within which consultants work under will help them define what is possible and what is not. It is true that with one consulting mandate, the “whole system” cannot be changed, but whatever intervention is carried out needs to function to bring about maximum impact to the system as defined. For this to happen, the management (and the consultant) needs to focus on the key engines of value creation. O’Malley (2018) in a recent article in *The Systems Thinker* talks about these key engines as innovation, imagination, cooperation, and knowledge.

Coming to emancipation, I borrow this from Critical Systems Thinking (CST) where emancipation is a central commitment. I propose emancipation as a guiding philosophy for a systems interventionist where they are continually aware that every mandate and every relationship has an inherent power dynamic and they need to be conscious of the same if they have to design and lead mandates that are fair and just. Reference again needs to be made to triple-loop learning where the consultant needs to aspire to reach a position of balanced understanding with their client that the intervention facilitates fair and transparent value creation for the business, environment and society. This involves intense dialogue and challenging of mental models for both sides involved. Consultants will know that this process itself may run the risk of projects being called off or being commissioned to a competitor firm who may offer a “simpler” approach adhering strictly to the sponsor’s mandate.

However, this is where the focus on responsible outcomes come in. Consultants and clients are part of the larger human ecosystem where interests of the larger economy, environment and society need to be considered. Often consultants may end up acting in manners that are self-centric and myopic driven by market forces, under client pressure and/or even influenced by a position of power due to their subject matter or sectoral expertise. Nosseir (2016) talks about the consultancy business as “a double-edged sword, often involving consultants in a conflict between serving their clients to the utmost of their knowledge and manipulating this knowledge to serve their own business interests” (Nosseir 2016). To overcome such a challenge, the shift needs to be made from what Maula and Poulfelt (2000) say from “one-directional” to “two-directional” consulting. One-directional consulting involves knowledge flow from the consultant to the client in a directive manner (Lippitt and Lippitt 1979; Kubr 1996). This kind of consulting is content based (Schein 1987) and believed to be “transplantation” of new ideas from the consultant to the client (Berg et al. 1998). Two-directional consulting involves two-way knowledge flows between the consultant and the client with possible creation of new knowledge. This mode of consulting is non-directive (Lippitt and Lippitt 1979; Kubr 1996), process based (Schein 1987) rather than content based. This mode of consulting is also “translation” based where established frameworks and approaches are customised for a specific client (Berg et al. 1998). Two-directional consulting involves close engagement between the consultant and the client in an iterative process. This is where deliberations on objectives, clarity on values and critique in the approach is possible. It provides an opportunity to relate the intervention to the wider frame of reference of the systemic value-add. Such an act may result in change of scope of the intervention that can be either an extension or a reduction. The consultant needs to be open to such changes

and embrace the business realities that come with such interactions. Creating sustainable outcomes also mean the ability of an intervention to self-sustain beyond the life of a project mandate. Consultants need to work with their clients as partners to build adequate capability and governance so that the human agency in an organisational setting is able to carry forward and sustain with the change initiated. This forms an important element of responsible outcomes.

Consultants have to manage expectation and navigate ethical considerations both at the level of self and at the level of the client that Poulfelt (1997) calls “dual ethics”; I will explain this further. When it comes to the self, consultants have to navigate a variety of factors. First is the factor of financial realisation. As I already mentioned, often having to critique a mandate and engage in a deliberation on systemic value-add may not offer financial justification. The client may have limited budget for which a consultant has been called in and the consultant also needs to “win” the mandate as this is what earns them their living. This often leads the consultant to surrender to negotiations and budget cuts and accept a mandate as it is. Limited budgets may also lead consultants to compromise on the approach and that may mean exclusion of stakeholder voices or involvement, or even a compromise on the concept of systemic value-add. Further, it is often one senior decision-maker in one department who is the actual sponsor of a mandate, and not necessarily the whole organisation. It is not uncommon to have situations where there is a lack of alignment between the decision-maker and the larger organisational objective and/or values. This kind of a situation may put the consultant in a highly precarious situation whilst carrying out a mandate. As Poulfelt (1997) goes on to say, consultants have to deal with additional complexities like confidentiality and the extent of client proximity that they may allow in the relationship between the two. These are issues pertaining to “dual ethics” that a consultant has to constantly deal with and navigate.

Difficult questions and difficult situations do not mean that we as consultants can afford to shy away from these realities and carry on working “as usual”. Time has come when failures and assignments led by misguided consulting values have begun to surface in the corporate world with grave consequences. However, there is still lack of regulation of management consultants on how they ought to operate, create value and what ethics they ought to adhere to. To quote Elkington (2018):

If an industrial product like a car fails the manufacturer pulls it back, tests it and, if necessary, re-equips it. In case manufacturers grow careless, governments run periodic road safety tests. Management concepts, by contrast, operate in poorly regulated environments where failures are often brushed under boardroom or faculty carpets. Yet poor management systems can jeopardize lives in the air, at sea, on roads or in hospitals. They can also put entire businesses and sectors at risk.

The answer could lie in espousing for responsible outcomes in consulting. Holistic flexibility brings in the required prerequisites where boundaries are critically looked upon, interrelationships are cherished, emergence is anticipated, and flexibility is encouraged in an environment of learning. Consulting ought to be guided by a spirit of inquiry to achieve responsible outcomes that focus on systemic value-add, emancipation and sustainable solutions. However, to focus on responsible outcomes is not

an “individual game”; if this has to see the light of the day, this spirit needs to be embraced by the industry as a whole.

14.3 Conclusion

In this chapter, I articulated the concept of holistic flexibility that exists at the intersection of holism and flexibility. I called out the core characteristics of holistic thinking—boundary critique, interrelationships and emergence—and identified three kinds of flexibility—cognitive, formulative and substantive. I argued that a systems consultant constantly navigates between these systemic characteristics and flexibilities in their work environment within the constraints of the client mandate. Transparent interaction between the consultant and the client is important for mutual parties to address problem situations effectively. Being able to see the whole picture and shed individual egos are important qualities for both the consultant and the client on the journey to enable lasting solutions. In light of the complexities humankind exists in today, I was inspired to articulate three important outcomes for systems consultants—systemic value-add, emancipation and sustainable solutions—that I called responsible outcomes.

Holistic flexibility has been a retrospective concept that emerged as a result of my reflection on my own journey as a management systems consultant, the successes I have had and the limitations I have encountered. I hope that as a clear articulated concept, it will help systems consultants navigate the client journey better and more effectively.

In the next three chapters, I will highlight select debates in three major fields of consulting that calls for holistic flexibility and the need to work towards responsible outcomes.

References

- Ackoff RL, Emery FE (1972) On purposeful systems: an interdisciplinary analysis of individual and social behavior as a system of purposeful events. Aldine-Atherton, Chicago
- Anderson L (1997) Argyris and Schön’s theory on congruence and learning. <http://www.scu.edu.au/schools/gcm/ar/arp/argyris.html>. Accessed 13 Aug 2009
- Archer MS (2005) Structure, culture and agency. In: Jacobs MD, Hanrahan NW (eds) *The Blackwell companion to the sociology of culture*. Blackwell, Malden, pp 17–34
- Argyris C, Schön D (1974) *Theory in practice: increasing professional effectiveness*. Jossey-Bass, San Francisco
- Argyris C, Schön D (1978) *Organizational learning*. Addison-Wesley, London
- Argyris C, Putnam R, McLain SD (1985) *Action science: concepts, methods, and skills for research and intervention*. Jossey-Bass, San Francisco
- Bateson G (1972) *Steps to an ecology of mind*. Ballantine, Toronto
- Berg PO, Pouffelt F, Sevón G (1998) *Transplant surgeons, magicians or interpreter: change strategies among management consultants*. Paper presented at the Conference on Organization Research, Stanford University, September 1998

- Bergland C (2015) New paradigm of thought demystifies cognitive flexibility. <https://www.psychologytoday.com/blog/the-athletes-way/201509/new-paradigm-thought-demystifies-cognitive-flexibility>. Accessed 15 Jan 2018
- Canas J, Fajardo I, Salmerón L (2006) Cognitive flexibility. In: Karwowski W (ed) International encyclopedia of ergonomics and human factors. Taylor & Francis, pp 296–300. ISBN: ISBN-10: 041530430X
- Chelune GJ, Baer RA (1986) Developmental norms for the Wisconsin Card Sorting Test. *J Clin Exp Neuropsychol* 8(3):219–228. <https://doi.org/10.1080/01688638608401314>
- Cook G (2018) The power of flexible thinking. <https://www.scientificamerican.com/article/the-power-of-flexible-thinking/>. Accessed 12 Sept 2018
- Elkington J (2018) 25 years ago I coined the phrase “Triple Bottom Line.” Here’s why it’s time to rethink it. <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it>. Accessed 5 Dec 2018
- Flood RL, Romm NRA (1996) Contours of diversity management and triple loop learning. *Kybernetes* 25(7/8):154–163. <https://doi.org/10.1108/03684929610149747>. Accessed 26 Oct 2016
- Fuchs C, Hofkirchner W (2003) The dialectic of bottom-up and top-down emergence in social systems. *tripleC* 3(2):28–50. <http://triplec.at>
- Jackson MC (2007) Systems approaches to management. Wiley, Chichester
- Jovan M (2005) Klinicka psihijatrija. Belgrade: Naša knjiga. ISBN 9788690155910
- Kubr M (1996) Management consulting: a guide to the profession, 3rd (revised) edn. ILO International Labour Office, Geneva
- Le J (2018) 15 systems thinking guidelines to live in a world of uncertainty. <https://medium.com/constraint-drives-creativity/15-systems-thinking-guidelines-to-live-in-a-world-of-uncertainty-b07d5a478e6>. Accessed 25 Nov 2018
- Lippitt G, Lippitt R (1979) The consulting process in action. University Associates, La Jolla (California)
- Luhmann N (1988) The autopoiesis of social systems. In: Geyer F, Van der Zouwen J (eds) Socio-cybernetic paradoxes. Sage, London, pp 172–192
- Maturana H, Varela F (1980) Autopoiesis and cognition. Reidel, Dordrecht
- Maula M, Pouffelt F (2000) Knowledge transfer, consulting modes and learning: do the codes of conduct and ethics reflect reality in management consulting? MPP Working Paper No. 9/2000. https://www.researchgate.net/publication/5093013_Knowledge_Transfer_Consulting_Modes_and_Learning_Do_the_Codes_of_Conduct_and_Ethics_Reflect_Reality_in_Management_Consulting. Accessed 15 Oct 2017
- Mlodinow L (2018) Elastic: flexible thinking in a time of change. Pantheon Books, New York
- Motsching-Pitrik R (2015) Developing personal flexibility as a key to agile management practice. In: Sushil, Chroust G (eds) Systemic flexibility and business agility. Springer, Singapore, pp 131–141
- Nosseir M (2016) Integrity matters: the importance of ethics in the consultancy business. <https://www.entrepreneur.com/article/281226>. Accessed 16 Oct 2017
- O’Malley P (2018) Value creation and business success. <https://thesystemsthinker.com/value-creation-and-business-success/>. Accessed 18 Nov 2018
- Pouffelt F (1997) Ethics of management consultants. *A Eur Rev* 6(2):65–71
- Reason P (1991) Power and conflict in multidisciplinary collaboration. *Complement Med Res* 5:144–150
- Reed MI (1992) The sociology of organisations: themes, perspectives and prospects. Harvester Wheatsheaf, Hertfordshire
- Rogers CR (1959) A theory of therapy, personality and interpersonal relationships, as developed in the client-centered framework. In: Koch S (ed) Psychology: a study of a science. Vol. 3. New York: McGraw-Hill
- Rogers CR (1983) Freedom to learn for the 80’s. Charles E. Merrill
- Schein EH (1987) Process consultation, vol II. Addison-Wesley, Reading (Massachusetts)
- Sushil, Chroust G (eds) (2015) Systemic flexibility and business agility. Springer, Singapore

- Ulrich W (2017) The concept of systemic triangulation: its intent and imagery. Ulrich's Bimonthly. http://wulrich.com/bimonthly_march2017.html. Accessed 15 Jan 2018
- Understood (2018) 3 areas of executive function. <https://www.understood.org/en/learning-attention-issues/child-learning-disabilities/executive-functioning-issues/3-areas-of-executive-function>. Accessed 15 Sep 2018

Chapter 15

Social Impact



15.1 Introduction

I refer to The Ross School of Business (University of Michigan) definition of the term social impact as “a significant, positive change that addresses a pressing social challenge... having a social impact is the result of a deliberate set of activities with a goal around this definition”. Having been through the journey of working with organisations in this space, observing social activism events that are underway in the world and having understood select social impact models and consulting frameworks, in this chapter I will highlight some of the key considerations that social impact consultants need to bear in mind. I will argue for collaborative dialogue between change agents and cross-pollination of ideas as important elements for successful impact interventions.

This chapter does not intend to craft solutions for the management challenges for social impact organisations, neither does it intend to create a framework for systems intervention for social impact. It will rather make an attempt to place social impact intervention as a collective effort in the systemic context. I will argue for the case of holistic thinking and flexibility if social impact interventions are to be led to deliver to address “pressing social challenges” as put forward in the definition with which I began this chapter.

I will begin the discussion with a personal note that will lead up to the various aspects pertaining to social impact consulting.

15.2 A Systems Lens to Social Impact

In 2016, I was invited by *The CSR Journal* to co-curate and co-host India’s first awards dedicated to recognise individuals and groups working towards positive social impact along with Antra Bhargav, change-maker and an advocate of women’s empowerment. *The CSR Journal* is India’s first online knowledge portal for social work and Corpo-

rate Social Responsibility (CSR). The awards were launched with the name, “Social Welfare and Growth Awards” and later rechristened to “The CSR Journal Excellence Awards”.

There were five categories of work within which the awards were announced: Education and Skill Training, Sports, Environment and Agriculture, Women’s Empowerment and Child Welfare, and Health and Sanitation.

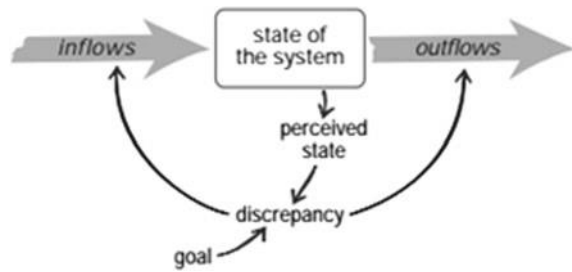
As a co-curator and co-anchor of the awards ceremony, it was heartening to see the efforts of the nominees and their organisations as active change-makers for the society. However, in retrospect, I realised that the nominee individuals and organisations were examples of great contributions to social impact, but those initiatives and many others (who had applied for the awards and still many others who did not) were operating in isolation from one another. Addressing a specific category, may it be education, health and sanitation, women’s empowerment, skills development, child rights and others, is an isolationist strategy of trying to address one specific problem at hand at one specific time, without having the overview of the whole system in hand where all these elements operate in interrelationship with one another. The result is achievement of short-term goals and negligence of long-term systemic change.

A year following the “Social Welfare and Growth Awards”, on invitation of *The CSR Journal*, I wrote a three-part series on systems thinking for the development sector and started the first piece with an anecdote to bring home the danger of an isolationist approach in development sector initiatives. The story goes:

Let’s consider Baahubali (I picked up a trending name), who lives in a village near a chemical company and works for the same company. He is poor and the company has allocated CSR funds for the education of the village, for which Baahubali’s son is a beneficiary. But the child (Baahubali’s son) drinks untreated water from the river nearby as he does not have a water purifier at home. The water is severely contaminated because of the chemical company, where Baahubali is employed, flushes its industrial waste into the river. Baahubali’s wife is a small-time fisherwoman and is now out of business as the contaminated water of the river has over the years killed most of the fish in the river. Baahubali’s son constantly falls ill due to drinking contaminated water and all the family earnings go in his treatments, and eventually, he has to drop out of school. Similar was the case with other families. The company eventually stopped its funds for education in the village as their measurement metrics showed a drop of student enrolment in schools over time. Several families in the village had similar experience leading to increasing deprivation, and antisocial behaviour. A village that has lived in poverty for generations is now being pushed into a bleak future of more abject poverty and dissonance (Chowdhury 2017a).

Baahubali’s anecdote is one where a well-intentioned social impact initiative of a corporate led to a sorry state of affairs with the withdrawal of its CSR funding for the community in which it existed. This was prompted by the corporation’s inability to map the interconnections between its industrial practices, social responsibility and consequences of both for the community. A more strategic approach would have entailed understanding the “local ecosystem” as a system where environmental protection, health and sanitation, education and community upliftment could be addressed in sync. For this, systemic social impact metrics would have been agreed on collaboratively with stakeholders and the “local system” mapped out with its numerous interacting subsystems and feedback loops.

Fig. 15.1 State of the system (cited from Meadows 1999; p. 4)



Going back to my experience of the “Social Welfare and Growth Awards”, I realised that several of the projects I studied as part of co-curating the awards could reach a similar end if the approach of considering each initiative as a stand-alone project continued as the way they were. A holistic approach to social impact involves a complete rethink of design, implementation and measurement of initiatives undertaken by corporates, individuals and the government. With this context, I will reflect on some of the key factors that need consideration by change-makers and consultants working in this field.

For social impact interventions to yield results, change-makers and consultants need to adopt a systemic mindset to navigate through issues that exist and evolve in complex nodes of cross-cutting interactions of subsystems that are seen and many more that may be unseen. However, when it comes to social impact consulting, dimensions associated with the same can be endless, interactions within these dimensions can be ambiguous due to the sociocultural influences and issues often revolve around addressing basic rights of human beings. At first glance, the problem situation may appear daunting for the interventionist. To overcome this, one has to approach this by identifying and understanding the leverage points of the system. A leverage point is an aspect or place in the system where an intervention needs to be focused on for maximum impact of the larger system. However, there is a tendency for change agents to tackle surface level issues rather than identifying and addressing root causes. Tackling surface level issues can result in solutions that are limited in impact and temporal, and are only likely to reappear after a period of time. Root causes are difficult to locate and involve significant drill-down taking into account deep interconnections, sociocultural dimensions and ethical considerations. But addressing root causes can result in solutions that are more impactful and sustainable. An interventionist also needs to distinguish between low leverage point and high leverage point. Whereas a low leverage point is one that can result in a small impact with minimal intervention, a high leverage point is one that can result in a large impact with minimal intervention. High leverage points are not easy to locate. It requires deep systemic appreciation and understanding of the complex human activity system to locate them and work on them.

To understand leverage points, Meadows (1999) uses the description of stocks and flows as represented in Fig. 15.1.

A system can be understood as a network of stocks and flows; this is the fundamental concept of cybernetics! Equilibrium in the state of the system is ensured by a balance between the rate of inflow and the rate of outflow. The state of the system is always different from the perceived state as perception involves a perceiver who is “outside” the system. For the sake of this discussion, I am referring to the perceived state as the one that is as per the consultant who works along with their client towards achieving a certain goal. Estimation of the actual or perceived difference between the rate of inflow and the rate of outflow creates a discrepancy. It is often this perceived discrepancy that the consultant gets called in to resolve at the first place. Greater the discrepancy, more the difficulty is in the mandate; so is the reverse. There are always networks of feedback loops that operate within a complex system that either increase or decrease the discrepancies. There are two kinds of feedback loops—positive and negative. Whereas, positive feedback loops cause the system to amplify the already created gaps to continually make it move away from the goal, negative feedback loops are control oriented and they pass on signals to the system to regulate itself so that it does not move away from its goal—the desired state. Negative feedback loops are therefore corrective in nature. As Meadows (1999) says, “Negative feedback loops are ubiquitous in systems. Nature evolves them and humans invent them as controls to keep important system states within safe bounds”.

Undertaking a systems intervention for a consultant means understanding these feedback loops that make the system behave the way it does. This understanding can lead to a better unearthing and appreciation of leverage points that are the actual nodes of intervention. Therefore, understanding of the whole system goals here is of crucial significance as without the same, any intervention may end up being tactical and isolationist where low leverage points are addressed and high leverage points are overlooked. Again, to be realistic and practical the consultant needs to draw their boundaries effectively so that their vision does not become idealistic and unachievable. Yet, boundaries need to be drawn in a manner where a specific intervention can be positioned in the wider context of work being undertaken by other interventions, organisations, or the government. A critical approach to the same can lead to the unearthing of high leverage points that create a greater social impact.

Refer back to the anecdote of Baahubali. No matter how well-intentioned the CSR funding of the corporation was, it was of no use to the community and led the families into further distress and disillusionment. The leverage point here chosen was children’s education that leads to the allocation of CSR funds for education. Investment in education as a never contested leverage point! However, an informed approach would critically go back to the multiple nodes in the ecosystem to understand the multitude of operating feedback loops. Systems as a state of mind would shed its influence right at the design stage of an intervention; if I have to carry the argument even further, I would suggest this at the pre-design stage where the corporate would have created the strategy to establish its manufacturing facility. A systems consultant would approach the strategy not as a stand-alone project of setting up a manufacturing unit, but as a project for setting up a social entity where the entity exists as part of a wider ecosystem. This would have brought to life the importance of fishing for the village community where Baahubali resides as an essential means of livelihood

and hence, a serious commitment to environmental conservation and waste disposal, apart from the responsibility to community upliftment enabled through education, health and sanitation and livelihood. Social impact is never complete by considering an individual aspect of the society; isolated efforts would never lead to meaningful and sustainable results. In fact as we saw just discussed, a systemic effort needs to be undertaken through the process even before any social impact work is adopted.

I reflect back on the “Social Welfare and Growth Awards”—the five categories are indeed significant elements for the society to achieve their full potential. However, these categories drew a line between these aspects. A systemic approach would have meant considering projects that can create more holistic outcomes; examples would include making an underprivileged community self-sustainable, enabling financial control for women (note that financial control can automatically bring in significant social control), creating a healthy and competitive community of young people who excel in sports and are able to earn a livelihood with or without sports, so on and so forth.

Whether working with a corporate interested in social impact or an organisation working directly in social impact, a consultant will need to continually challenge pre-existing thoughts and dominant paradigms within which interventions are approached not only for themselves but also for their clients. This can be challenging in social impact because essentially any work carried out in the field for positive social change is deemed to be constructive in any case, and this is in all fairness to such work. However, contributing truly to social impact would mean that the consultant has to engage with multiple levels of authority, with multiple degrees of responsibilities and expected outcomes. Spann and Ritchie-Dunham (2017) say, successful engagements can be driven when relationships are built with clarity and commitment first as individuals, then as partners, teams, organisations and finally extending to the larger society to their constituents and society, leading to the development of six abilities as a result of this process—leadership, trust, innovation, execution, scalability and sustainability. Refer to Table 15.1 for a representation of this progression.

Taking the argument of Spann and Ritchie-Dunham (2017) forward in the context of social impact consulting, leadership emerges when the consultant is able to ask the difficult questions that challenge their own mental models with the innate desire to bring about a positive change in the context. This ability is the root of responsible consulting where the seeds of systemic value-add, emancipation and sustainability can be sown. Being true to oneself enables the consultant to establish trust in interactions with their counterparts within their teams and with their clients. It also creates the required rigour to question assumptions, beliefs and attitudes and lend the flexibility for them to shift the same in mutual interest and common understanding. This is especially important when the consultant has to navigate through multiple networks with the client situation and with their knowledge partners for the greater benefit of the situation at hand. The atmosphere of shared values and objectives drive innovation to solve problems, because problem-solving shifts from being an individual responsibility to a team responsibility. As Spann and Ritchie-Dunham (2017) say, this is the stage where “the compelling nature of the situation became clearly visible as an unambiguous, uncompromised collective understanding and agreement”. The

Table 15.1 (Progression of successful engagements cited from Spann and Ritchie-Dunham 2017)

Creating... At the level of...	Relationship	Clarity	Ability
Self	Grounding your context, choosing your system, experiencing your role	Internalising a systemic point of view, and taking a personal stand	Leadership
Another	Engaging with others in their passion, their work goal, and a success story, and adding value to them	Creating an individual causal map of their goal, 3–5 core competencies, and their story	Trust
Team	Gathering around shared passions, discovering a positive goal, and describing your shared reality	Discovering and assessing your global goal by understanding that goal’s behaviour over time; mapping the system as a whole	Innovation
Organisation	Sharing the work and worldview with the organisation and exploring its implications	Analysing your map to discover your solution set; assessing the organisation’s fit with reality	Execution
Constituents	Engaging constituents, helping them to shape their identity and define what they seek	Formulating a viral strategy for execution at the constituent level	Scalability
Ecosystem	Giving critical stakeholders a voice, demonstrating your understanding and adding value	Integrating stakeholder goals, needs, and value exchange via a thoughtful, balanced stakeholder assessment	Sustainability

consultant’s ability to appreciate interconnections and understand patterns remain crucial here where the “collective” is itself an amalgamation of the variety of teams and individual leaders working in the social ecosystem. They need to be aware and sensitive to appreciate emergence and unintended consequences to enable scalability and sustainability of such a shared vision with execution excellence that Spann and Ritchie-Dunham (2017) call a “movement... to self-direct and self-sustain”. Social impact projects hence go beyond the search for immediate results and short-term gratification for a defined time and/or space. Multiple boundaries will intersect, diverse disciplines need to converge and resources from multiple sources need to be optimally leveraged.

Hence, in social impact consulting, it is not about how much change the consultant can drive, but it more about how much of a shift in the established way of thinking and doing they are able to enable in the wider ecosystem. They almost have to act

as a what Green (2017) calls “knowledge brokers” where the consultant has to work through the realms of academia, policy, strategy and practice. A systemic lens to social impact is the ability to critique boundaries effectively, identify high leverage points and transcend relationships at multiple levels.

15.3 The Macro Picture of Social Impact

A systems view of social impact can be taken through both policy and intervention approach, and through an integration of design, implementation and measurement (that we will discuss later in the chapter). At the level of policy, there needs to be a shift from conceptualising and strategising on impact areas in an isolated manner to viewing them in terms of societal problem-solving in a more holistic manner that encompasses various workstreams and thematic areas. At a macro level, these issues can be addressed by various countries coming together and reaching a common understanding on the big problems facing humanity. This macro policy-level approach is best suited to address humanitarian causes, protect our global commons and enable human rights to the world’s peoples.

15.3.1 Sustainable Development Goals (SDGs)

The year-2015 witnessed a landmark development in the United Nations with its member nations to agree on 17 goals for global social impact that came to be known as the Sustainable Development Goals (SDGs). Although these goals have their independent targets, they are interconnected and represented by 169 global targets. These SDGs are (Transforming our world: the 2030 Agenda for Sustainable Development 2015): (1) No Poverty, (2) Zero Hunger, (3) Good Health and Well-Being, (4) Quality Education, (5) Gender Equality, (6) Clean Water and Sanitation, (7) Affordable and Clean Energy, (8) Decent Work and Economic Growth, (9) Industry, Innovation and Infrastructure, (10) Reduced Inequalities, (11) Sustainable Cities and Communities, (12) Responsible Consumption and Production, (13) Climate Action, (14) Life Below Water, (15) Life On Land, (16) People, Justice and Strong Institutions and (17) Partnerships for the Goals.

The SDGs present a significant mind-shift towards connected thinking with the seventeenth goals itself calling for global partnerships and multi-stakeholder engagement as a means to achieving the rest. Every goal is interconnected and cannot be treated in isolation. Here, I attempt to understand SDGs further and deliberate on how they can reflect a systemic view of social impact. I have relied on the collation of facts from Wikipedia for this elaboration (Sustainable Development Goals 2018).

No Poverty is defined as ending poverty in all its forms everywhere. Poverty is looked at as more than a lack of access to financial resources. Poverty encompasses a lack of health care, security, basic nutrition, education, social equity and a lack of

power to influence factors that act on people's own lives. These factors are in turn amplified by connected global political and economic shifts like state-sponsored violence, economic migration and climate change. The position of women and children is highlighted as the most vulnerable as consequences of poverty. Poverty eradication and end of hunger is interlinked.

Zero hunger is defined as ending hunger, achieve food security and improved nutrition and promote sustainable agriculture. To achieve this, the focus will be on doubling agricultural productivity by 2030 supported by sustainable production systems and improving the quality of production. Peripheral factors such as genetic seed diversity, increasing access to land, preventing trade restrictions and distortions in world agricultural markets to limit extreme food price volatility, eliminating waste with help from the International Food Waste Coalition, and ending malnutrition and undernutrition of children, will be central to achieving this goal. The parameters of poverty and hunger can follow the principles of a positive feedback loop. If not controlled at one level, this can spiral out of control. Consideration of the peripheral factors as indicated above reflect the debate of drawing boundaries and how the same can reinforce or counter the spiral of poverty and hunger.

Good health and well-being for people is defined as ensuring healthy lives and promoting well-being for all at all ages. Reduction of child and maternal mortality remain central to achieving this goal. Bettering public health systems and reducing adolescent pregnancy would facilitate this goal. Other supporting initiatives include reducing the spread of and controlling deaths from HIV/AIDS, tuberculosis, malaria and waterborne diseases, amongst others. This goal is further extended to the prevention of substance abuse, traffic accidents and environmental pollution. Good health and well-being cannot be delineated from education and this leads us to the following goal.

Quality education is defined as ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. This goal looks beyond just access to education, but emphasises on quality of education, completion of desired grades and gender diversity in education. This understanding "sweeps in" consideration of the girl-child and women's empowerment as central to education.

The above goal leads us to gender equality, targeted to achieve equality and empowerment of all women and girls. Gender equality is a "necessary foundation" for a prosperous, meaningful and sustainable world. This goal focuses on the elimination of underage marriages, equal access to economic opportunities and social equity. Involvement of women in the implementation of the SDGs is an important element. Education and equality are sustainable only if health and well-being are offered, for which water and sanitation are essential elements.

Clean water and sanitation as a goal are targeted to ensure availability and sustainable management of water and sanitation for all. This is a major improvement area and includes addressing aspects such as open defecation, unsafe drinking water and waterborne diseases. More than physical infrastructure and information, it requires behaviour change in tackling such issues. Focus is specifically required for developing countries such as Brazil, China, Ethiopia, India, Indonesia, Nigeria and Pakistan.

The goal of affordable and clean energy is intended to ensure access to affordable, reliable, sustainable and modern energy for all. This can only be achieved by international economic and political action between net producer and net consumer nations of energy to facilitate clean energy technology and energy efficiency.

Financial inclusion can make several of the SDGs real. Hence the goal of decent work and economic growth targeted to promote inclusive and sustainable economic growth, full and productive employment and decent work for all. This encompasses a wide range of economic activities such as technology upgradation, providing a fillip to innovation and entrepreneurship, promoting small- and medium-sized enterprises and job creation.

The government, industry and innovators need to work together in making this happen, leading to the following goal of industry, innovation and infrastructure, crafted to build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation.

Closely related to the previous goal, industrial development also involves capital investments and infrastructure development to connect people and locations. This leads to reducing inequalities as a goal defined as a reduction of income inequality within and among countries. This goal requires political will and cooperation when it comes to lifting trade barriers, easing movement of goods and services, reducing high banking charges and creation of “remittance corridors”. Adequate telecommunication and transportation services can aid such developments to a great extent.

The goal of sustainable cities and communities is crafted in making cities and human settlements inclusive, safe, resilient and sustainable. With global economic development, migration and urban explosion, cities are the nerve centres of the world. With more and more cities getting created presenting complexities like never seen before, creating healthy and sustainable urban centres is the need of the hour. Affordable housing, safe living spaces, access to basic life necessities, education and sports facilities and adequate economic opportunities for all will need to be created.

For sustainable cities and communities, it is essential for citizens and industries to follow responsible consumption and production. Sustainability will be at the heart of all developments and shifts that the world will witness as we work towards making provisions for the current generation without compromising on the needs of the future generations. The goal clearly articulates sustainable production and waste disposal and other practices that can promote sustainability reflected through a “10-Year Framework of Programmes on Sustainable Consumption and Production”.

Climate action needs urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy. Climate action can only be made possible if the SDGs are met as they are inextricably inter-linked with aspects of poverty, gender equality and energy in some form or the other; we have already discussed this earlier. Climate action has a direct impact on the following two goals of life below and above water.

Life below water is targeted to conserve and sustainably use the oceans, seas and marine resources for sustainable development. Covering over 70% of the earth’s surface, oceans are an integral part of our ecosystem making our planet liveable. They also contain valuable and numerous species of marine life. However, it is concerning

to note that oceans absorb about 30% of all carbon dioxide produced by humans and there is evidence of rapid acidification of its waters due to rampant industrialisation. This goal focuses on reducing energy consumption, avoidance of the use of non-biodegradable material and responsible fishing as important measures to respect and protect life below water.

Life on land is targeted to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss. Life on land is represented by our forests, deserts, mountains and landmasses that have faced significant hazards at the hands of human action leading to deforestation, melting ice caps, desertification and extinction of both flora and fauna. This goal has led to the creation of several indices to monitor and track life on land and danger indicators so that corrective action can be initiated at the right times.

Peace, justice and strong institutions is a critical goal crafted to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. This goal addresses basic human rights and focuses on building institutional structures to tackle violent crime, sex trafficking, forced labour, child abuse and all forms of violence against women and children.

Finally, partnerships for the goals are intended to strengthen the means of implementation and revitalise the global partnership for sustainable development. This goal is *to bring everything and everyone together* and work as one system between countries, organisations and citizens to achieve the rest of the goals in multi-stakeholder partnerships.

Political leadership at individual country level will need to take the lead in implementing the SDGs. Public–Public Partnerships (PPP) play an enabling role in supporting political leadership with financing and infrastructure. Public and private institutions will need to work closely with the civil society—both individuals and institutional—to mobilise support and for collaborative enablement of macro-efforts at micro levels. Country leadership not only needs to recognise the systemicity of the SDGs but also take proactive steps in establishing strong institutional interlinkages, professional capacity building and encourage the establishment of frameworks and platforms for knowledge creation, sharing and management. Inability to recognise this can lead to failure in technological, policy and managerial intervention and unintended consequences (Zhang et al. 2016).

Here I will note the following 10 prime systems imperatives for consultants and change-makers towards the realisation of the SDGs:

- Recognise interconnections within and between the goals to understand emergence.
- Draw boundaries to define impact realisation, and recognise permeability and overlaps.
- Identify high leverage points in the system for maximal impact.
- Recognise feedback loops and work towards variety attenuation of the system in which the intervention is situated.

- Understanding of local issues and customisation of solutions for local nuances.
- Change mobilisation at the local levels and equip change agents at the community level with finance, resources and infrastructure.
- Think not just implementation but sustenance of the same.
- Consider evaluation holistically and focus on four kinds of evaluation—Community, Audience, Process, Summative (we will discuss this in detail later in this chapter).
- Stay flexible and adaptive through design, implementation and measurement of social impact projects.
- Drive partnerships between institutions and individuals to create a cumulative force for social change.

Realising the SDGs will require not just the “hard” skills, but also “soft” skill due to multi-stakeholder partnerships and mobilisation that will be central to the same. As noted by Amato (2017):

Working in partnership with a wide range of stakeholders, across various cultural, disciplinary and sectoral boundaries requires specific competences and skills, including open-mindedness, empathy, listening, influencing, negotiation, brokering, alongside strategic and critical thinking.

Being able to put into action the tenets of system thinking needs to be enabled by cognitive, formulative and substantive flexibility (the flexibility types have been discussed in detail in Chap. 14). This is because every continent and every country poses its own specific challenges, constraints and ease of delivery. This needs to be addressed both at the levels of policy and implementation approaches. Take the example of quality education and gender equality. This topic has to be approached in completely different ways for the urban poor in Pakistan and Brazil. Deep-rooted religious norms, sociocultural beliefs and the dangers of religious fundamentalism in the former case will be very different from the influences of economic deprivation and racial distinctions between ethnic Brazilians and Afro-Brazilians in the latter case. Just as religious considerations will play a significant role in shaping community engagement in Pakistan, economic and racial considerations will play a similar role in the case of Brazil. These distinctions need to be reflected in the strategic direction and implementation approach in bringing education to the girl-child and creating an equitable society. This requires “not only competence in systems thinking but a capability of putting systems thinking into practice in a dynamic way, as praxis” (Reynolds et al. 2017). Country, regional and community level strategy and implementation can be carried out by a range of change agents that I call “vehicles” of social impact. These vehicles are responsible to work together to enable signatory government to draw strategies and lead the implementation of these goals in specific countries and for local situation.

15.3.2 *Vehicles of Social Impact*

The SDGs have given vision and direction to social impact at a macro level; the right leadership and strategies can channelise energies and passion to deliver on the same. With the perspective on social impact becoming more holistic and evolved, there are also various vehicles emerging to support social impact work or deliver on strategies. The way to look at social impact itself has significantly evolved from a stage where piecemeal tactics to tackle problem areas have now been replaced by an appreciation of how new technology and innovative approaches can bring about transformative changes in people's lives by touching high impact leverage points. This kind of a changed perspective has been brought about by developments such as the proliferation of technology, especially the mobile phone, access to banking and insurance infrastructure, opening up of the job market with new-age industries burgeoning and prospering, governments facilitating new opportunities and support systems in the rural and farm sector and finally, greater risk-taking appetite of the youth to explore their exposure to a new world of promise. Borrowing from a recent report from Omidyar Network (2018), consider India as a case in point, where rural poverty has been greatly tackled to a large extent by the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), which was lauded by the World Bank as “a stellar example of rural development”. The report goes on to highlight several significant policy and industry related changes such as the low-cost Unified Payment Interface (UPI), unique identification number (Aadhaar) for public benefits' access, the *Jan Dhan Yojana* to enable financial inclusion and the Right to Education Act, amongst others that have opened up the middle and lower sections of the population to a whole new world of empowering opportunities. Innovative models of financial inclusion and involving the youth have today surfaced like never before. Similar is the case in several other developing countries in Africa, Latin America and South Asia that have independent democracies and a progressive civil society.

Here, I will highlight four select vehicles that support financing and/or delivery of social impact work—individuals, NGOs, impact investment and CSR—to build my argument. I will argue that for social impact to be systemic, it is important to consider the convergence of such vehicles at the levels of design, implementation and measurement.

Throughout history, individuals have contributed significantly to social change and development, sometimes in limited scales and sometimes in forms of major movements. Such individuals have been driven by the passion to lead change by working on the ground without relying on established institutions and state support. This phenomenon is often referred to as social activism who finds a way to have discovered “meaningful ways to shape policy and influence politics” (University of Southern California 2018). “We can sit and wonder what will happen or we can look for opportunities to make things happen”—was the sentiment of Charles E. Lewis Jr., founder and president of the Congressional Research Institute for Social Work and Policy External link (CRISP) and an adjunct professor for the USC Suzanne Dworak-Peck School (University of Southern California 2018). Across the world,

individuals have expressed a deep sense of commitment to challenge status-quo and lead relentless efforts towards uplifting the state of the disadvantaged and neglected to enable them to lead better lives.

Social activism is often seen to start as protests that go on to garner public support, eventually embracing a wide range of stakeholders to make change happen. 2014 saw a major movement of African American men in the United States protesting against injustice and police brutality that converged in a national march in Washington DC highlighting a significant voice for equality and justice (Bent-Goodley 2015). Social media played an enabler role in amplifying the cause that eventually led to global sensitisation around the subject. Similar was the case of Dr. Lauren Wroe who worked closely with asylum seekers and migrants in the UK to give them a voice and an equitable life (Ivory 2017). In India, social activism has had a long-standing history with the Khadi Movement led by Mahatma Gandhi in the first part of the 1900s that encouraged indigenous production of the khadi fabric towards India's self-reliance during the British Raj, and the Bhoodan Movement led by Acharya Vinoba Bhave that led to the redistribution of more than 7,000,000 acres (28,000 km²) of land to aid India's socially backward and landless. Referring back to the "Social Welfare and Growth Awards" that I mentioned in the beginning of this chapter, I witnessed numerous such initiatives led by individuals to bring about positive change across India in their own ways, some of which could attain scale and many that could not.

At a different level, individual giving or philanthropy has played a major role in enabling ground-breaking changes in human life and solving social problems. Enormous amount of wealth has been given away in charitable donations, strategic initiatives and personal causes by the world's richest. Warren Buffett tops the list giving away USD 48 Billion, followed by Bill and Melinda Gates and Michael Bloomberg, between 2000 and 2017. Philanthropists can have a "today forward" or a "future back viewpoint in their giving (Bhagwati et al. 2018). Whereas, the former is "a step-by-step approach that starts with the status-quo and builds incrementally from there", the latter "starts with a vision of the future state and works backward" (Bhagwati et al. 2018). Both viewpoints have a strong commitment to bring change and believe in a measurable impact in the issues they associate with. For greater impact, focus on long-term outcomes and impact need to be kept in mind, avoiding an overemphasis on short-term outputs. To quote Bhagwati et al. (2018):

A focus on outcomes can help donors better understand where funds are needed — and in doing so, tackles the problem in a holistic way and ensures that the solutions are sustainable. For example, investing in building toilets alone would be an incomplete attempt to solve India's sanitation problem; focusing on strategies to change behaviour regarding open defecation is equally important.

In order to achieve systems transformation facilitated through complex visions such as behaviour change and multi-stakeholder engagement, philanthropists need to work closely with the wider ecosystem to ensure that their funds are managed well, ensure that mobilisation agencies are credible and effective, and have the larger vision of considering how their causes align with policy level initiatives to ensure greater and more sustainable impact. For this to be a reality, philanthropists need to

listen, build trust with the ecosystem, be diligent in choosing their partners and look at the government and local administration as partners.

Philanthropy still has its bottlenecks and a major one, still, is the difficulty in finding credible implementation agencies. The bulk of the non-profit sector is trapped pursuing a large number of disconnected donors. As a result, philanthropy in many cases has become two-tiered. Sophisticated donors are choosing to work with a small number of highly credible non-profit organisations. Disconnected donors and unsophisticated non-for-profits are trapped in an unending and unproductive pursuit of new causes and new funders respectively (Chowdhury 2016). In various cases, Non-Government Organisations (NGOs) have come into fill this gap.

Non-Government Organisations (NGOs) are registered and organised teams of individuals who work in areas of social upliftment, environmental protection and financial inclusion, amongst other causes, and contribute to citizens' participation and policy advocacy. NGOs were first called so by the United Nations in 1945 in Article 71. NGOs, including community-based organisations and cooperatives, can contribute a great deal in mobilising resources and enabling operational infrastructure towards the implementation of public services. They can act as a crucial link between the government, industry and civil society in articulating common causes, agreeing on developmental objectives and optimising and channelising resources to enable work execution. Due to the unique positioning of NGOs, they can not only facilitate vertical communication between the government and the civil society, they "are also in a unique position to share information horizontally, networking between other organisations doing similar work" (William 1991). Today, significant amount of funds are being allocated for social impact work by individual philanthropists and allied governmental organisations through NGOs for designing, implementing and measurement of projects. Additionally, there are several impact investors who are channelling their social impact financing through such organisations.

Several NGOs have sprung up in the recent past, especially in developing countries as there is a growing need in supporting economic development with sociopolitical infrastructure that can be equitable and just, along with the basic protection of human rights, where NGOs play a key role (Bromideh 2011). NGOs have also contributed significantly in disaster relief and advocating for social justice in failed states (Bromideh 2011). To quote Grobman (2008) (as cited in Bromideh 2011):

They often hold an interesting role in a nation's health, economic or social activities, as well as assessing and addressing problems in both national and international issues, such as human, political and women's rights, economic development, democratisation, inoculation and immunisation, health care, or the environment.

However, NGOs face challenges at several levels. Indeed, there has been a rapid rise in the number of NGOs, but professional management remains a far cry for most organisations. This is both because of the lack of adequate skills and competencies to manage (quality), and the scarcity of the number of good professionals (quantity). Too many projects being mandated and underway have also led to a clutter of a large number of NGOs that may not always be credible enough to carry out the intensity

of work required. There is also a lack of adequate policy frameworks to guide and regulate NGOs.

Financing remains a challenge in this sector despite individual philanthropist and corporates spending a large amount of funds in social impact causes. Recently, impact investors have also entered this space bringing in a cash-flush that have promoted credible impact work and social innovation projects. For more than three decades, Community Development Financial Institutions (CDFIs) have been prevalent in the United States to fund and promote social impact projects, but their financing model was not sustainable for the long run according to the Organisation of Economic Cooperation and Development (OECD) (2015). Impact investment came in to fill this gap and presented a new model in development funding. Impact investments are investments “made with the intention to generate positive, measurable social and environmental impact alongside a financial return. Impact investments can be made in both emerging and developed markets, and target a range of returns from below market to market rate, depending on investors’ strategic goals” (Global Impact Investing Network 2018). Firms like Omidyar Network, Acumen, Intellectap Group and Lok Capital are harnessing the market potential of the previously ignored, leveraging innovative thinking and risk-taking abilities of the youth to pump in patient capital that not only creates financial value, but also social returns. Omidyar Network, in its recent report highlighted the immense potential of what they call the Next Half Billion (NHB) in the context of India itself, which is estimated to be nearly 500 Million people. The report talks about the NHB with the essence that “while [they are] currently underserved, excluded and disempowered in many ways, they can be empowered to improve their lives through the power of technology and markets” (Omidyar Network 2018). Investee companies aspire to serve the aspirational needs of this market with services such as quality health care, education, banking, convenient transport and social connectivity.

It is to be noted that although NGOs and impact investment firms have very different modus operandi, it is important for us to see where such institutions can work together. Very often we tend to wear blinkers and overlook apparent mutual leverage. A more systemic approach is required where the financial leverage and business acumen of impact investors and the passion and technical expertise of NGOs are brought together to create more effective implementation strategies. This can also be a prudent way to overcome the funding limitations of NGOs.

Over the years, NGOs have toyed with a range of financing options with impact investors. Some of these include being an investor, co-creator, service provider or experimenter (KPMG 2018). As an investor, an NGO may adopt a new business model and choose to invest in the entity or develop a co-funded model. As a co-creator, an NGO may include local “beneficiaries” as part of its governance structure. This can create greater credibility to the funds spent, and bring in transparency and legitimacy to the process. As a service provider, an NGO can be “contracted out” a particular project mandate, often by a Foundation or an impact investor. The NGO will be normally expected to report on a range of parameters for monitoring and evaluation, and payments may be aligned with agreed results. The NGO brings in implementation know-how and local networks. Finally, the experimenter model,

where NGOs test and pilot new approaches that investors fund and would like to see returns.

NGOs also mobilise funds from Corporate Social Responsibility (CSR).

CSR has emerged as an important channel through which companies are spending significant money in social impact. CSR has today appeared as a strategic function where key officials, organisational top management and sometimes the board get involved in. Some of the most pressing social issues are today addressed through certain organisation's CSR strategies and such strategies, in turn, shape the very identity and brand of an organisation. A heightened awareness and sensitivity around the aspects of the triple bottom line (financial, social and environmental—discussed in detail in Chap. 14) have brought in a strategic approach to CSR and adoption of initiatives that regularly get reported in the boardroom of progressive companies. Several studies have also shown that millennials are becoming more and more socially conscious and desire to associate with brands that are socially conscious as customers, suppliers and employees. The 2018 Global Human Capital Trends study found that “millennials are becoming increasingly sensitive to how their organisations address issues such as income inequality, hunger and the environment. 88% of millennials believe that employers should play a vital role in alleviating these concerns, and 86% say the business success should be measured by more than profitability” (Agarwal et al. 2018). Additionally, we cannot lose sight of the fact that companies exist in the wider ecosystem and are not isolated entities. Their actions have direct ramifications in the society, which in turn impacts them in terms of brand performance. To quote the United Nations International Development Organisation (2018):

A properly implemented CSR concept can bring along a variety of competitive advantages, such as enhanced access to capital and markets, increased sales and profits, operational cost savings, improved productivity and quality, efficient human resource base, improved brand image and reputation, enhanced customer loyalty, better decision making and risk management processes.

Policy level developments in several countries have also mobilised a large amount of CSR funds to be spent for social impact causes. For instance, through a landmark Act of the Indian parliament, specified CSR spending for companies with defined criteria was made mandatory in 2014. This has led to opening up of a whole new space of dialogue, funding and critique for the social impact landscape in India. There are three ways in which companies are spending their CSR allocations in India—direct financing by the company, by funding recognised registered NGOs and finally by setting up their own Foundations to deploy funds.

Partnerships between Foundations, Companies and NGOs are commonplace, and such engagements have brought in new avenues of funding for NGOs. However, NGOs still face challenges in securing CSR funding. As corporate giving is linked to business objectives, NGOs need to be more cognisant of processes and reporting formalities. Smaller NGOs with lower visibility face difficulties in fostering corporate partnerships. Location and resource efficiency priorities of the corporates can overshadow the actual needs of the target communities. Finally, lack of knowledge on part of the corporate sector on workings of the social sector itself can pose a challenge in identifying, trusting and partnering with NGOs.

It is important to understand that true social impact is possible when we look beyond the above “vehicles” as separate, but understand how they can work together to bring in a combined force towards achieving systems change. We earlier discussed that creating change at the level of the “constituency” and the “ecosystem” can be brought about by engaging with diverse stakeholders and change-makers in the ecosystem through balanced assessment and integrated engagement (Spann and Ritchie-Dunham 2017). Social activists, philanthropists, NGOs, impact investors and CSR managers exist at different levels and are often directed by different mandates. However, if they are let to function in their own ways it may lead to duplication of efforts, lack of synergy and loss of oversight of the systemic objectives as laid out in the SDGs and other charters at international, regional and local levels. I discussed the SDGs in detail earlier to bring to light the interconnected nature of the grand challenges as articulated and agreed upon by select member nations of the UN—issues that push our conscience to the edge. These SDGs represent grand challenges because these cannot be conquered by an individual philanthropist who may pump in billions of Dollars into cause, or an NGO implementing the strategic plan to address an issue, or an impact investor who desires to bring in triple bottom line benefits, or a CSR manager who is trying to uplift a community where the factory of his or her company is located. Grand challenges need a shared vision, trusted alliances and common commitment.

The government plays the most significant in aligning its national agenda with global efforts and in providing for adequate resources and regulatory frameworks for these vehicles to achieve their shared goals. I have touched upon the role of the government with few anecdotes in the above discussion, but have restricted my discussion majorly to the four select vehicles. Delving into the nuances of regulatory frameworks and resource alignment related to the same is a separate and complex topic that is beyond the scope of this chapter.

15.4 Stages of Social Impact Initiative

For reference, social impact consulting can follow the three typical stages of a standard consulting mandate of design, implementation and measurement. Conventionally, they have been approached as three distinct stages that are sequential. A conventional approach is also not to consider iterations as part of the process, and hence learning becomes an afterthought for the project and remains unintegrated for the initiative. However recent developments in social impact consulting introduced through the Theory of Change (ToC) bring together the disparate elements in this space to consider the three conventional stages as integrated and iterative aspects focused on overall outcomes of a programme. I will first discuss the stages of a social impact initiative and then share my experiences of working through the same in select projects.

I discussed about the ToC in detail in Chap. 7. Here, I attempt to take the strength of this model further in light of its shortcomings and how the same can be overcome. The ToC approach has had its own share of criticism. A commonly seen thread of

discussion is regarding how it attempts to simplify and pre-empt the future, particularly for situations when some interventions cannot be fully planned in advance. This is specifically true in case of social impact work that spreads over a long period of time in contexts that may have political instability, social unrest, funding uncertainty and security concerns. Challenges can shift from time to time, and often these shifts can be major. In such situations, activities and outcomes planned at the outset may not hold valid; plans and objectives may need revisions. In cases where priorities of the donor or funding organisation changes, objectives of an intervention may even require a complete rethink.

Additionally, due to the variety of stakeholders involved in a social impact project, there is a possibility that adequate expertise may not rest with individuals who may have been involved in charting out the goals and risk patterns. This could lead to models that are built with little understanding without rigour and foresight. Also, when there is a large project, multiple ToC models are drawn out for subprojects and there may be a lack of alignment between them. Collection of mass data may lead to confusion and data crunching just for the sake of it. Similarly, diagrams and flowcharts can be cumbersome and confusing due to the variety of stakeholders and factors that need to be considered for a robust ToC model building. As a project becomes underway, if the influencing factors change, it also means changes in the ToC, the interacting flowcharts and activities mapping. However, there could be a sense of inertia in part of a project team to bring about such changes as they would have already spent significant time in charting out the model initially. The consultant and/or the project team may end up becoming a victim of a model rather than the model being the enabler of change. This can defeat the purpose of the theory itself.

This calls for flexibility in the ToC itself where detailed documentation and recording may not be possible. A “high-level theory” can be more useful here that articulates “an emerging theory about what has to be done in a particular setting” (Rogers 2014).

A high-level ToC is one that articulates impact as a vision, outcomes as direction and outputs as specific deliverables. A vision is always directional for all initiatives and programmes to be designed under. Outcomes help defining parameters within which programme goals can be defined; they also establish accountability. Activities keep the team grounded. Learning remains an essential element here where ongoing improvements and adaptations are incorporated in the change model. Additionally, the consultant needs to think laterally, act systemically and lead with commitment.

I borrow the understanding from the Annie E. Casey Foundation (2004) that considers the three criteria of impact, influence and leverage as considerations for a social impact intervention. These criteria can be applied by the consultant whilst drawing out a ToC for an intervention to make it more holistic. These criteria are defined as (Annie E. Casey Foundation 2004):

- **Impact:** The impact of your work is its programme outcome. Impact may not be directly programme related, but a combination of multiple factors that come together. The wider social, political and economic environment play a significant role in shaping impact; so does contributory factors from other projects that operate in parallel that may or may not be directly targeted on social impact.

- **Influence:** Your influence is how much other actors change as a result of your work. A social impact intervention is more about behaviour change rather than about tangible material outputs. Behaviour change ensures depth and sustainability in outcomes. A consultant and the project team through their intervention need to touch stakeholders at a level of meaning and values to bring about such behaviour change.
- **Leverage:** Your leverage is how much investment others put into your model. Social impact can never be driven by an isolated approach but with investments from multiple parties that come together on common grounds. Investments may be both financial or non-financial.

The consultant plays the central enabler with knowledge and skills, and the right attitude to bring divergent factors together reaching a common understanding of impact, garnering effective influence and harnessing the desired leverage. As we saw earlier in the work of Spann and Ritchie-Dunham (2017), the consultant's leadership at the individual level will play the central role in enabling this thought process and actual delivery. It does bring in great responsibility in the part of the consultant to be to translate this leadership at multiple levels to see systemic change in the ecosystem level.

15.4.1 The Three Reference Stages

I will now discuss the three main stages of social impact consulting as a reference for consultants and change-makers—Design, Implementation and Measurement. I call them reference stages as these cannot be considered as watertight. There can be considerable overlaps between them.

15.4.1.1 Design

This is the first stage where the vision is articulated and the strategic direction of the project is established. The sponsor organisation (funder) normally has a vision that guides the work. However, it is also common for them to involve consultants to help them articulate a vision for them. A strategic direction is like the pathway that supports the organisation and the team work towards the vision. The vision and strategic direction must not be created in isolation, but in context of the prevalent social, economic and regulatory realities. I will now discuss some of the considerations for this phase.

Table 15.2 Illustration of theory about how this change will come about, and a theory about how the intervention will trigger this change (cited from Rogers 2014)

<p>Individual change: transformative change of a critical mass of individuals</p>	<p>Investment in individual change through training, personal transformation/consciousness-raising workshops or processes; dialogues and encounter groups; trauma healing</p>
<p>Health relationships and connections: break down isolation, polarisation, division, prejudice and stereotypes between/among groups</p>	<p>Process of inter-group dialogue; networking; relationship building processes; joint efforts and practical programmes on substantive problems</p>
<p>Root causes/justice: address underlying issues of injustice, oppression/exploitation, threats to identity and security, and people’s sense of injury/victimisation</p>	<p>Long-term campaigns for social and structural change; truth and reconciliation; changes in social institutions, laws, regulations and economic systems</p>
<p>Institutional development: establish stable/reliable social institutions that guarantee democracy, equity, justice and fair allocation of resources</p>	<p>New institutional and governance arrangements/entities; development of human rights, rule of law, anti-corruption; establishment of democratic/equitable economic structures; decentralisation</p>
<p>Grassroots mobilisation: mobilising the community so that politicians have to pay attention</p>	<p>Mobilise grassroots groups, non-violent direct action campaigns, use of the media, education/mobilisation efforts, advocacy groups</p>

Consideration for the Design Phase

Design needs to begin with a sound research of the as-is situation identifying various aspects of the on-ground realities, problem identification, stakeholder research, research on opportunities and challenges and resource assessment. ToC recommends this study to cover two parts—a theory about how this change will come about, and a theory about how the intervention will trigger this change (Rogers 2014); an illustration is provided in Table 15.2.

It is important to include a feasibility research as part of the design phase. This needs to include assessment of parameters that can be both within and outside the scope of the project team. Aspects such as funding, resource allocation, timelines, partner selection and administration structure can be considered as those within the scope of control of the team with varying levels of control. Aspects such as changing government policies, macroeconomic changes, regulatory hurdles and international funding cuts (where relevant) can be considered outside the scope of control of the team. A pilot study can serve as an important input to finetune on the design parameters and understand implementation-related details. Pilot studies can also be used for extrapolation of facts for the larger initiative in situations when it is difficult to calculate funding ranges for the larger piece of work. This is also where resource allocation and internal challenges can be better understood and that in turn helps in assessing the feasibility of the initiative. In case of community behaviour-change level

work it should be noted that if a pilot is carried out in one community or geography, it may not be a true representation for all the geographies it may want to cover. Especially in countries such as India and several countries in Africa, where there is high regional diversity, local realities and community sensitivities may change from region to region and from tribe to tribe. In such situations, the pilot project should consist of multiple sub-pilots in different areas to have a rear-real understanding of the realities and challenges. Aspects such as religion, sect, language and local beliefs can also be used by the project team to mobilise communities and create a feeling of ownership within themselves. Local level influencers and high leverage points in the system need to be identified and this can be used to further the larger initiative planned.

It is not uncommon to see that project teams consider impact as an afterthought, where assessment and evaluation is carried out after a project is completed. But this approach is limiting in the sense that it does not allow for valuable learning to be incorporated through the entire process. The design stage itself needs to agree on success parameters and impact so that implications for implementation and contingency management can be worked backwards. The Theory of Change (ToC) model can be applied here to make a distinction between not only outcome and impact, but also desired and actual outcomes. The pilot stage can be used to bring stakeholders together to collaboratively chart out what they want for themselves rather than the consultant and project team seen as “handing-down” the change agenda. Participation and stakeholder involvement in the design stage ensures ownership and buy-in for the same. This can also act as a means to share power between stakeholders. The ToC can be applied through the lifecycle of the project starting from the design phase that can bind the entire initiative in a meaningful and focused manner.

The design phase involves a wide range of stakeholder appreciation and consultations, given the nature of development projects. This will take into consideration a varied range of interest groups including organisation management, beneficiaries, the wider community, rights groups, service providers, funders, civil society, local administration and legislation, amongst others. It is important to account for perspectives and requirements of as many interest groups as possible.

15.4.1.2 Implementation

The delineation of activities, outcomes and impact in the Theory of Change brings in the onus of effective implementation to the project team; implementation is at the core of efficient closure of activities, they make outcomes visible, and enable long-term impact.

Considerations for the Implementation Stage

There are several factors to be considered for seamless execution of social impact projects. Following are some of the key parameters for successful implementation:

- **Planning:** A smart plan is always the critical success factor between the strategy/design and the implementation. A plan that is Specific, Measurable, Achievable/Agreed, Realistic and Time-bound (SMART) sets the tone for competencies and energies of the team to align in a set direction. Several factors need to be considered for planning and these include resource constraints and allocations, documentation and recording, governance and management, monitoring and tracking and risk management. Planning needs to reflect the “what” and “how” tenets of institutionalising the Theory of Change in practise as illustrated in Table 15.2. Agreed-upon templates need to be used to bring in consistency and predictability.
- **Technology:** With projects that span across geographies, impact areas and diverse teams, it is not only difficult, but impossible, for project managers to manually monitor and track progress, which is required for team management and reporting to clients and/or funders. The technology should also enable storing, tracking and retrieving of data and information that serve as facilitators for effective knowledge management. There are several project management software systems available that can be used in such cases that minimise errors and maximise visibility for the consultant.
- **Team:** The project manager or the consultant cannot draw out success by himself or herself in an open canvass. It is the collective effort of the team that can create the success story. In case of social impact projects, apart from functional competencies and team alignment, it is important that the team shares the passion and commitment to work for a cause. This involves displaying the level of engagement and building the quality of relationships with self and the other that we discussed earlier in the chapter. It is not just the project manager but the team that needs to display the tenets of holistic flexibility in various degrees depending on the role the members are playing in their respective capacities.
- **Communication:** Irrespective of the team size, clear and regular communication is at the crux of a well-knitted and in-sync team through the implementation stage. There should be no ambiguity on project expectations, progress, challenges and changes within the team and between the team and the client. Any misses can greatly damage project alignment and progress. A sound project management tool can support the project manager in such communication; however, the team must not forget the value of personal touch, listening and one-to-one communication that not only builds clarity, but also affinity.
- **Stakeholder participation:** In social impact, it is always taking your stakeholders with you and touch as many diverse interest groups as possible through the programmes undertaken. Representatives from different stakeholder cohorts need to be consulted, involved and kept informed through the implementation process. This can also be a channel to solicit civil society volunteers for various aspects of the implementation; these opportunities could include tying up with educational institutions for student internships and partnerships with think tanks for reports and perspectives.
- **Monitoring:** The implementation process needs to be supported by regular monitoring. This needs to have set parameters and timelines, and allow for corrective

feedback that can feed into already articulated assumptions and risks as per the Theory of Change.

- **Institutional capacity:** In development projects, institutional capacity enables the social impact to self-regulate and self-perpetuate. Hence it is the responsibility of the project team and the sponsor to work alongside communities and civil society to record standard operating procedures, build skill sets and enable replicable models so that the end of a project implementation does not mean the end of an initiative. Stakeholder participation throughout the process can be of great aid in institutional capacity building.

The role of the consultant project manager is of utmost importance in connecting the dots and taking diverse interests and stakeholders together, and yet deliver a project on time as per client expectation. This requires specific project management competencies that can be clubbed under the following heads (Cartwright and Yinger 2007):

- **Knowledge Competence:** This involves the consultant's knowledge about project management covering aspects such as theoretical frameworks, models and metrics.
- **Performance Competence:** Includes visible aspects of what the project manager is able to do or accomplish while applying their project management knowledge. Aspects covered are project design, planning, execution efficiency, monitoring and reporting and overall governance.
- **Personal Competency:** This is the "softer" aspect of behaviours and attitudes. Sound personal competencies include effective communication, leadership, cognitive flexibility, effectiveness and professionalism. Effective implementation of projects requires both structure and flexibility. The structure provides focus and channelises energies and resources in the right direction. Flexibility enables a system to be adaptive and agile.

Systems thinking can enable consultant project managers with the due competencies required to navigate the requirements of holistic approaches and flexibility.

15.4.1.3 Measurement

It is commonplace to look at measurement as the final stage of a project, often disconnected to the overall initiative. However, measurement needs to be considered as an integral part of the programme with its seeds sown right at the design stage. Going by the Theory of Change, clear delineation of activities, outcomes and impact can keep the consultant on their toes about results from specific action points and initiatives in a thorough manner, and understand their contribution to the overall programme. An oversight of the impact, leverage and oversight drives the consultant to incorporate learnings through the programme in a holistic and mindful manner. The intervention always needs to start with defining the parameters that will ascertain its success metrics. Relevant benchmarks and relative reality can be used to articulate timelines and targets.

Considerations for the Measurement Phase

Effective measurement requires structure, credibility and impartiality. Structure brings in alignment and dependability in an evaluation, and makes amalgamation of learning more focused and efficient. Credibility comes from the method of evaluation and data collection. Credibility is closely associated with impartiality of the evaluator. Impartiality comes from both the process of evaluation, in which transparency plays a big role, and the proficiency of the evaluator. A more matured approach to evaluation would mean that insights from the evaluation are considered as a tool for decision making and not for mere deviance measurement.

Measurement and evaluation can be quantitative or qualitative. Quantitative evaluation is carried out based on scientific tools that capture numeric data based on fixed parameters. Qualitative evaluation is more subjective and are based on observations and analysing anecdotes. Consultants can take a more integrated stand to evaluation and apply a combination of both quantitative and qualitative techniques. Participation of “beneficiaries” and other stakeholders can make the process more valuable and holistic. It also builds in greater credibility to the process as it captures insights together with and from the community an intervention is expected to benefit. Such integrated approaches can employ techniques such as focus group discussions, stakeholder workshops and key informant interviews.

I make reference to the following five criteria for programme evaluation from the Organisation of Economic Cooperation and Development (2000) for social impact.

- **Relevance:** The extent to which the activity is suited to the priorities and policies of the target group, recipient and donor. In evaluating the relevance of a programme or a project, it is useful to consider the following questions:
 - To what extent are the objectives of the programme still valid?
 - Are the activities and outputs of the programme consistent with the overall goal and the attainment of its objectives?
 - Are the activities and outputs of the programme consistent with the intended impacts and effects?
- **Effectiveness:** A measure of the extent to which an aid activity attains its objectives. In evaluating the effectiveness of a programme or a project, it is useful to consider the following questions:
 - To what extent were the objectives achieved/are likely to be achieved?
 - What were the major factors influencing the achievement or non-achievement of the objectives?
- **Efficiency:** Measures the outputs—qualitative and quantitative—in relation to the inputs. It is an economic term which signifies that the investment uses the least costly resources possible in order to achieve the desired results. This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been adopted. When evaluating the efficiency of a programme or a project, it is useful to consider the following questions:

- Were the activities cost-efficient?
 - Were objectives achieved on time?
 - Was the programme or project implemented in the most efficient way compared to alternatives?
- **Impact:** The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. The examination should be concerned with both intended and unintended results and must also include the positive and negative impact of external factors, such as changes in terms of trade and financial conditions. When evaluating the impact of a programme or a project, it is useful to consider the following questions:
 - What has happened as a result of the programme or project?
 - What real difference has the activity made to the beneficiaries?
 - How many people have been affected?
 - **Sustainability:** Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable. When evaluating the sustainability of a programme or a project, it is useful to consider the following questions:
 - To what extent did the benefits of a programme or project continue after donor funding ceased?
 - What were the major factors which influenced the achievement or non-achievement of sustainability of the programme or project?

As we discussed earlier, the consultant needs to be cognisant of the fact that long-term impact results out of a variety of factors and may not always be a direct consequence of the programme initiative being measured. It is important that factors outside the programme mandate are considered as significant influencers in measuring long-term impact. Deviance can be addressed by the consultant by working closely with stakeholders to bring about collective change through building alternatives, revisiting strategies and incorporating course corrections.

15.4.2 Systems Inspired Methodologies and Approaches

Systems thinking can offer a wide range of approaches and methodologies to aid the consultant work effectively through the stages of a social impact intervention. Several of such approaches, methodologies and tools have been discussed in the earlier chapters of this book. However, I will touch upon some of the benefits of select systems approaches here as a reference (Chowdhury 2017b).

Stakeholder Mapping is an often used systems tool to exhaustively lists out the stakeholder universe, and understand them in the context of their power in the ecosystem and their interest in the organisation/project.

The philosophy of Critical System Heuristics (CSH) (discussed in detail in Chaps. 7 and 13) helps in aligning our boundary decisions. Clarity in thinking and approach can enable the creation of reference systems objectively that can, in turn, establish greater clarity for the articulation of activities, outcomes and impact effectively.

Appreciative Inquiry (AI) is another approach that focuses on what works right in a human activity system by exploring strengths, successes, values and aspirations. It is a process of collective inquiry into the imaginative state of a social system of what it could be, followed by a collective design of the desired state, where the collective nature itself presents a compelling argument to counter coercion or resistance.

Soft System Methodology (SSM) is a classic systems methodology that helps converge a wide range of stakeholders through a creative seven-step process. I have discussed SSM in detail in Chap. 6 as a design and planning approach. In the same chapter, I also covered Strategic Assumption Surfacing and Testing (SAST) with reference to systems design. SAST brings in several iterative tools that come handy to arrive at realistic decisions on systems design.

FSG, the leading social sector consulting firm, talks about another useful tool called Ecocycle Mapping that draws its understanding from biological research to categorise situations into the four quadrants of development, conservation, destruction and renewal that is seen in natural (ecological) systems. Aided by a well-structured appreciation, a situation can be plotted in one of the four quadrants mentioned above and appropriate interventions can be directed to it.

In the context of implementation project management, FSG also talks about an interesting tool called Timeline Mapping, which can help in maintaining a chronological map of events, activities, grants, actions, achievements and other milestone markers in a defined format. This establishes interrelationships between the events and also with the external context—social, economic and political. Timeline Mapping helps project managers have a real-time project assessment as we go along and undertake any realignment if required.

For highly complex projects where there are various subsystems interacting with numerous variables, System Dynamics (SD) comes in handy to understand nonlinear behaviour and emergent patterns. SD creates models of relationships between the various elements of a complex system with stocks and flows.

Viable System Model (VSM) is one approach that helps in organising a system in a way that they will be capable to meet the demands of a changing environment within controlled conditions. I discussed VSM in detail in Chap. 4. VSM's inspiration from cybernetics can enable the project team to constantly be aware of environmental variety in the complex setting of social change and impact.

Outcome Mapping is another technique that focuses on capturing behaviour change in stakeholders observed through their relationships and activities. These observations are logically linked to the programme's activities and understood in the context of its boundary players with whom the programme continually interacts;

boundary partners are always shifting. Contributors to those outcomes are tracked as part of the evaluation.

Rethinking strategy and planning is an important outcome, once measurement and assessment are undertaken. Interactive Planning (IP) is a well-documented methodology that can help in the retrospection of progress made and how an organisation could be more optimal in leveraging its own resources and capabilities. IP brings in a structured approach that helps in envisioning the desired ideal state in the current scenario in an attempt to change the mindset of planners to think in terms of an ideal-seeking achievable within the current circumstances. I discussed IP in detail in Chap. 7.

15.5 Social Impact as the Need of the Hour

As I wind up this chapter, I would like to comment that social impact cannot be an afterthought for the power brokers in the government and corporate sector. Our urge for materialistic goals has driven the society to irresponsible and rampant capitalism, disrespect for nature, socio-economic exploitation and rising inequality. Social uprising and rejection of this status-quo have been observed in several parts of the world that represent a voice of dissent and rejection. We have seen several such instances in the recent past. One of the biggest events to shake power establishments anywhere in the world in modern times was the Arab Spring that was a series of coordinated anti-establishment protests (majorly violent) in largely Muslim countries including Tunisia, Morocco, Syria, Libya, Egypt and Bahrain. Similar protests have long sustained in Iran. Right at the turn of this decade in 2011, the United States witnessed Occupy Wall Street in New York's financial district to highlight economic inequality and unjust pay gap in the industry. This soon became a movement and spread across the country and beyond. The same year also saw a major anti-corruption movement in India represented by multiple demonstrations across the country; this finally led to strong policy changes and enforcement against corruption and misuse of power. The Umbrella Movement in 2014 witnessed scores of people in Hong Kong coming out to fight for free elections and a fair political process. 2018 saw deadly civil unrests in Nicaragua against the President due to accusations of family dictatorship leading to a complete overhaul of the country's welfare system. And of course, the Yellow Vest protests in Paris and across France without any visible leadership or focused objective.

Attitude, technology and instant congregation have steered these movements or if I may say, revolutions, in the most recent years in history. The attitude of rejecting status-quo and aspiring to bring about real change reflects great passion and risk appetite in people; technology fuelled by social media spreads inspiration and hope like wildfire and congregates people instantly like a tsunami. Recognising the need to establish an equitable and just society is not only important but also urgent in an age where attitude, technology and the power of instant congregation can create unrest, immobilise corporations and topple governments. These emergent behaviours

and related consequences reflect the characteristics of complex systems that are an interplay in several interrelationships and interactions demonstrating self-organisation and sustained patterns. Intense positive feedback loops rapidly amplify such characteristics to lead to such patterns spiral out of control real-time as they take shape. This can be explained as a phenomenon of nonlinear dynamics of complex networks. To explain this phenomenon, Wiesner et al. (2018) brings in the analogy between social behaviour and the statistical properties of condensed matter physics, considered as “sociophysics” (Galam 2003). Sociophysics help in understanding complex collective behaviour patterns that reflect nonlinearity, emergence and unexpected emergence.

Being able to apprehend and address such phenomena need perspective and commitment to social impact that goes beyond social activists, NGOs, impact investors and CSR; it is the *business* of governments, leaders and major corporations. The need of the hour is systems leadership for influencers and decision makers to create organisational and civil infrastructure that is responsible, enable societies that are equitable and secure an environment that is safe and sustainable. This is not easy. Consultants, change agents and leaders in the corridors of power need to facilitate dialogue between stakeholders to track divisiveness in human behaviour and be the change they want to see. Dialogue, involvement and partnerships remain central to such a process.

15.6 Conclusion

In this chapter, I presented my perspectives on social impact as relevant to consultants and change-makers. I began by defining social impact and led the reader through a discussion on how successful engagements can be driven when relationships are built with clarity and commitment at different levels, and how understanding of leverage points can enable greater effectiveness of the process. This was followed by a discussion on the macro-perspective of social impact where I discussed about the Sustainable Development Goals (SDGs) that I argued have the potential to consider social transformation holistically by addressing the grand challenges of humanity.

I argued that for systems change to be made possible, the vehicles of social impact need to come together and operate in tandem. I followed this up by talking about three phases of a social impact intervention, viz. design, implementation and measurement. For each stage, I presented a discussion on some key considerations for consultants. I discussed about the Theory of Change that threads in the three phases to present an integrated flow for social impact effectiveness. I argued that although this division is presented, it is not to be considered as watertight demarcation, but rather for the purpose of structuring of thought and to bring in focus in methodologies applied. Integration of thought and methodologies are important to enable the consultant see through impact, leverage and influence.

In the end, I discussed about the urgency of tabling and addressing social impact as a combined effort for implementation vehicles, and also as an imperative for the

power brokers in politics and business to enable a meaningful and sustainable future. A key tenet to lead consultants and change-makers through this journey is holistic flexibility due to the characteristics such complex situations present with the display of nonlinear emergent behaviour.

References

- Agarwal A, Bersin J, Lahiri G, Schwartz J, Volini E (2018) Citizenship and social impact: society holds the mirror. <https://www2.deloitte.com/insights/us/en/focus/human-capital-trends/2018/corporate-citizenship-social-impact.html>. Accessed 22 Sept 2018
- Amato V (2017) The global goals, systems thinking, and innovative partnerships. <https://thepartneringinitiative.org/news-and-views/tpi-blog/the-global-goals-systems-thinking-and-innovative-partnerships/>. Accessed 13 Aug 2018
- Annie E. Casey Foundation (2004) Theory of change: a practical tool for action, results and learning. Organisational Research Services, Seattle
- Bent-Goodley T (2015) A call for social work activism. *Soc Work* 60(2):101–103. <https://doi.org/10.1093/sw/swv005>
- Bhagwati A, Sheth A, Srinivasan S (2018) India philanthropy report 2018. <https://www.bain.com/insights/india-philanthropy-report-2018/>. Accessed 24 Mar 2018
- Bromideh AA (2011) The widespread challenges of NGOs in developing countries: case studies from Iran. *Int NGO J* 6(9):197–202
- Cartwright C, Yinger M (2007) Project management competence development framework, 2nd edn. Paper presented at PMI® Global Congress 2007—Asia Pacific, Hong Kong, People’s Republic of China, Project Management Institute, Newtown Square (PA)
- Chowdhury R (2016) Changing landscape of philanthropy in India. *CSR J*. <https://thecsrjournal.in/changing-landscape-of-philanthropy-in-india/>. Accessed 15 Oct 2017
- Chowdhury R (2017a) Systems thinking for development. *CSR J*. <http://thecsrjournal.in/systems-thinking-development/>. Accessed 21 June 2018
- Chowdhury R (2017b) Systems thinking at work. *CSR J*. <http://thecsrjournal.in/systems-thinking-work/>. Accessed 21 June 2018
- Galam S (2003) *Physica A: Stat Mech Appl* 320:571–580
- Global Impact Investing Network (2018) What you need to know about impact investing. <https://thegiin.org/impact-investing/need-to-know/#what-is-impact-investing>. Accessed 16 Feb 2018
- Green D (2017) What does systems thinking tell us about how INGOs and academics can work together better? *Oxfamblogs*. <https://oxfamblogs.org/fp2p/what-does-systems-thinking-tell-us-about-how-ingos-and-academics-can-work-together-better/>. Accessed 16 Dec 2018
- Grobman GM (2008) *The nonprofit handbook: everything you need to know to start and run your nonprofit organization*. WhiteHat Communications, Kigali
- Ivory M (2017) Should social workers be political activists? *The Guardian*. <https://www.theguardian.com/social-care-network/2017/may/26/should-social-workers-be-political-activists>. Accessed 15 Aug 2018
- KPMG (2018) NGOs and the challenge of impact investing: creating value and doing good. <https://home.kpmg.com/xx/en/home/insights/2018/09/ngos-and-impact-investing.html>. Accessed 13 Oct 2018
- Meadows DH (1999) Leverage points: places to intervene in a system. http://donellameadows.org/wp-content/userfiles/Leverage_Points.pdf. Accessed 17 July 2016
- Omidyar Network (2018) What we’ve learnt about accelerating impact in India. https://www.omidyar.com/sites/default/files/Accelerating%20Impact%20in%20India_Report_.pdf. Accessed 21 Dec 2018

- Organisation of Economic Cooperation and Development (2000) The DAC principles for the evaluation of development assistance. <http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>. Accessed 2 Oct 2015
- Organisation of Economic Cooperation and Development (2015) The role of philanthropy in financing for development. In: Third international conference on financing for development. Addis Ababa. <https://www.oecd.org/dac/financing-sustainable-development/Addis%20flyer%20-%20PHILANTHROPY.pdf>. Accessed 13 Oct 2017
- Reynolds M, Blackmore C, Ison R, Shah R, Wedlock E (2017) The role of systems thinking in the practice of implementing sustainable development goals. In: Leal Filho W (ed) Handbook of sustainability science and research. World sustainability series. Springer AG, Singapore
- Rogers P (2014) Theory of change. In: Methodological briefs, impact evaluation, vol 2. UNICEF Office of Research, Florence
- Spann S, Ritchie-Dunham J (2017) The promise of systems thinking for shifting fundamental dynamics. The systems thinker. <https://thesystemsthinker.com/the-promise-of-systems-thinking-for-shifting-fundamental-dynamics/>. Accessed 13 Dec 2018
- Sustainable Development Goals (2018) https://en.wikipedia.org/wiki/Sustainable_Development_Goals. Accessed 21 Dec 2018
- Transforming our world: the 2030 Agenda for Sustainable Development (2015) United Nations—sustainable development knowledge platform. <https://sustainabledevelopment.un.org/post2015/transformingourworld>. Accessed 15 Aug 2016
- United Nations International Development Organisation (2018) What is CSR? <https://www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr>. Accessed 24 Apr 2018
- University of Southern California (2018) Engaging social workers in activism: where to start? <https://msw.usc.edu/mswusc-blog/social-work-activism-advocacy/>. Accessed 12 Dec 2018
- Wiesner K, Birdi A, Eliassi-Rad T, Farrell H, Garcia D, Lewandowsky S, Palacios P, Ross D, Sornette D, Thébault K (2018) Stability of democracies: a complex systems perspective. *Eur J Phys* 40(1):1–17
- William C (1991) Non-governmental initiatives. In: The urban poor and basic infrastructure services in Asia and the Pacific. Asian Development Bank, Manila
- Zhang Q, Prouty C, Zimmermanb JB, Mihelcic JR (2016) A systems approach to rethinking sustainable development goals in a resource-scarce world. *Engineering* 2:481–489

Chapter 16

Organisational Development



16.1 Introduction

Organisational Development (OD) is a systemic discipline that brings together diverse functions in an organisation within the consideration set of external factors, to design, implement and sustain business-focused interventions with people at its centre. OD initiatives are heavy on both strategy and implementation, and are often led by an external consultant with senior management sponsorship within the organisation. Given its focus on the people function, OD initiatives have significant involvement from the Human Resources (HR) with cross-departmental representation as part of an extended sponsor team.

Success in OD interventions has several imperatives—the ability to systemically comprehend and approach transformation, creation and customisation of established frameworks and models for specific organisational and/or sectoral contexts, and the ability of the consultant to lead the change journey. This chapter intends to shed some light on these imperatives from a consultant’s standpoint. I will bring in my experiences from my OD consulting work through the discussion to bring my arguments to life.

16.2 What Is Organisational Development (OD)?

I opened this chapter with the definition of the term Organisational Development (OD) from my perspective. The Business Dictionary (2018) defines OD as: “Theory and practice of planned, systematic change in the attitudes, beliefs and values of the employees through creation and reinforcement of long-term training programmes. OD is action oriented”. In addition, if we refer to some of the more classical definitions of OD (Beckhard 1969; Bennis 1969; Burke and Noumair 1994; French and Bell 1999), we can be pointed towards five important aspects of OD:

- **OD is a response to an internal and/or external trigger:** OD has become an important element for management in current times due to the nature of both the business environment (external) and talent landscape (both external and internal). In a fast-changing world of short product life cycles, macroeconomic shifts, global financial volatility, emerging new technology and blurring of traditional boundaries of nation states, the external environment poses new challenges to business managers that were never seen before. These developments often challenge traditional ways of looking at organisation structures, products and solutions and systems and processes. Importance to embrace the triple-bottom line has also made businesses rethink their value systems and codes of conduct, and they have come under pressure to create organisations that are socially conscious and environmentally responsible, rather than focusing on just wealth creation. The generation-y and -z have entered the workforce with their own values and ambitions that often go beyond creating a future for themselves, but also creating a future for their fellow citizens. HR teams and managers are posed with completely new challenges on how to manage, motivate and inspire this new workforce and create mutual value between them and the organisation. Such triggers have led organisations to question established ways of working and challenge pre-existing mindsets, and adopt flexibility and adaptiveness to stay relevant. Focused more internally, leadership transition or change in the nature of ownership of companies often lead to new business goals or new managerial styles, and therefore the need for organisation transformation and OD.
- **OD interventions have executive sponsorship and have specific focus:** Whatever the trigger is, the seriousness of the agenda itself means that OD interventions need executive sponsorship. The top management needs to buy into the need and extend support—both material and non-material—for such transformations to be made real. OD interventions need focus and involve organisation-wide changes in people, process and technology. Hence, such initiatives cannot be ad-hoc or sporadic, but need to be strategic and well-planned. They spread over a long time period and fruition of such work needs patience and commitment. For implementation, often such initiatives have a steering committee and a core team. Whereas, the steering committee provides direction and guidance for the exercise, the core team is responsible for execution of the actual planned activities.
- **OD addresses change both in the soft (values, culture, vision, etc.) and hard (systems, processes, procedures, etc.) dimensions:** OD initiatives are holistic in nature and involves both soft and hard interventions. Soft interventions include (not restricted to) articulation of values, vision, mission, competency development and capability building. Hard interventions include (not restricted to) organisation structuring, process design, technology enablement, systems integration and performance management system. There needs to be a horizontal alignment within the soft and the hard aspects, and a vertical alignment between the two. For instance, it is leadership values that define an organisation's vision and mission. Competencies come into play to work towards the vision and the mission, enabled through leadership and managerial capability. Similarly, the organisation structure aligns human and material resources to achieve the business goals inspired by the mission. Pro-

cesses provide fuel to the structure that achieves scale and predictability through technology and systems integration. Finally, effective performance management ensures adequate leverage of human potential, capability and development.

- **OD is multidisciplinary:** OD is multidisciplinary. It is the convergence of sociology, behavioural science, anthropology, management science and technology that can offer the bringing together of diverse perspectives, expertise and capabilities to address both the soft and hard aspects that entail a holistic OD initiative. If a specific expertise or perspective is employed in silo, it may certainly address one specific aspect of the problem situation, but will not lead to outcomes that address the business need or outcomes that can be sustainable.
- **OD is implementation/action oriented:** OD is deeply rooted in action. Any model and framework presented without implementation is theoretical and idealistic. OD primarily aims to bring about change during and after the lifetime of the initiatives. Hence, OD projects are high intensity and resource demanding. The consultant and the client need to work as partners in bringing such projects to life. Sustainability of outcomes is ensured by putting in place adequate governance mechanisms with continued top management support. It is equally important that different stakeholders within the organisation are involved in a bottom-up manner so that initiatives are not seen as imposed on employees by the management, but ones where employees have played a role in bringing them to life and where they have “skin in the game”. OD projects, therefore, are said to have their roots in Action Learning (that we will discuss in further detail in the next section).
- **OD is participative:** The bottom-up process involves bringing together of people from different levels in a democratic and participative manner. It involves obtaining employee opinion in design, involving them in implementation, implanting employee change-champions and involving them in review and assessment to ensure that employees own the journey. This is not only a success imperative of OD projects, but also brings in “humanistic values” in the process (Margulies 1972). Humanistic values are driven by the spirit of respect and inclusion that considers human beings as equal stakeholders in the change process. It ensures that employees are presented with an engaging and exciting workplace that is beyond a mechanical place of toil. Such values respect diversity in people and thought process, and ingrain sensitivity in change-agents to appreciate and enable the power of human agency.

16.2.1 *OD and Action Research*

OD can be traced back to the contribution of Lewin (1958) and his work in the field of Action Research. As the name suggests, Action Research is the process of detailed understanding or research of an organisation or a particular situation with the intention to facilitate action to change the same. Delving into a situation is central to identify change-triggers and understand what entails the situation to undergo the desired change. An inclusive attitude and a multidisciplinary approach are essential

to bring about change that is meaningful, real and sustainable as we have already discussed earlier. Improvement in the situation lies at the heart of Action Research. As said by Elliott (1991), Action Research is “the study of a social situation with a view to improving the quality of action within it” (p. 69).

Lewin’s (1958) process of Action Research entails the following three steps:

- **Unfreezing:** This is the first step where a preliminary diagnosis of the situation is undertaken. Both secondary and primary data points are considered for a comprehensive appreciation. Secondary datapoints include the study of company documents such as business plans, previous employee survey results, annual reports and any other material that can provide a sense of the company’s state of affairs from business, operational and talent points of view. Primary datapoints would include leadership interviews, employee focus group discussions and participant observations that would lend an insight into the softer elements of the organisation. Insights generated from these sources are organised, validated and studied by the consultant in a rhetorical act of “unfreezing” the situation.
- **Changing:** This is the step of active change where the consultant designs strategies and implements plans to bring about the desired change. The desired change is normally articulated at the end of the unfreezing step. Learning plays an important role in Action Research; hence these steps are not linear progressions, but iterative in nature. During the change process, feedback is continually collected and any opportunities of bettering plans are recognised and fed back into the previous step for bringing about improvements. Such activities are normally carried out collaboratively between the consultant and the client and are part of the transformation process.
- **Refreezing:** This is the final step where the organisation is stabilised with the change process actually getting absorbed in the system reflected through behaviour change and process adoption. A second feedback loop operates here as well where any further learning is incorporated in the plans. This is again an iterative process. It is important to appreciate and accept the continuity of the process if the change has to be adaptive and sustainable. Investment needs to be made in capability building, governance mechanisms and effective incentivisation so that the change is genuine and sustainable.

Sustenance of the initiative is a factor of three aspects—the conditions the consultant puts in place in terms of transparent systems and processes, and knowledge transfer, the client readiness to carry forward with the change and finally, the teams’ ability to organise themselves and acclimatise in the new system. To manage scale, consistency and sustenance, self-managing work groups can be formed in the organisation that can own up specifics of the change intervention and be personally committed to making it happen. Hackman (1986) talks about the benefits of such self-managing groups. Their sense of responsibility and accountability drive them to monitor their own progress, recognise gaps and bring about course correction from time to time. These teams are best when organised as multidisciplinary and with representation from different departments. Diversity brings in a spread of expertise, risk pooling and a range of different perspectives to handle complexity and have a wider reach

within the organisation. They approach the organisation for guidance and support whenever required. Their combined zeal and efforts help them to stay inspired and committed for the future; learning and self-improvement remain the cornerstone for such self-managing work groups.

Organisations are constantly in a state of flux. One change leads to another trigger for change sparking off a new loop of unfreezing, change and refreezing. This is the uniqueness of open systems that they are never static. When a consultant signs off and closes on a project, they make conscious use of the tenets of systems thinking aided by flexibility to define and draw boundaries for a particular time frame. However, the organisation or the situation is always faced with a new requirement at the end of a consulting mandate. Hence, it is important for consultants to build capacities and adequate infrastructure (both human and material) in their clients so that the organisation is equipped to absorb variety and influence high leverage points. Therefore, a consulting mandate should never stop at a project report, but should be a collaborative change effort that has the tenets of inclusion, patience, tolerance and long-term vision. Considering the organisation as an open system, the consultant needs to understand characteristics of self-regulation and self-perpetuation, and share implications of such characteristics with the client. This, in the long run, can also enable the creation of internal consulting roles within organisations that are able to comprehend complexities of open systems and support the organisation navigate through the same.

16.2.2 OD and Systems Thinking

Through the definitions and understanding of OD I have presented above, it is imperative that successful OD interventions need to be driven by a systemic mindset. Earlier in the chapter, I talked about internal and external triggers that lead to the genesis of OD interventions. Such triggers are further amplified by the new realities that organisations have come to face in light of new work styles of people and the inroads of advanced technology in our work lives. For instance, employees today want to work more flexibly; flexibility not just with time and place of work, but with also contractual agreements of work. More and more young people want to take up more than one job at a time or work on different contracting terms with different employers incentivised by a variety of factors such as financial security, brand name, nature of work, organisational culture and value contribution. Technology has made virtual working possible across national and continental boundaries enabled by facilities such as video calling, collaboration, virtual conferencing and artificial intelligence based support systems. These developments in a way have also led to organisations look at employment contracts differently. There is heightened pressure on HR and Finance departments to cut costs, rationalise workforce and optimise resources to reap the benefits that a new workforce and new technology bring to the table. These are important consideration sets for a consultant to look at triggers not just from the macro perspective, but also how dialogue around these topics may create unseen

pressure on their clients to reinvent their organisation structure and manage their teams.

I further talked about the characteristic of OD interventions as pervasive of the entire organisation and the requirement of interdisciplinary expertise. At the same time, I also talked about the constraints that consultants need to work with, considering that projects are time bound and resource restrictive. The constraints that a consultant works under need a bit more deliberation as this can be at several levels. First, the defined and rather simplistic constraint of a project mandate; I have been referring to this throughout my book. I call this rather simplistic because it is what we see in black and white as defined by the consulting contract that includes the scope of work, deliverables, timelines, and commercial and non-commercial commitments from the client's side. A consultant is committed to offer client delight and at the same time ensure resource utilisation of their team and bring in the desired profit to their employer. Consciousness of responsible outcomes can enable the consultant to create mutual value in such arrangements. Resource pooling between departments and collaborative working can further aid in the process. Second, at a completely unseen level, consultants can be caught up in turf wars between different leaders or functions in their client context. There may be situations where a mandate is awarded to a consultant where two senior leaders are expecting outcomes favourable to their respective positions, and the consultant may end up in a situation where the outcome is unfavourable to the position of the principal sponsor. Adherence to fair practices and agreed codes of conduct are required for the consultant to tide over such situations. Finally, the consultant may also be faced with situations that may push their ethical boundaries and question their core values and belief systems. Such situations may be common in workforce optimisation projects where the client may expect drastic reduction in workforce numbers leading to job losses and financial insecurity of employees. Many consultants often take such mandates based on their belief systems and adherence to the principles of humanistic values. Often the answers may not be straightforward and easy. It may also mean a consultant taking up a workforce reduction mandate, but agreeing with the client on a rehabilitation plan for deserving employees who are likely to be out of job as a result of the exercise.

Therefore, the consultant needs to be constantly aware of how they choose to draw their boundaries and how they collaborate with their client to draw boundaries that reduce "conflict zones" between the "sacred" and the "profane" (these concepts are discussed in Chap. 3). A critical mindset and a deep interest in "humanistic values" are important for the consultant to create conditions that are meaningful, empowering and sustainable.

Ability to recognise and appreciate interrelationships within and between internal and external triggers is important; so is the ability to recognise subsystems created by these interrelationships that have a constant flow of energy and communication between them. For behaviour change to happen, it is not the formal project plan and implementation structures that are important, but what happens when these connected nodes start exchange of the energy, communication between these nodes.

OD consulting requires the ability to draw synergies between people, process and technology and pre-empt and prepare for emergence. Emergence is important as we have already discussed, one change leads to another in a dynamic loop in the process of unfreezing, change and refreezing, with learning and iteration at the heart of the process. All the three types of learning are relevant to be reminded here. Single-loop learning that can help the consultant to monitor progress against plans and bring in corrective action; mainly relevant in the “change” step of Action Learning. Double-loop learning where feedback can lead the consultant to revisit the “unfreezing” of the organisation to renegotiate goals and therefore may even lead to revisions in the consulting mandate. Finally, triple-loop learning comes into play if the consultant faces complex ethical issues during the intervention and “refreezing” becomes tough and compromising. Here, reconsideration of consulting mandates may even happen if ethical dilemmas are severe and consensus is not arrived at between the parties involved. Such arrangements during the “refreezing” stage are rare in OD consulting in the corporate sector. The “refreezing” stage is also about anticipating emergent behaviours and unintended consequences of the intervention. In all fairness, such implications need to be considered at the planning stage itself, but in case of behaviour change programmes, the intervention may start throwing up such cues during the implementation and socialisation stages. For example, complete rejection to a new competency that has been identified to align teams to a revised business vision, and employees expected to demonstrate the same; this may lead to resistance of displaying the new behaviour expectations that may be very different from the past. What would be the ideal way forward then? Do we let go of employees who are resisting? Or do we build new behavioural programmes that help them integrate better into the new expectation from the management? There can be various situations like these that arise from time to time during an OD intervention where the consultant will need to ask tough boundary questions, appreciate seen and unseen interrelationships and prepare for unintended consequences. Awareness of the self and a holistic perspective are essential qualities that the consultant will require to navigate through such situations. Flexibility in terms of cognitive, formulative and substantive flexibility provide the fuel for the consultant to think variety, absorb complexity and deliver to client expectations considering the constraints they work under.

Given the key tenets of OD being contextual, yet situational, holistic, multidisciplinary, participative, iterative and long-term value adding, systems thinking and practice offer the required perspective and approaches for effective OD interventions. Having been part of OD teams for clients across sectors and across various organisation types, I realise there are a few sets of dimensions that surface when certain factors are juxtaposed to make sense of OD initiatives. In the next section, I have made an attempt to explain this by developing what I call the “systemic OD matrix”.

16.3 Towards the Systemic OD Matrix

OD initiatives can be looked upon from two angles; first, the OD component that is in focus, and second, the organisation dimension addressed. Both the OD component and OD dimension are complementary in an intervention and obvious overlaps can be noticed. However, I make this distinction to enable the consultant to consider such interventions in a balanced manner without falling into the tendency to consider the intervention in a siloed and isolative manner. I will now explain both the angles in turn and take the reader through a discussion to work towards developing the systemic OD matrix.

16.3.1 OD Component

An OD intervention can be seen to have a specific approach to focus on specific aspects in the system. Here, I borrow the understanding of Leavitt (1965) who talks about four components/focus areas what later came to be known as Leavitt's diamond: task, structure, technology and people.

16.3.1.1 Task

This component focuses on the activities to be undertaken to achieve a particular goal or outcome. Both qualitative and quantitative aspects of considering tasks lead to the understanding of processes and how tasks facilitate the conversion of inputs into outputs for the final achievement of objectives. If it is a manufacturing process, it is expected that each consequent activity adds additional economic value to the product in progress. Similarly, in a management process, it is expected that each subsequent activity contributes towards business enhancement of the function in progress.

Focus on task or process as a component would mean that the consultant works on defining, streamlining and creating added-value at the task level so that overall there is a cost, quality, production and/or time leverage. Significant time goes in productivity analysis, activity mapping and time and motion studies in large-scale interventions that come under the umbrella of Business Process Reengineering (BPR). Concepts like Total Quality Management (TQM), six-sigma and lean have been universally adopted across industries for task-focused interventions.

A greater focus on task and process may mean that the organisation even redesigns its structure around the task. Here comes in the concept of a Process-Based Organisations (PBO). Ghoshal and Bartlett (1997) say that PBO "should be derived directly from the strategy by linking the strategic choices to the customer processes and development processes". In such corporations, rather than organising around individual units or functions, people and technology are organised around common processes and customers, and this is driven by the business strategy. In this kind of a structure,

reporting mechanisms and organisational hierarchy mean less, but what holds weight is process optimisation, no matter however the organisation structure is arranged. In this kind of an arrangement, frontline implementers are the actual process warriors and therefore adopt an entrepreneurial role (Vanhaverbeke and Torremans 1998). The manner in which PBO operates is radically different from the manner in which a conventional functional organisation would operate.

It is observed that task-focused OD interventions are normally (and not necessarily) sponsored by a functional or departmental head. HR initiation may be commonly noticed in such cases as due to its focus on workforce optimisation.

16.3.1.2 Structure

A focus on the structure will come under the gamut of organisation design (that we discussed in Chap. 2). The belief that drives such mindset is that organisational performance can be enhanced by reworking and reorganising departmental leadership functions, reporting relationships and responsibility-authority matrices. There are different parameters that are normally considered during an organisation restructuring initiative. These include production, quality, innovation, marketing, product, supply chain, etc. Any of these parameters presents the key trigger for the intervention to be expected to lead to solutions addressing the same. For instance, a consumer durables company may want to move from a production focus, where emphasis is on greater throughput to achieve economies of scale, to a product focus, where the emphasis is on innovation and research to come up with new offerings for consumers. In the former case, Research and Development (R&D) as a function may not have existed; but in the latter case, R&D will become a key function reporting directly to the CEO. The structure inspires the creation of tasks and processes that will serve the structure and that will ultimately lead the organisation towards its business objective. The structure influences how people are managed and how processes are implemented. Choice of structure and roles, and functions changed can lead to changes in workforce numbers, skills requirements and also the technology enablement for the organisation. Recent developments in organisation design have seen surfacing of new kinds of organisation structures that are adaptive and flexible, and are a break away from tradition. For instance, cellular structure that takes its inspiration from cell organisation in the human body or network structure that is about bringing together a network of systems to work towards a common goal.

It is observed that structure-focused OD interventions are normally (and not necessarily) sponsored by the business head or the CEO.

16.3.1.3 Technology

The role of technology has tremendously changed for organisations. From playing the role of business support, technology has started to play the role of a business enabler. Advances in Information Technology (IT) have made information availability and

access, big data analytics and artificial intelligence the norm in various industries. This has direct business relevance in terms of both management and productivity. Intelligent organisations have been able to utilise this to create their own competitive advantage around their information management strategy. A technology-focused OD intervention would consider technology as the key enabler and shaper for the company, and for its customers. Such projects will involve all-encompassing technology strategy, large-scale technology implementation, investments in technology infrastructure (both hardware and software), and hiring of people who are essentially technology-savvy. Tasks and processes will have a huge reliance on technology for enablement, monitoring and measurement.

Hence, technology-focused transformation involves a complete rethink of the organisation; otherwise, it is unlikely to be sustainable. In this context, Mattern (2002) notes that sometimes companies are not able to reap the best benefits from modern technology because they try to fit them into outdated and unsuited frameworks, processes and controls. For technology-enabled organisations to be successful, new-age managers will not only have to be accountable to instil a mental shift amongst the people in the organisation, but also inculcate new culture, new processes and new infrastructural mechanisms so that the benefits of modern technology can be reaped to its highest potential.

New expectations and shifts in traditional technology and functions demand that the role of the Chief Information Officer (CIO) and that of the IT department itself undergo a transformation. Hence the influence of technology on structure. This has led to the appearance of a new genre of information leadership for organisations, where heads of IT departments are considered to be business leaders with the capability of driving change and creating a positive impact for the business. People who run the technology need not only to understand technology, but also need to have a thorough understanding of the entire business, profit indices and business-technology alignment. They should be the people to partner key decision makers at the highest level. IT is no longer considered to be a back-end support function, but a key business driver. This has resulted in the arrival of a new role for IT executives and management in organisations with heightened responsibilities and accountability. Lohmeyer et al. (2002) clearly state that companies must make sure that their IT managers are business literate if they want technology and business to work together for business success.

It is observed that technology-focused OD interventions are normally (and not necessarily) sponsored by the CIO.

16.3.1.4 People

OD interventions focusing on people will centre on development and exploring the full potential of employees in organisations. Such interventions are very different from the people-management styles and interventions from the days of Taylor and Fayol (that we discussed in Chap. 1). Management thinking has moved from a time where people were regarded as cogs in the wheel to today where people are regarded

as the most valuable asset for an organisation. If the classical approach was top-down and mechanistic, the new management style requires people to be nurtured, developed, recognised and respected as individuals. In an age of heightened global competition and corporate uncertainty, employees of an organisation are beginning to be recognised as strategic assets that define the future of the organisation itself. This has also led to greater dialogue for a humanistic approach for organisations that regards individual needs, nuances and sensitivities. Employees are expected to be provided with a space where they can be empowered and be what they actually are and give their best to their organisation. Hence, the focus is on aspects like culture and values fitment, performance appraisals, engagement, retention and learning.

As companies begin to realise the importance of its people strategy, growth in the world economy and increasing number of qualified college and university pass-outs have made employment and employability versatile. This has given rise to a new problem of attracting and retaining the right talent. To deal with the complexities of an increasingly globalised world, companies are even making efforts to pool in global talent and develop them to carry their global business models forward. Haberer and Cohen (2007) note that “progressive companies” in Latin America are now setting up “leadership factories” to systematise the identification of global talent. These so-called factories are talent development hubs where people from target geographies and skills are recruited, groomed and developed to shape them into business leaders. Managers are today expected to reach into the feelings and emotions of employees and ensure that together with the right structure, they also receive the right co-workers. OD interventions focus on developing notions of common identity, shared understanding and non-divisive policies. This may take shape in both organisation policy and overt symbolism. An organisation’s people strategy needs to be closely associated with its management strategy so that its people are brought to the centre stage of moving the business forward.

It is observed that people-focused OD interventions are normally (and not necessarily) sponsored by the HR Head.

16.3.2 OD Dimension

Taking a different angle, OD interventions can also be considered from the larger organisational standpoint they are meant to address. There can be categorised into three dimensions—alignment, accountability and development—that can be considered in a sequential manner. These dimensions emerged as a result of my discussions with my then colleague, Sumit Sethi, during my tenure at Aon.

16.3.2.1 Alignment

Every organisation is formed to bring together a team of individuals who have an interest in working towards a common goal. These individuals have shared values

that bind them and let them work in sync with maximum metamorphosed energies and passion. As part of the growth process, the organisation usually witnesses scale and higher business complexities. In this journey, the organisation attracts more people for operations, and more business processes to enable people and operations. An organisation structure gradually shapes up that streamlines what people do, how they interact, who exercises checks and controls and ensure that people are adequately positioned and regarded within that structure. Alignment in the structure plays an important role to bring together the vision, strategic direction, individual and team responsibilities and reward mechanisms so that the organisation is able to demonstrate performance in a sustainable manner.

Alignment brings in not only physical and organisational stability to the system, but it also garners the interest and commitment of people together to enable them to work with passion and energy. The shared passion and energy steer the organisational ship towards high performance and business excellence. The following are some of the key elements of a structure:

- Clarity in reporting,
- Specialisation of roles,
- Clarity of responsibilities and accountabilities,
- Decision-making authority,
- Consistency in pay as per job levels.

In OD, alignment can be brought about by the right kind of organisation structure, clarity in roles, culture, and an aligned reward and recognition philosophy. An organisation structure provides a framework of responsibilities and reporting relationships, and the mechanisms for linking and coordinating the organisational elements into a coherent whole. In the words of Trevor and Varcoe (2017), an aligned organisation is one that has “a tightly managed enterprise value chain that connects an enterprise’s *purpose* (what we do and why we do it) to its *business strategy* (what we are trying to win to fulfil our purpose), *organisational capability* (what we need to be good at to win), *resource architecture* (what makes us good), and, finally, *management systems* (what delivers the winning performance we need)”.

As the organisation grows, it also starts shaping its own culture and there is a mutually reinforcing relationship between the structure, people and culture where each influences one another. Harrison (1993) talks about four dimensions of organisational culture—power, role, achievement and support—defined below:

- The **power** dimension propagates centralisation of decision-making implemented through functional hierarchies with all power converging at the centre. Such a culture normally practices unequal access to information and resources for individuals in the organisation.
- The **role** dimension focuses on clarity and articulation of tasks and roles in the organisation; hence an emphasis on replicability of work. Such culture normally encourages standardisation, predictability and process adherence.
- The **achievement** dimension pushes the team to work relentlessly towards achieving the goals the organisation has been set up for; there is significant pressure on

delivery and achievement orientation. Such culture normally encourages performance drive in the organisation.

- **The support** dimension encourages affinity, loyalty, trust and camaraderie; people are expected to deliver on results if the right support and environment are provided to them. Such culture normally leads the organisation on path of capability development and employee wellbeing.

No one culture is better or worse than the other. A right balance is required for the organisation to work towards a common objective. Consideration of the kind of culture is important in the context of the organisational structure as the structure is shaped to a large extent by the culture that the top team in an organisation fosters. In order to create the right kind of structure, the consultant needs to understand the business vision and the kind of culture the top team demonstrates and wants to further. True alignment can be brought about by bringing a congruence at this level between vision, values and strategy so that the structure and systems and processes set out to enable the desired culture to be cherished and promoted.

Integration of compensation is an important aspect in this alignment journey. Often, compensation is regarded independently from the vision, values and culture (and structure) of an organisation. Rapid growth, market volatility and talent scarcity are factors that result in such misalignment. However, organisational alignment requires compensation alignment. Today, experts are talking about “total rewards” that looks at this aspect in a more mature manner. Total rewards is the sum total of all material and non-material rewards and benefits that an employee takes back from an organisation. It is normally guided by a total rewards philosophy that is a derivative of the vision and values. To borrow from Aon, the leading HR consulting firm, design of total rewards policies can be framed across two axes and four intersecting quadrants between these axes. The axes are (Kwon and Hein 2013):

- **Financial-Experiential:** Whilst the financial aspect focuses on cost and payouts in financial terms, the experiential aspect focuses on the lived-in experience of employees including leadership, management and co-workers.
- **Personal-Company:** While the personal aspect focuses on individual rewards such as salary, trainings and goal attainment, the company aspect focuses on shared benefits such as culture, work environment and brand mileage.

Total rewards is a more evolved concept than looking at compensation per-se to give employees a complete life experience during their association with an organisation. Alignment can be created by setting of clear goals, linking total rewards with business objectives and taking an informed decision relative to market realities, all guided by a well thought through total rewards philosophy.

The role of communication in creating organisational alignment should never be underestimated. Vision, values and culture need clear articulation and sensitisation. Leadership plays a lead role in this engagement. People managers need to be responsible for providing clarity of role, expectations and total rewards to their teams. The internal communication team that lies in the intersection of Human Resources and Corporate Communications needs to lead the efforts in the process.

Dangers of a misaligned organisation can be serious. Lack of clarity in decision-making, goal clarity, reporting and rewards can throw the organisation into disarray. Employees in a misaligned organisation may be overwhelmed with too much activities at all times but their efforts not adding up the overall business objectives. This leads to a drain in organisational resources and personal capacities. Achieving alignment is a fundamental role of an OD consultant. In the words of Bradford (2001): “Aligning everyone in your organisation with your strategy is one of the most important things you can do beyond formulating and implementing great strategies. Alignment will make it much easier for your management team to push the organisation in the direction you intend. Without good alignment with the strategy, every bit of forward motion will be a struggle” (p. 1).

16.3.2.2 Accountability

Once alignment is established in terms of structure, roles, reporting and total rewards, it is important to create the right conditions at the workplace that drive high performance and continued energy. This can be enabled by a putting in place a Performance Management System (PMS) that is aligned to the organisational strategy and business vision. An effective PMS can support the management to have continual oversight of the organisational operations and bring about course correction wherever required. It can establish clarity in minds of the employees by non-ambiguous goals and structured feedback that can help them continue to deliver as per expectations. It is incorrect to approach PMS as a stand-alone HR initiative, but it is a business enabler that is central to the achievement of strategic goals.

Introducing and implementing PMS is not a one-time affair that comes into play during appraisal time. It is rather a journey that passes through goal setting, employee sensitisation, manager-team conversations, mid-term developmental interactions, scheduled appraisals, career progression and total rewards. Regular feedback plays an important role in sharing expectations, successes, improvement areas and support required between the manager and their direct reportees. Outcome of such interactions should directly feed into learning and development programmes (that we will discuss under the next section, development). Effective MIS needs to be maintained where information can be stored, retrieved and analytics can be leveraged for overall assessment of the organisation’s performance health.

Role specificity and individual goal setting is an important aspect of PMS. An OD consultant typically works with their client on breaking down strategic goals into function-wise and role-wise goals and targets and aligns one’s responsibilities as per the goals. An often used approach in goal setting is the Balance Scorecard (BSC) approach (Kaplan and Norton 1996). The BSC introduces balance to the organisation’s goal-setting process by bringing in four dimensions of consideration: (1) *financial*, which focuses on the financial health creation for the firm; it keeps in mind revenue, profitability and shareholder returns. (2) In order to reach the financial goals, *customer* goals come into focus on the relationship of the organisation with the customer both in terms of quality of product/service offering, after-sales service and

overall experience the customer goes through in the journey of interacting with the organisation. (3) Customer goals are supported by effective and efficient *processes*, both operational and management that the organisation adopts and socialises; process goals bring in optimisation in the system. (4) Finally, everything needs to be supported by the right capabilities in the organisation by *learning and growth* of its employees; competency development, execution excellence and continual learning are the focus areas for the learning and growth goal.

Recent advancement in management science has even extended the BSC to encompass social and environmental issues into business activities (Epstein and Wisner 2001; Figge et al. 2002). This also means its extension to a variety of stakeholders to be considered for business excellence delivery where there is heightened consciousness for meaningful business and the triple-bottom line. An OD consultant needs to keep in mind this flexibility of the BSC to craft more impactful PMS frameworks for their clients.

It is to be noted here that the PMS needs to be closely related to the total rewards philosophy of the organisation so that desired (and exceeded) performance is adequately recognised and underperformance is supported with learning and resources. Establishing accountability and enabling high performance requires leadership drive, industry competitiveness and employee wellbeing. This can be enabled by developing the right kinds of capabilities within the organisation, and this brings us to the third dimension of development.

16.3.2.3 Development

Development is the final and the most critical dimension. Continual learning is essential for organisations to deal with complexity and adapt to the rapidly increasing pace of people, technology and process changes in the wake of internal and external triggers. Leaders across the board need to come together, pre-empt change and display excellence. Development initiatives need to run across levels and functions to create an organisation that is can always be ready to pre-empt, and respond to threat and changes. Development needs to be approached in a holistic manner considering business alignment, individual aspirations and market realities. Business alignment ensures that all learning programmes are in-sync with the vision and objectives the organisation is working towards. Every employee is an individual with their own interests, learning needs and learning styles, and hence, the importance of individual aspirations. Finally, learning programmes need to reflect current developments in the external environment so that learning outcomes prepare employees to be business ready; hence consideration of market realities needs to be reflected in programme design and content creation. Learning outcomes need to be captured in performance measures to create alignment with the organisation systems. Development programmes need to have top management and CXO support as they require financial investments and employees' time. Learning outcomes are also leveraged for organisational succession planning and talent management of the business. These activities

are highly strategic and need top management time and commitment to make them business aligned. Leaders also need to give time to high potential employees.

Here I will discuss four core elements of development—competency, assessment, improvement and succession planning.

Competency

Competencies are knowledge, attribute and skills that can come together to enable one to deliver effectively on their work. Knowledge is about the know-how and technical acumen that an employee has developed as a result of their education and experience. Attribute is the quality that is inherent in an individual to perceive and deliver something. Skill is the ability to carry out an activity. Every organisation is characteristic of its own competencies as every organisation is unique by virtue of its goals, values, culture and people. An overall organisational competency is an amalgamation of competencies that exist in its individuals and this, in turn, defines the way people are expected to be in the organisation.

OD consultants are often called to develop competency frameworks for their clients. A well-articulated competency framework establishes clarity and focus in the organisation regarding the kind of people it may want to attract, how it may want to invest and focus resources to develop talent, and understanding of what kinds of behaviours are to be encouraged or discouraged. A well thought through and ingrained competency framework can work towards creating a distinctive characteristic and value proposition for an organisation. These can also be used for assessment of employees to find out development areas so that learning programmes can be adequately created. Consultants are often called to codify the following three kinds of competencies:

- **Technical competencies:** Those that cover technical capabilities. For some roles, technical competencies may be mandatory; for example, a role that requires the use of a specific software for design and operations.
- **Behavioural competencies:** Those that cover “soft” aspects such as relationships, leadership, communication, etc. that are important across roles and levels. Behavioural competencies may be highly important for certain kinds of roles; for example - sales where negotiation will be highly required as a behavioural competency.
- **Functional competencies:** Those that are relevant to particular roles and functions and that enhance performance. For example, if someone is working in the field of stakeholder engagements in a public policy firm, the ability to identify the right stakeholders will be seen as a functional competency.

In an organisation, different competencies are required for functions to be carried out seamlessly and effectively. The manner in which the organisation nurtures and protects its own competencies can result in a competitive advantage for that organisation. Hence, identification, alignment, appreciation and development of competencies need serious focus and top-level sponsorship.

Assessment

Objective understanding of where individual and team competencies stand in an organisation can present important perspectives about the organisation's capability to face current situations and its future readiness. OD consultants often need to conduct competency assessments leading to the understanding of organisational competencies, and individual strength and opportunity areas.

Assessments can be carried out in different ways for different kinds of competencies. Conventional approaches may involve managerial observation and feedback and on-the-job tests. Development Centres (DC) provide an objective platform for an external consultant to observe and assess participants in a simulated environment and provide developmental inputs. To facilitate a DC, competencies are broken down into sub-strands and behavioural attributes and specific tools are assigned to assess each competency. This is called a competency-tool matrix; A corresponding document defines and illustrates what each sub-strand means and what would be its behavioural expectations. A specific tool is allocated to assess the same. The tools would be designed keeping in mind the behavioural expectations for each sub-strand. DCs are intense sessions involving one full day or more where a holistic perspective of the individual is obtained.

Often DCs are complemented with a 360° feedback and a psychometric test to give a more rounded picture of the individual. 360° feedback brings in perspectives from peers, managers, subordinates, customers and any other touch points that the individual engages with for their work. Psychometric tests are normally administered as an online test to assess a person's mental capabilities. A combination of all these approaches offers more objective and rounded perspective about a person's abilities.

By mapping individual competencies for an entire organisation, an organisation-level competency map can also be created that can show where the organisation stands in totality in terms of its competencies and capabilities with regards to readiness for achieving its business goals.

Improvement

Assessments do not exist for the sake of it, but to bring about improvement in the situation. Development Centres, as the name suggests are more development oriented rather than assessment result oriented. OD consultants work with their clients to chart out the most appropriate development journey for people within constraints of organisational resources and individual bandwidth. Improvement is best brought about when people are taken out of their comfort zones and faced with higher level business challenges to prepare them for the future. Both formal and informal developmental sessions can be organised depending on the individual's learning style and requirement. Often organisations create peer-level support groups where participants can share experiences and learn from each other.

Developmental programmes are tailored to people playing specific roles and to the levels they occupy in an organisation. The following can be noted as best practices for the design of level-specific competencies:

- **Leadership (top level):** At this level, technical skills are not the core focus. Leaders need to hone behavioural competencies and be comfortable to take decisions in complex and ambiguous situations; this also means the ability to prioritise and letting-go. Individual coaching is a good approach at this level that involves structured one-on-one sessions between a leader and an expert coach. This approach is time intensive and involves high financial investment from the organisation.
- **People managers (mid-level):** At this level, technical, functional and behavioural competencies are all important. Technical and functional skills bring in the capability to provide technical guidance to teams and to be seen as experts in their domain. Behavioural competencies are equally important as people managers need to manage themselves, teams, and also has interactions with managers from other functions and their superiors. At this level, a combination of individual or group mentoring, classroom training and live projects (in the form of action learning) are highly impactful.
- **Individual contributors (junior-level):** This level is about getting the job done; technical and functional competencies are most important. Development programmes here can involve classroom sessions, group demonstrations and live projects. However, behavioural competencies should not be ignored. Teams can be sensitised about behavioural competencies with internal employee ambassadors and illustrations.

Succession Planning

The previous stages can contribute significantly towards building organisational talent readiness. Competency articulation, assessments and development programmes can act as career-enabling processes for management to handle career pathing and high potential management. Improvement programmes can be designed keeping organisational future talent needs in mind, and individual aspirations and strengths can be worked on towards the same. Succession planning can reduce dependency on external talent by creating an “internal leadership factory”. Coaching and mentoring for high potential employees can play a significant role in helping them overcome behavioural boundaries and be ready to take up future leadership positions. Employees can also be moved around across departments to make them get more exposure to work outside their immediate functions. Such initiatives also continually encourage employees to give their best to their organisation.

Such initiatives around leadership development need to be considered as a continual process and integrated with the core business of an organisation. This final dimension of development can create organisations that are aligned and enable employees to deliver with accountability.

Table 16.1 Systemic OD matrix

Intersections	Alignment	Accountability	Development
Task	Task articulation and definition takes centre stage <i>Danger of over-documentation</i>	All tasks will be created to drive delivery and goal achievement <i>Danger of being too mechanical</i>	Tasks and processes will reflect learning and continual improvement <i>Danger of delivery taking a second seat</i>
Structure	Roles and reporting in sync with business objectives <i>Danger of over-reliance on the structure and rigidity</i>	Structure will establish clear reporting and divisions of power <i>Danger of centralisation and concentration of power</i>	Enablement of intra- and inter-functional interactions, fluidity and learning; related competencies <i>Danger of the system slipping into confusion</i>
Technology	Focus on implementing technology to bring integration <i>Danger of technology dependence and being too mechanistic</i>	Technology will ensure adequate support for realisation of goals driven by processes <i>Danger of process taking over people</i>	All learning and development centralised and technology-enabled <i>Danger of technology overriding personal learning styles</i>
People	Attracting and retaining like-minded people <i>Danger of groupthink</i>	People will be trusted and believed to be delivering as per expectation <i>Danger of too much pressure and burnout</i>	Authentic focus on developing and empowering people <i>Danger of hyper-flexibility and actual business taking a back seat</i>

16.3.3 Systemic OD Matrix

As I work through the four components and three dimensions of OD, I see value in considering the intersections as a mode to understand an OD change intensity and process. Whereas, the OD components direct the initiative for specific interventions, the dimensions present a macro-picture of the change in the system. Often organisations and consultants run into the danger of concentrating only on one aspect and not on the other. Both aspects need to be considered; whereas the components are the enablers, dimensions are the spaces (or areas) of impact. A unitary approach will lead the organisation to consider an OD initiative in silo. Overemphasis on enablers will lead to interventions focus on the tactics, and an overemphasis on dimensions can make the intervention idealistic and theoretical. What is required is a balance of the two. It is important to be aware of the nuances that come up as a result of the intersection between the components and the dimensions. I visualise the intersecting nodes in what I call the systemic OD matrix as represented in Table 16.1.

In the systemic OD matrix, I have presented the nuances that appear at the nodes of intersection between the components and the dimensions. This matrix is not meant to be an exhaustive one, but only indicative of what may actually happen if an OD

initiative focuses only on specific aspects and loses sight of the overall picture. With this in view, I have also presented the dangers each intersection node presents. The systemic OD matrix can be used by organisations and consultants alike to identify, prioritise and balance their initiatives; it can be used as much as a diagnostic framework, as a design platform. Often the organisation and the consultant may end up picking piecemeal projects and isolated initiatives due to the constraints of perspective and/or resource. The systemic OD matrix can provide a reference framework to compare efforts and interventions to make sure there is balance. No single intersection provides the perfect solution for a problem. It is a combination of few such intersections specific to an organisational context where probable solutions may lie. A complete organisation transformation will account for all nodes of intersections with the goal to impact alignment, accountability and development through tasks, structure, technology and people.

With this context, I will spend some time reflecting on some possible personas (or client types) a consultant may encounter. This understanding may support the consultant assess why they may be seeking a specific type of intervention and therefore how they can manoeuvre those situations.

16.4 Client Personas and OD Initiatives

Having worked with clients in various stages of their business evolution and in a variety of set up, I would discuss four ideal-typical client types that I call personas. Personas “fictional characters, which you create based upon your research in order to represent the different user types that might use your service, product, site, or brand in a similar way” (Dam and Siang 2018). Personas help in understanding the client, their thought process, their information consumption habits, reference points and decision-making behaviour. This understanding can help the consultant in crafting their interaction appropriately with their client. The four personas I will be presenting are: local guardian, traditional parent, cross-cultural parent and modern parent. The understanding of these personas emerged as a result of my extensive discussions with my research collaborators, Ashu Sabharwal and Ruchi Sachdeva. The names are chosen to represent the typical behaviours they present as a decision maker. These perspectives are not mutually exclusive and these personas may have characteristics that are overlapping and sometimes similar. However, each of these personas also presents its own uniqueness that an OD consultant needs to be aware of so that interventions can be carved out in a manner that is contextual and that can create greater buy-in. It is important to note that personas are not perfect descriptions for the client; but they offer a direction to understand clients and engage with them better. The role the consultant can play to deliver on responsible outcomes is also largely dependent on the situation they are in and the client mandate they get the opportunity to engage with. The perspectives I share here are drawn primarily from my personal experience as a consultant and insights shared here are purely from a consultant standpoint.

16.4.1 Local Guardian

In literal terms, a local guardian is one who is entrusted with protecting and guiding someone whose immediate elder relatives (normally parents) are geographically away from the site of the incumbent. A local guardian is like a parent who keeps an eye, counsels and reports back to the incumbent's senior relative about their wellbeing. The immediate senior relative remains the ultimate custodian of the incumbent.

Reiteration of this ideal-typical understanding of a local guardian is important because it helps us understand a type of client persona. They are normally country-level (local) business or function heads of a large international organisation where the headquarter (HQ) is located in another country. The vision, mission and strategic direction of the organisation is normally set in the HQ level that holds all power and influence. The HQ issues directives and country-level business goals that the local office is expected to work towards. The local office is normally represented by a country head (who serves as the business head) and a team of functional heads in a usual organisational set up. The local organisation is designed to cater to the strategic objectives of the HQ. This also guides the roles and responsibilities, and systems and processes in the local office. The culture and ethos of the HQ are normally replicated in the local office and the local guardian is expected to protect and nurture the same in their country. The client sponsor can be a local citizen or an expatriate from the home office (HQ).

Imagine the country head or a function head in the local office to be the client (the local guardian). The incumbent will be responsible more for execution than strategy. They would not have much control over the vision and policies of the organisation. The structure is normally aligned with the strategic direction set by the HQ. The local office would be interested in driving process alignment and accountability so that delivery is aligned to the strategy. Development initiatives would work towards protecting the vision and values, and learning philosophies of the HQ. OD interventions sponsored by the client in such situations normally involve process design, PMS implementation, execution of people development initiatives. Strategic aspects like structuring, leadership coaching and performance metrics are normally set by the HQ and implemented by the local office. Budgets are agreed and frozen in the beginning of the financial year between the HQ and the local office.

However, there could be occasions where the local situation presents unique complexities and market nuances that demand exceptions. These situations can include specific market realities, regulatory complexities and cultural uniqueness. In such cases, the local office may be empowered to decide on its own market priorities and policies under the overall agreement of the HQ. Although budgets will be frozen at the beginning of the financial year, there can be more flexibility provided given a situation in flux.

16.4.2 *Traditional Parent*

An ideal-typical definition of a traditional parent is one who is closely connected with their child and feels completely accountable to him or her. They take care of all needs and are highly protective of their child. As the child grows up as an adult, there is a tendency of conflict arising between the parent and the child as the latter may have his or her own aspirations that may not be aligned with the parent. Although the parent may be reluctant, a mediation may always help in making both the parties see eye-to-eye.

This client persona is typical of a family owned business where the promoter acts like a traditional parent. The promoter is normally the founder of the company and they would have seen their business grow through good and not-so-good times to achieve a degree of scale and credibility. They would have worked closely with their immediate family, people they have known and a pool of trusted advisors to navigate market realities and bring the company to a position it is in. The promoter may have a vision in mind, but that may not have been articulated well. The focus would have always been on delivery rather than process adherence. Systems and processes would have grown organically and become institutionalised by practice rather than by design. This could result in the existence of lot of legacy systems. Reward and recognition, and development would be personal judgements rather than being based on fair and objective frameworks. The promoter is the primary decision maker and controls all budgets. Such situations would see the next generation come into manage scale and complexity. The family attracts people of their own culture and nature, and there is a high degree of affinity between the teams who work together.

However, as the organisation grows in scale, so does complexity. Increase in the number of people and product/service lines have management implications including having to absorb people from a variety of cultures and value systems, perceived and actual distance between top management and execution layers, and inability to provide consistent, balanced and fair systems and processes for all. This is where a traditional parent persona type may call upon an OD consultant to create an aligned and accountable organisation. Such mandates may focus on specific dimensions or on all three dimensions of the organisation; such mandates do not specifically spell out any of the four OD components. This allows more autonomy to the consultant to understand the situation and offer advice that is strategic and more meaningful. It is common for discussions of such mandates to be triggered and owned by the next generation in the family who would be keen to professionalise the business.

Comfort and affinity in the engagement are of high importance to a traditional parent. A consultant to see an impactful and sustainable engagement needs to build a personal rapport and trustworthy relationship with the client. This relationship often needs to keep aside excessive formality and display signs of working like an internal team member with cognisance of how the client feels. A trustworthy relationship can see such mandates become long-term and touching all aspects of the organisation that may translate into high-value and high-profit business for the consultant.

16.4.3 Cross-Cultural Parent

A cross-cultural parent is one who would have lived and worked in diverse places and/or sectors, and would have certainly had the opportunity to interact with teams from more than one culture. They would have ideally lived in more than one country. A cross-cultural parent would ideally have a more liberal perspective and would be less protective of their child. Hence, they would be open to experimentation, welcome critique, appreciate professional expertise and favour objectivity more than personal preference.

This client persona would typically be displayed by someone who would have lived and managed businesses in more than one country, and would have finally based themselves in a specific country for a fixed period of time or as a permanent arrangement. A cross-cultural parent in the client scenario, if they are a function or a business head, is normally a professional who is brought into a growth-led organisation to bring in more business focus and management capability. They would be brought into a company more for their leadership abilities rather than for their technical know-how. Their mandate is largely to make the organisation future-ready. Decision-making is normally devolved to the cross-cultural parent from the promoter of the organisation. They normally report back to the promoter on key business and management parameters on regular intervals. They work in aligning business with industry best practices, promotes decentralisation and is open to innovation and new thinking. They captain the ship and steer it according to their judgement to maximise potential and explore new opportunities.

Given the mandate a cross-cultural parent has, they are normally open to partnerships with external consultants who have the expertise to bring in best practices and support the organisation in large-scale transformations. They would like to engage with credible partners who can take on the transformation journey, whilst they can focus on taking the business forward. They would be empowered to award a consulting mandate as the principal sponsor. Professionalism, subject-matter expertise and change management skills would be some of the core competencies that the client would look for in a consultant.

From the consultant's perspective, a cross-cultural parent can offer opportunities for large businesses that span over a long period of time. Such a client would normally be open to bring about organisational changes touching the three dimensions of alignment, accountability and development.

16.4.4 Modern Parent

A modern parent balances work, social and personal lives and tries to bring the best from both traditional and modern values. They would have overcome traditional barriers and become more open to modern values integrating emerging social trends

and interests of their children. They are open to risks, embrace complexity and do not shy away from taking on execution of different family tasks.

A modern parent client persona can be reflected by a start-up founder. They would ideally be an energetic digital-native with rich international exposure in terms of people and knowledge. They would have worked in a professional set up in the past. They are driven by a vision that they passionately believe in and are driven to achieve. They spend time and energy communicating their vision and always aspire to create shared energies with like-minded people internally and externally. They would seek continual improvement and be open to trial and error, until they strike at the right business and management model. They lead from the front and aim to achieve exponential growth by getting the right team, keeping them motivated, applying the best processes and making quick changes wherever required. Attracting adequate capital to enable capacity and growth in the company is a continual concern for the founder. Concern of predictable capital creates periodic uncertainty for the founder to take investment decisions. Start-ups find themselves in a state of continual flux. Although the founder always finds themselves in a constant pull between a hands-on and a hands-off approach, it is normally observed that they always get absorbed in execution in the initial stages.

A modern parent presents a very different engagement experience for the consultant. Arriving at a clear scope of work with this client persona can be a challenge as the situation itself is at a state of flux. The client will try to control costs due to budget uncertainties, the mandate is likely to see scope creep due to changing requirements, and the consultant may end up spending more time than initially planned due to the mandate and engagement being a situation in flux. Objective of the mandate as well be often unclear; the founder would be keen to see immediate business returns as return on investment would be high on the priority list of this client type.

The situation may differ if the company has secured second or third stage funding. Complexities and pressure to show results may not change, but complexities of the mandate may change. The funding partner will also come in with their expectations from the mandate alongside the founder. The silver lining here is that the objective may be more clearly called out as the funder would probably want to see more clarity and specificity in any third-party engagements. The consultant would, however, need to deal with multiple stakeholders and may also find themselves in situations where the wish list of the funder is in conflict with the wish-list of the founder. The consultant would have to navigate such complexities by helping both parties arrive at the purpose of the intervention and by the use of judgement, objectivity and professionalism.

Personas may help the consultant to understand their client better and steer their conversations in a contextual and relevant manner. It is for the consultant to understand that just like them, the client is also operating within certain constraints and with certain mental models. Personas can help the consultant understand why a certain project has been called for or been mandated. Understanding of personas along with reference to the systemic OD matrix can make the consultant's OD journey more meaningful and effective.

Finally, I will spend some time talking about the considerations a consultant has to make to make any OD intervention successful and sustainable.

16.5 Change Management Considerations

Change is not easy. It comes with denial, resistance and critique until an organisation accepts and absorbs it. As the consultant works through an OD intervention with their client, they have to go through the different emotions of this journey. At the core of this lies understanding of the human dimension and navigating organisational emotions with patience and empathy. The cultural context of the organisation in terms of values, beliefs and background play an important role in the process. There needs to be based on an unbiased assessment of the organisation's readiness to change and preparedness of any unintended consequences in the context of its culture and its conditions of existence.

I note the following considerations for an effective change management initiative:

- **Transformation accountability:** Accountability comes from two aspects—the authenticity of the reason why the intervention has been undertaken and the team that is aligned to deliver on the same (both client and organisation teams). The first part of authenticity is important because an OD intervention should not be undertaken because it is considered to be the prevalent trend in the market and because this is what benchmark organisations are doing. There should be a genuine need to undertake such an intervention that emanates from a business need. Otherwise, it will remain a “good thing to do” without the accountability of delivering it. Benchmarks and best practices play an important role to guide the strategy and incorporate relevant tactics, but an intervention always needs to be customised to a specific context that is situated in a specific space and time. Once this authenticity is established for an intervention, the teams aligned to deliver on it need to own up the intervention. We have earlier discussed about a consultant's personal responsibility and self-directed teams for delivery and sustenance of an OD intervention. This is an important aspect to consider. The teams' bandwidth, capability, commitment and passion need to be brought together to work towards the delivery of an OD intervention. Superficial involvement will only see the completion of activities in defined timelines, but will never be able to ensure meaningful and sustainable delivery of an initiative.
- **Executive sponsorship:** Top-level sponsorship is always required for successful OD interventions. In fact, this aspect flows from the first point of authentic requirement for such an intervention. The relevance of such an intervention to business needs to be established that ensures that the CEO or the Board is supportive of the initiative. The CEO may even be the principal sponsor of such an initiative, and that can bring together the top leadership of an organisation to support it. This is important as OD interventions are resource intensive, time demanding and require team bandwidth. Without executive sponsorship, such interventions may not be able to garner the required resources for implementation or could even be orphaned halfway. In fact, the intervention needs to involve and affect the top-level equally. If an organisation has to transform, the top management needs to partake in the process and change itself to live up to the new essence of the organisation.
- **Organisational participation:** An OD intervention needs to take the people in an organisation through the journey. Right from the stage of organisation diagnosis, planning, design, implementation and impact assessment, the consultant

needs to listen, engage and be sensitive to the needs of people. Real change is after all mindset change, and mindset change can only be brought about if employees are part of the journey and not treated as “subjects” or as “cogs in the wheel”. Discipline and a top management mandate can certainly make employees display certain behaviours or deliver on activities as a factor of fear; but such change will be superficial and not sustainable. If change has to be ingrained into the culture of an organisation, what people believe in and what they want is equally important as what the business wants. Creating self-directed teams to work alongside consultants to plan and extend influence through the organisation are important elements. Systems approaches such as Soft Systems Methodology and Social Systems Design (discussed earlier in this book) can come handy for the consultant to approach organisation participation systemically and holistically.

- **Communication:** Vertical communication between organisational levels and horizontal communication between teams, departments and locations is a critical consideration. Any change brings about nervousness in people and uncertainty about their future. OD initiatives may lead people to be concerned about their jobs, bands and other aspects. Clear communication from top management needs to flow through the organisation about the intent of the intervention and it should solicit support from people to make the intervention work. People’s participation is important here and we have already discussed this aspect in the previous point. People managers need to be kept informed about any change that impacts employees and they need to be sensitised with clear question and answer protocols. Similarly, vertical communication can be established by creating cross-functional teams and involving them in the change process. Any aspect of the intervention that may impact employees needs to be designed and implemented within due legal, cultural and ethical parameters. An organisation’s Internal Communication function plays a crucial role here; it lies in the intersection of Human Resources and Corporate Communications.
- **Capacity building:** Change comes with the requirement of new skills—behavioural, technical and functional. These new skills need to be mapped and adequate support needs to be made available to employees for them to learn, and often unlearn the past, and relearn. People managers play the role of mentors for teams; they need to allow time both for formal skill building sessions and learning time of people. HR needs to provide the infrastructure for such programmes to be made available considering convenience, resources, employees’ learning styles and learning curve. The consultant can put in place programmes to develop “co-experts” in a change environment that incorporates a bottom-up, collaborative and coaching approach (Paajanen et al. 2004). This co-expert model can provide a unique dimension to the capacity building approach in the change process where capacity building does not remain a top-down directive, but is systemic, considerate and empathetic.

A complete intervention is one that takes a balanced approach in the systemic OD matrix and keeps in mind the above change management considerations.

16.6 Conclusion

In this chapter, I presented a discussion on organisational development (OD) from a systems consulting point of view. I began by defining OD and considering the various elements that are central to the OD journey. I explained the relation between OD and Action Research, and talked about the interlinkage between the two.

I laid the grounds for systems thinking in OD and built an argument towards creating what I called the systemic OD matrix that brought together the two principal axes of an OD intervention: the four components of task, structure, technology and people and the three OD dimensions of alignment, accountability and development. I delved into the details of the intersections of each of them and argued for a balance between them for interventions to be meaningful, impactful and sustainable.

I introduced the concept of client personas in OD initiatives to help consultants understand the client psyche and therefore the kind of engagement they may prefer with a consultant. I closed the chapter with some considerations for the consultant that need to be kept in mind for a successful OD intervention.

Behaviour change remains an extremely important element in OD consulting given the nature of work that it entails. Changes in structure, introduction of new technology and implementation of new processes will not yield the desired outcome if people do not change themselves to adopt and adapt. This is not a one-sided initiative, but needs to be collaborative or being led by a co-expert model. The consultant needs to learn, unlearn and relearn through the process, and so does the organisation and its people.

References

- Beckhard R (1969) *Organization development: strategies and models*. Addison-Wesley, Reading, MA
- Bennis WG (1969) *Organisation development: its nature, origins and prospectus*. Addison-Wesley, Reading, MA
- Bradford R (2001) Building support for the strategic plan: aligning employees with strategy. *Compass Points*. http://www.strategyletter.com/cp_1001/cp_fa.asp. Accessed 18 Mar 2010
- Burke WW, Noumair DA (1994) *Organisation development: a process of learning and changing*. Pearson, New Jersey
- BusinessDictionary (2018) *Organisational development (OD)*. <http://www.businessdictionary.com/definition/organizational-development-OD.html>. Accessed 23 July 2018
- Dam R, Siang T (2018) *Personas—a simple introduction*. <https://www.interaction-design.org/literature/article/personas-why-and-how-you-should-use-them>. Accessed 2 Jan 2019
- Elliott J (1991) *Action research for educational change*. Open University Press, Buckingham
- Epstein MJ, Wisner PS (2001) Using a balanced scorecard to implement sustainability. *Environ Qual Manage* 11(2):1–10
- Figge F, Hahn T, Schaltegger S, Wagner M (2002) The sustainability balanced scorecard: linking sustainability management to business strategy. *Bus Strategy Environ* 11:269–284
- French WL, Bell C (1999) *Organization development: behavioral science interventions for organization improvement*. Prentice Hall, New York

- Ghoshal S, Bartlett CA (1997) *The individualised corporation: a fundamentally new approach to management*. Harper Business, New York
- Haberer PR, Cohen AF (2007) Building global champions in Latin America. *The McKinsey Quarterly*. http://www.mckinseyquarterly.com/article_page.aspx?ar=1974&L2=21&L3=33. Accessed 11 June 2007
- Hackman JR (1986) The psychology of self-management in organizations. In: Pallak MS, Perloff RO (eds) *Psychology and work: productivity, change, and employment*, vol 5. American Psychological Association, Washington, DC, US, pp 89–136
- Harrison R (1993) *Diagnosing organizational culture: trainer's manual*. Pfeiffer & Company, Amsterdam
- Kaplan RS, Norton DP (1996) *Translating strategy into action: the balance scorecard*. Harvard Business School Press. ISBN 0-87584-651-3
- Kwon J, Hein P (2013) Employee benefits in a total rewards framework. Aon Hewitt. http://www.techtelco.aon.com/attachments/human-capital-consulting/2013_Benefits_Quarterly_Employee_Benefits_Total_Rewards_Framework.pdf. Accessed 12 Aug 2018
- Leavitt HJ (1965) Applying organisational change in industry: structural, technological and humanistic approaches. In: March JG (ed) *Handbook of organisations*. Rand McNally, Chicago
- Lewin K (1958) *Group decision and social change*. Holt, Rinehart and Winston, New York
- Lohmeyer D, Pogreb S, Robinson S (2002) Who's accountable for IT? *The McKinsey Quarterly Special Edition Technology*, 4. http://www.mckinseyquarterly.com/article_page.aspx?ar=1251&L2=13&L3=13. Accessed 20 June 2007
- Margulies N (1972) *Organisational development: values, process, and technology*. McGraw-Hill, New York
- Mattern F (2002) *Transforming IT*. McKinsey Quarterly Special Edition Technology. http://www.mckinseyquarterly.com/article_page.aspx?ar=1255&L2=13&L3=13. Accessed 18 June 2007
- Paajanen P, Kantola J, Karowski W, Vanharanta H (2004) Applying systems thinking in the evaluation of organisational learning and knowledge creation. *Syst, Cybern Inform* 3(3):79–84
- Trevor J, Varcoc B (2017) How aligned is your organization? *Harvard Business Review*. <https://hbr.org/2017/02/how-aligned-is-your-organization>. Accessed 14 Dec 2018
- Vanhaverbeke W, Torremans H (1998) *Organisational structure in process-based organisation*. Paper prepared for the 14th EGOS-Conference in Maastricht

Chapter 17

Corporate Reputation



17.1 Introduction

Reputation is a belief or an impression that is held about an organisation, and bears both psychological and social connotations. Today's dynamic world has brought in a new reality for corporations that pose a range of challenges and opportunities for creation or even destruction of reputation. Corporations have to manage a complex reality of heightened customer demands, civil society expectations, a 24 * 7 news cycle, live social media, regulatory crackdown, cyber threats, an empowered employee voice and citizen journalism (the list can go on) that present unprecedented pressures on an organisation for it to navigate through in a sensible manner. Corporate reputation management has emerged as a specialised discipline to guide and support organisations pre-empt, prepare and respond to the dynamic environment they exist in so that its business interest can be safeguarded in the long run.

For a long time, corporate reputation may have been about image management where Public Relations (PR) firms would devise tactics to ensure that the right kinds of perceptions are created about the organisation in the eyes of the public. However, greater public awareness and sensitivity have ensured that corporate reputation does not remain an image management gimmick, but is considered as a core business imperative that needs to be reflected in an organisation's ethos and spirit.

In this chapter, I intend to share my perspectives on corporate reputation management. This will include why it is more important to think reputation now than ever before and how a systemic approach to reputation management can be adopted by consultants working in this field.

17.2 Why Corporate Reputation?

Fombrun (1996) defines corporate reputation as the “perceptions and feelings about an organisation held by its multiple stakeholders”. A sound corporate reputation has

the power to attract the right people to join a firm, mobilise the right partners to deliver on business, enable sales, and garner the required public support for the organisation to exist as a sustainable business entity. Divenney et al. (2008) highlight three core business benefits from a financial angle for corporations to invest in building and safeguarding reputation; these encompass “financial performance (profits, return on assets, return on investment, etc.), market performance (sales, market share, etc.), and shareholder return (total shareholder return, economic value added, etc.)” (as cited by Otunga 2010). Inability to focus on reputation can lead to dangerous consequences for an organisation’s performance and its existence as a social entity. I borrow a few cases from Harrison (2017) to exemplify this. From 2014 to 2016, Wells Fargo was under the scanner for admitting to creating millions of fake customer accounts that allocated unearned incentives to employees. This led to the share price of the US entity reduce by 20% and thousands of employees losing their jobs. The Deepwater Horizon accidental oil spill in the Gulf of Mexico in 2010 led BP’s share price crash by 53%; 11 lives were lost in the incident and untold damage done to the environment and communities. More recently, the infamous series of emission scandals of a German pride, Volkswagen, saw its revenue drop 5% in the first half of 2016 and the group’s share price tumbled almost 40% from 2015 to 2016. It caused grave reputational damage to the group’s brand in Europe and across the world with the layoff of 30,000 employees; the group continues to struggle to bring back its market share and brand value.

Creating the right perception of an organisation is not a one-time affair. It is a journey of crafting its narrative and engaging with the diverse stakeholder ecosystem an organisation exists in. Public Relations (PR) consultants work in this space of building strategic communications processes between an organisation and its public with the objective to create mutually beneficial relationships between them and safeguard corporate reputation in the long run. PR consultants are entrusted to craft compelling narratives about an organisation and leverage various mediums of communication such as the press, electronic media, social media and self-generated content platforms to amplify the same with target audiences. The endeavour remains to present the organisation in the desired light with the public that can in turn contribute to its brand value and reputation. Effective public relations strategies can generate public goodwill, win advocates and overcome crises more effectively without them resulting in a reputational threat. PR consultants work relentlessly with news creators and opinion shapers to transmit desirable messages about the organisation minimising opportunities of misinterpretation of facts and any possible negative coverage. Good PR is equally important for both internal and external audiences.

Several developments in opinion creation and consumption habits have changed the conventional landscape for PR. This has also resulted in the need for corporations to think proactively about their reputation in more pressing manners today than ever before. Several shifts in the socio-political and technological conditions are triggering this. I will highlight a few below.

- **24 * 7 news cycle:** Today we live in an era of non-stop news where events are reported as they happen. Technological advancement has made real-time access

for the media to events as they happen an easy reality. The rise of several news channels at national and regional levels has led to greater competition between them to be the first to reach and report events. Weaver et al. (2007) say that the press has moved toward sensationalism, entertainment and opinion from what was once driven by analyses, consolidation and verification. Journalists are in a hurry to reach an event as they happen and report back to the public even before they can understand what the event is about. The general public today lives from headline to headline and from breaking news to breaking news. Understanding of true journalistic ethos also means that this is not a situation where credibility can always be established and where unbiased reporting can always be achieved. When a news channel is aimed at generating and reporting *all the time*, there comes in sensationalism to grab public attention and elicit reaction (Vettehen et al. 2011). Sensationalism ensures that stories get highlighted easily and spread fast, and often repercussions spiralling out of control. As Vettehen and Mariska (2018) say, “The biggest truism about the use of sensationalism in news stories seems to be that it is a guarantee for success in terms of selling the stories to the public”. The pressure to sell fast and sell big to the public often leads to errors, misrepresentation of facts and creation of what has today come to be known as fake news. Fake news is intended to create hoax and propaganda and has appeared as one of the biggest threats to democracies and corporations alike. This leads us to the following trigger.

- **Social media:** Social media simply amplifies the reach and magnitude of news and facts at light-speed. Recent past is fresh with memories of events like the Yellow Vest protest, Arab Spring, Umbrella Revolution and Occupy Wall Street that were all organised on the power of the socially connected world that brought people from disparate interests and geographies together based on a common concern. Social media can be used to spread news and opinions real-time between people propagating fake news or news that is unfounded and untrue. Facebook-owned WhatsApp has appeared as a major platform for forwards and shares of propaganda material. News that is sensational can be handed over directly to people in mass scale without any censorship or moderation evoking sudden public sentiments or even mass hysteria. Juju et al. (2016) found that the top 20 fake news stories in the American presidential elections saw more engagement on Facebook than the other top 20 news stories from major American publishers. Technology companies find themselves under tremendous social and regulatory pressures to curb the spread of fake news. This leads to the threat of reputation even for themselves, let alone other companies. For instance, coming under fire in several countries, companies like Facebook and Twitter are taking on fake news themselves by the use of artificial intelligence and smart algorithms. Social media has taken the meaning of the 24 * 7 news cycle to a very different level as it has itself become a source of news that people access rather than a platform for sharing of authentic news. This aspect is amplified further by the rise of citizen journalism that completely shifts news creation to the hands of ordinary citizens.
- **Hyperconnected youth and citizen journalism:** All you need to create news is a smartphone. Today’s youth is aware, vigilant and is keeping an eye on what you do and how you behave. They form their own communities and trust groups to share

views and opinions that make them believe in a reality that is socially constructed in time and space in the virtual world. This comes from several characteristics of the youth that include a wish to have a reference group of their own and stay in touch with them (Filiciak et al. 2010). Co-creation and co-sharing are characteristics that drive them to constantly assess the engagement of corporations with their customers. Gaps in customer promises are promptly highlighted between peers with reviews that can be damaging to a brand—a “power” that previously used to rest only with individuals identified as experts and/or reviewers. This aspect is closely connected with the first two because events or experience with a brand can be promptly picked up and shared on social media and rapid amplification of the same has the potential to feed it into the 24 * 7 news cycle.

The potential of this interconnection was brought to life in 2015 with the case of the “Kodaikanal won’t”, a song that was performed by a young rapper Sofia Ashraf to protest against mercury poisoning of the environment in the South Indian hill station of Kodaikanal by the global giant Unilever (the makers of Pepsodent toothbrush and Lifebuoy soap). The song targeted the company for a thermometer factory that the company allegedly dumped in 2001 without responsibly disposing of the mercury that was being used in the factory leading to damage in soil and water, and workers’ and children’s health. Ashraf’s rap, “The environment is polluted still. Your clean-up was a shame—there’s poison in the air” on YouTube attracted millions of views within weeks of it being posted and 45,000 signatures in a petition to the global CEO of Unilever that had led the company to own up to the issue and take measures to make amends in its waste disposal initiatives. However, there was no stopping of this rap to go viral and deeply tarnish the reputation of Unilever.

This was a genuine case of environmental pollution that was aptly taken on by the potent combination of hyperconnected youth, citizen journalism, social media and 24 * 7 news cycle; however, companies need to be constantly on their guards of any misrepresentation of facts that may happen at the hands of irresponsible agents that can pose grave threats to their reputation.

- **Cybersecurity:** Organisations today store a tremendous amount of data online. This data include precious proprietary information, sensitive customer details, and valuable financial information amongst others, that put corporations in the front-line in the war on cybersecurity. The threat posed by cybersecurity is more than just security. It is about reputation. Earlier Yahoo! admitted unearthing a major attack that affected at least five-hundred million accounts, which the company blamed on hackers working on behalf of a government. The sequence of events prompted Verizon Communication to think of withdrawing from an agreement to buy Yahoo!’s core internet business for nearly five-billion US Dollars. In 2017, Indian banks saw a synchronised attack with hackers taking over control of every computer of three Indian banks and a pharmaceutical company and locked them. More recently, over three million debit cards were also exposed to high-risk because of breach in the networks of some of the leading Indian banks. Hackers are actively pursuing potentially damaging information, ranging from financial data (customer and internal) to trade secrets, products in development, legal and personal data, controversial

documents and more. As we start sharing more and more of some of our most private and sensitive information with digital platforms based on trust, the degree of our personal vulnerability also increases multifold. Organisations and institutions collecting and recording personal data for business operations need to be better equipped to handle their vulnerabilities in current times. This can be enabled by understanding its social, economic and policy-centric environment effectively.

At an event of a cyberattack, organisations are vulnerable to encountering a wide variety of financial costs. However, the bigger damage is the breach of stakeholder trust and a serious dent on reputation. Organisations and institutions collecting and recording personal data for business operations need to be better equipped to handle their vulnerabilities in current times. It is often said that data is the new oil!

- **Employee well-being:** Employees spend a significant amount of their life at work. Whereas it is imperative that the employer provides the required support for people to carry out their job role, it is also important that they go beyond just work engagements and consider the overall aspect of well-being. Well-being considers both the physical and emotional aspects of a person's life and extends to their social being that not only let them deliver effectively as employees but also live a more complete life. Employers are not only responsible for providing an ergonomic work environment to their employees, but also ensure that organisational systems allow for adequate work–life balance, healthy engagements with the manager and co-workers, and enable employees to engage sufficiently with the communities they exist in. Focusing purely on work delivery and overlooking other aspects that are important for a complete experience may lead to stress and burnout in the long run that can eventually impact work. Employee burnout can pose a reputational challenge to an organisation with irreparable damage.

In 2015, Amazon was hit by a serious reputational challenge as an employer with a damning New York Times article on the work pressure of employees in the company. The management was almost “exposed” for the grueling hours and stress that employees have to deal with on an everyday basis, which made Amazon almost seem like a living hell. To quote Kantor and Streitfeld (2015):

At Amazon, workers are encouraged to tear apart one another's ideas in meetings, toil long and late (emails arrive past midnight, followed by text messages asking why they were not answered), and held to standards that the company boasts are “unreasonably high.” The internal phone directory instructs colleagues on how to send secret feedback to one another's bosses. Employees say it is frequently used to sabotage others. (The tool offers sample texts, including this: “I felt concerned about his inflexibility and openly complaining about minor tasks.”).

This severely tarnished the reputation of one of the most valuable companies in the world as an undesirable workplace. Debates and discussions continued from people on both sides of the coin, but a dent in the reputation and sensationalism surrounding it is not easily mendable.

Talking about well-being, corporations also need to strive towards creating an inclusive culture where employees feel safe to work and express their opinions.

Respecting and attracting a diverse workforce, and zero-tolerance to discrimination and sexual harassment is required. People are in a heightened state of consciousness today and any wrong action is spotted, reported and talked about in no time. Uber has seen a series of reputational threats when it comes to cases on sexual harassment in which the company has been involved. Susan Fowler, a former Uber employee exposed an allegedly toxic culture in the company in her letter that talked about the unrelenting sexual harassment she was subjected to through her tenure in the company. Fowler's revelation led a lot of other women employees at Uber to come out and narrate their ordeal in the company. Whilst these were examples of cases where Uber has been directly involved, there were various cases in several countries where Uber drivers have been involved in the rape and sexual assault against women passengers. Over 100 Uber drivers in the US have been accused of rape or sexual assault against women and the number of cases coming out in various countries is on the rise. Uber is responsible to identify, conduct due diligence, onboard and train its drivers; hence holds accountability for the conduct of its drivers even though they may not be employed by the company directly. Travis Kalanick, the founder of Uber, was also dragged into a series of scandals that posed a threat to his own leadership and credibility. Overlooking such behaviours and being complacent about sexual harassment can lead to grave consequence and reputational threat to the company. Revelation of a series of cases of unacceptable behaviour led to the resignation of Kalanick in 2017.

When it comes to employee well-being, corporations need to display sensitivity and be cognisant of overall human dimensions, not just treat people as employees.

- **Regulatory hurdles:** Country-specific policy plays a significant role in determining the course a corporation takes in every specific case; this is sector and country dependent. A multinational corporation may be guided by its own regulatory mechanisms of its home country, but the same has to adapt and if required, changed, for the country in which it operates as its chosen geography of business. This requires a deep understanding of local laws, sectoral nuances and policy debates if the corporation has to serve in its chosen sector or country. Ignorance of the same can lead to serious reputational damage or even shut-down in case of non-adherence. In 2018 Google was fined a record USD 5 Billion by the European Union on an Android antitrust violation case that found the company guilty of bundling its search engine and Chrome applications. The company was similarly fined heavily in the same geography several times on account of user privacy violations. Regulatory actions like these not only hit corporations on valuable financial terms, but also reputational terms.

In case of new industries (e-commerce, digital payments, artificial intelligence, self-driving cars, etc. to name a few), the space itself is itself evolving and hence policymakers are also trying to make sense of how to maneuver the same. It is common in such cases for governments to work with industry forums, who have subject matter expertise, to decode complex issues and make regulations that are agreeable and amenable to concerned parties. In this case, it is important for corporations to tread the path cautiously. A corporation cannot be seen to be working too closely

with the government as this may be seen as an overt attempt by one corporation to influence policy in its favour. It is observed that often corporations bring together a consortium of companies who share similar interests and concerns, and present their viewpoints objectively to the government. For instance in India, the National Payments Corporation of India (NPCI) represents major private, public, international and cooperative banks to serve as a policy advocate for digital payments in India, an evolving domain. Its work entails developing technological solutions, drafting policy white papers and educating the general public on the benefits of digital payments.

In either case, the law of the land needs to be held in highest esteem.

- **NGO activism:** It is commonplace to see local and international NGOs presenting their opinions in an assertive or at times in a violent manner to counter planned activities of corporations. These activities may be regarding existing operations or planned projects. The validity of such opposition and the stand of its corresponding arguments would depend on which side of the divide one identifies with; nevertheless, such NGO activism has greatly affected businesses in the past, led companies to change the course of action and threatened corporate reputation. Daubanes and Rochet (2016) talk of the companies such as Nike, Citigroup, HSBC, Starbucks and Dunkin' Donuts that have "significantly strengthened" their social and environmental strategies as a result of NGO interventions. These interventions can take the shape of boycotts, naming-and-shaming, cyber activism, citizen mobilisation and even violent protests. NGO activism can gain precedence to an extent that it not only forces corporations to change the course of action, but policymakers also succumb to such influences to craft public policies in the light of such activism. In 2018, a massive protest led by Greenpeace against a major copper plant of the global giant, Vedanta, led to the closure of the plant in the Southern Indian state of Tamil Nadu on account of environmental pollution. The owning company presented its case over several rounds to the National Green Tribunal and announced massive CSR investments to demonstrate its commitment to the community. But none of its efforts could withstand the force of NGO activism with the State government passing an order to close down the plant.

NGOs operate in self-regulation mode touching sensitive aspects that have emotional appeal and people's personal connects (Daubanes and Rochet 2016); these may be in the space of environment, human rights or consumer rights. They fill a gap that divides corporations and the people; this serves as a leverage point for NGOs to create noise, garner support and challenge the high-and-mighty. Corporations need to understand that they have to coexist in harmony with such forces to ensure that their long-term reputation is safeguarded.

With the above triggers in the business environment, PR consultants need to be sensitive about both the situational realities and existential conditions of their clients. Constant vigilance needs to be exercised. The dynamic mix of human, social, technological, economic and regulatory factors that the environment presents means that consultants need to have a holistic approach to build and safeguard their client's reputation. This understanding is even more important in a highly connected world where every stakeholder is potentially connected with every other stakeholder; any

gaps in one part can easily get exposed and amplified in light-speed. A study by the World Economic Forum stated that more than 25% of a corporation's market value can be attributed to its reputation. Reputation is a firm's strategic asset and helps attract investors, customers and employees, and can create a competitive advantage (Fombrun and Van Riel 2004). Overlooking the importance of reputation can lead to serious consequences for corporations. In an environment of a hypersensitive and hyperconnected world, top management needs to identify interconnections, challenge preexisting mental models and be prepared for unintended consequences.

17.3 Corporate Reputation and Systems Thinking

Given the context I presented, it is clear that reputation management is not a straightforward activity driven by a specific department. Historically, Public Relations (PR) would play a major role in managing crises and putting in place communication strategies that would address risk factors and align response mechanisms around the same. Public Affairs teams would undertake activities involves government liaison and engagements with interest groups and activists. Internal Communications teams would liaise between an organisation's top management and its employees. However, such piecemeal efforts are not relevant when the environment is ambiguous, and stakeholders a corporation deals with are fluid and often unidentifiable. A holistic approach is required that would help critical assessment of the environment and understanding of requirements of different stakeholder groups. Reputation management is not simply about communication, but about substantial well-meaning action that has an authentic interest to drive results. To quote Bonini et al. (2009), "Now more than ever, it will be action—not spin—that builds strong reputations". Any eyewash approach to reputation management does not work in the context in which corporations exist today. What is required is a well-grounded systemic approach. The role of the PR consultant here gets elevated from merely crafting and transmitting narratives to that of a trusted advisor who should be having a 360° view of the business and its market realities and advising the top management to navigate the complexities in an effective manner. An effective PR consultant is one who is able to see through the stakeholder divides (employees, customers, regulatory bodies, activist organisations, etc.) and is able to craft strategies that are able to build and engage effectively with them. This introduces new challenges to the role of a PR consultant. However, this is a challenge that PR consultants will need to embrace if they wish to stay relevant in the changing market and opinion-shaping realities of today. Focusing on mere image building will soon make PR consultants redundant in a world of hypertransparency. PR consultants need to reinvent themselves as trusted advisors to clients who endeavour to build corporate reputation.

A solid foundation for building corporate reputation lies at the values the organisation exists. Various definitions of value have been articulated across literature, but values essentially identify what is important and the reasons to exist, and they provide the foundation of the organisation. Values need not be lofty and idealistic,

Fig. 17.1 Systemic approach to corporate reputation



but they can be simple words of what the organisation really believes in and why it wants it to make it happen. Brian Chesky, the founder of Airbnb says that the values why the firm was started are to: “Be a host, Champion the mission, Be a cereal entrepreneur and Embrace the adventure”. Values provide the foundation to understand and absorb market realities for an organisation to arrive at its business objectives. Business opportunity, competition offering and investment readiness are some of the key factors to consider while assessing the market realities in the context of the complexities and changing social, regulatory and technological dynamics. Given this clarity of values and business objectives in existing market realities, corporate reputation requires a long-term approach that is able to create the right message, engage effectively with stakeholders, and safeguard reputation at the time of any crisis. This is represented in Fig. 17.1.

Communication plays a critical role in building and restoring reputation. Coming from the consultant’s side of the equation, my discussion here will be on the aspects of create, engage and safeguard. It will be my assumption here that a corporate reputation consultant (more commonly known as a public relations consultant) would be called in by a client once the business objectives are already arrived at.

17.3.1 *Create*

The starting point is always creating the story to be told; this step may also be referred to as message creation. The consultant needs to immerse themselves into the foundational elements of the organisational values, market realities and business objectives to understand the narrative. This immersive exercise is specifically important today when there is a plethora of “news” and interpretations about an organisation, sometimes harboured internally and sometimes manipulated externally. Creation of authentic narratives will mean that the consultant will have to go through the difficult

journey of staying objective to their profession and yet staying close to the client. Talking about the role of narratives in corporate reputation building, I cite Rana (2017), then CEO of India's leading Public Relations firm, The PRactice:

The (other) key challenge for leaders and businesses lies in building authentic narratives in the midst of so much noise. We are surrounded by unvalidated views and news that are being amplified – through various echo chambers – to an audience that is not really thinking for itself. In an age of increasing cynicism, the very platforms designed for authentic communication have lost their sheen and credibility. The word ‘authentic’ itself has become loaded to the extent where it is hard to know what it means any more.

When authenticity comes into the picture, the tenets of responsible consulting play a significant role. This may sometimes lead the consultant to question the business objectives in the first place. Clarity and agreement at this stage are important because any gaps here may result in the creation of messages and plans that are hollow and unsustainable. Messaging is important as it helps coherently convey shared values and outcomes to truly engage audiences; this means messages must not only inform and promote, but also inspire and motivate. A good message covers several levels of communication including outcomes, values, benefits and features. Outcomes cover overall vision and therefore they inspire and motivate. Values associate with feelings and therefore they connect and engage. Benefits highlight strength and differentiators and therefore help create distinctions. Finally features fact-based and therefore they educate and inform.

The corporation can have one overall message that represents its overall intent of existence. But it is important to recognise that different messages need to be created to cater to the requirements of different stakeholders; flexibility is key. Hence the “create” step involves in-depth research on identifying stakeholders and analysing what their leverage points are. I highlight a few examples below:

- **Consumers/Customers:** Focus on benefits and features as they are the ultimate “consumers” of a product/service. They would like to know why an offering is distinct from another. New-age consumers also have a leaning towards ethical production processes and therefore would like to be oriented about the journey the product undergoes. So is the case of business-to-business (B2B) companies that may also be interested to know about the corporation’s commitment to society and its communities.
- **Shareholders:** Definitely financial returns and business health of the corporation. However, more mature shareholders will focus on outcomes and values to identify who they are associating with and how this aligns with their larger purpose of life. Shareholders want to know about the corporate governance ethos along with understanding its levels of transparency.
- **Regulators:** Compliance plays a major role when it comes to regulators and government bodies. Compliance needs to cover all areas including financial, environmental, social, safety and human resource. They need to be reported back regularly and non-ambiguously about business operations and adherence to guidelines laid down by the law of the land.

- **Employees:** Primarily interested to know about career benefits and how they may expect to progress with their association with the corporation. They are interested in learning and development, remuneration and overall well-being that the firm offers.
- **Civil Society:** Includes NGOs, activist groups and the general public, who are interested to know about the corporation and adherence to best practices. Issues-based interactions can also be followed for the civil society, but it is recommended to be in regular touch with organised groups of the civil society conveying messages related to various aspects of the corporation.

The above segmentation is not watertight and there will be obvious overlaps. Messaging needs to be considered as a dynamic exercise that caters to stakeholder groups as per specific requirements and contexts. I already gave the example of a consumer who will be interested in the product/service benefit, but may also be keen to understand the production process and the corporation's social commitment. Similar is the case with employees who are interested to know about the firm as an employer, but the new generation is equally interested to be associated with a corporation that is socially responsible, and where commitment rather than compliance counts. Shareholders primarily look for the return on investments but for many of them, alignment with values is important. Regulators are interested in compliance, but in an evolving industry, they may also welcome the creation of industry benchmarks and best practices that a particular corporation is undertaking and that may be a reference point for others. Messaging needs to be holistic and robust, yet at the same time that can cater to changing needs and requirements of a dynamic business ecosystem. The corporation is required to make a concerted effort to keep track and map information aligned to the outcomes, values, benefits and features of the business and leverage the same whilst creating compelling messages for engagement with stakeholders. This leads us to the following step.

17.3.2 Engage

The first step of the creation of messages establishes what to be said and how. But reputation is not built on mere rhetoric. It needs outreach and action that is planned, regular and well managed. Engagement is about establishing touchpoints with target stakeholders with clearly laid out objectives in mind and well-identified leverage points. Thorough research and understanding of the corporation's values, market realities and business objectives serve as inputs for the articulation of influence triggers for specific stakeholders and craft engagement strategies aligned to the same. These stakeholders are the target audience to whom the right messages have to reach. Here I borrow Table 17.1 (adapted) from Bonini et al. (2009) to highlight the positions representative stakeholders may take on a corporation and how they can be engaged with; this table is meant to be read only for illustrative purpose.

Table 17.1 Representative stakeholders, positions and engagements (Adapted from Bonini et al. 2009) (Meant to be read only for illustrative purpose)

	Consumer, partners	Media	Shareholders, analysts	Regulators	Employees	Civil society
Key issues	Avoiding purchase because of the negative perception of the company.	Portray big business issues in a negative light. Lack in-depth reporting required for a balanced view of the issue.	Effect on share prices. Changing investments.	Shaping policy and regulation. Monitoring impact on consumers, environment and society.	Careers, Pay, Learning and Development, Workplace harassment.	Advocating environmental, social, governance, and economic standards.
Key questions asked/actions taken by stakeholders	Boycott of product/service and any association. Limited questions through investment conferences.	Limited; normally request for interactions on phone or leadership interviews.	Multiple in-depth meetings with executives at all senior leadership levels. Follow-up conversations, if necessary, with investor relations unit,	Occasional meetings and investigations on compliance-related matters. Management inquiries for validations.	Clarity on HR policies. The demand of settlements. Action against corporation.	Occasional meetings. Senior-management face time. Protests, blockades.

(continued)

Table 17.1 (continued)

	Consumer, partners	Media	Shareholders, analysts	Regulators	Employees	Civil society
Actions the corporation can take	Holding statements with clarification. Past financials, trading information, etc.	Website, press releases, management press, self-side analyst calls and reports, industry reports.	Post-operational and unit level information, management's future strategy and forecasts, industry outlook, management's background. Detailed follow-up information of the company.	Clear and timely communication on all compliance adherence. Updates on performance and any significant changes in corporate outlook.	Keep informed of all HR policies. Establish grievance redressal mechanisms. Prompt resolution of genuine queries and discomforts.	CSR communication. Information on commitment to society, environment and community. Community involvement in projects.
Questions corporation should ask	Limited, if any.	Limited; restraint recommended.	Follow-up conversations if necessary with investor relations unit.	Limited; restraint recommended.	What employees want from the corporation. If employees are happy and feel safe.	Concern areas and how the corporation can further contribute to the community.

Identifying the objectives of each stakeholder cohort is crucial in crafting engagement strategies that cater to their specific needs. Each stakeholder needs to be assessed using parameters of their power in the ecosystem and interest in the organisation, and agreed strategies must correspond to such assessment. I will discuss specific perspectives on stakeholder engagement later in the chapter where I will take the reader through a particular platform called the CUBE that I led the development of when I was working with The PRactice, a leading Public Relations firm in India.

It is important to note that well-thought through engagement strategies focusing on identified stakeholder cohorts are important, however, they need to be backed by substantial action. Mere communication can only help temporary addressing of issues, but long-term reputation can only be created if the corporation takes genuine action for the cause of its business in a responsible and ethical manner based on its core values. Transparency and authenticity in action and communication are desired if a corporation has to earn the trust and goodwill of the public and build its reputation.

Bonini et al. (2009) cite the example of the leading pharmaceutical company AstraZeneca that faced flak from the US Food and Drug Administration (USFDA) over concerns of side-effects of Crestor, a high-cholesterol treatment drug. AstraZeneca not only leveraged the media to put up advertisements in the newspapers to defend its case, but it also went on to put up raw clinical-trial data on its website. This was a particularly risky and unusual step to take for the company as raw clinical-trial data as it is possible for independent researchers to draw completely different inferences from the same data. However, this was seen as a genuine intent of AstraZeneca to prove its own credibility and was taken positively by the public. The company's actions soon re-established Crestor's leading market share and restored the reputation of AstraZeneca. The company lived up to its core values enshrined in the words: "We follow the science. We put patients first. We play to win. We do the right thing. We are entrepreneurial".

The case of a gay employee being harassed by his manager in Tech Mahindra, a leading technology company in India, made headlines in 2018. Gaurav Pramanik took to Twitter to disclose the name of his manager and her abusive, insulting and discriminatory behaviour against him over a long period of time. The lady manager, Richa Gautam, happened to be the head of diversity and inclusion in the company. The Tweet made news across the country, especially when the country's Supreme Court had decriminalised homosexuality only recently. Tech Mahindra was prompt to respond and acted by immediately sacking Richa Gautam from her job. The case was placed under due investigation with transparent communication established with Gaurav Pramanik and the media. At the same time, Anand Mahindra, the visionary Chairman of the group that owns Tech Mahindra, responded with his Tweet:

I can categorically assure you that we celebrate diversity in our workplace. Our Code of Conduct is explicit on this subject. Fairness & dignity of the individual is enshrined in our core values. Tech M is investigating these allegations, and appropriate action will follow...

Tech Mahindra spokespersons were available for all media queries and substantiated their communication with genuine action. This was another example where the corporation lived up to the Mahindra core values of Professionalism, Good

Corporate Citizenship, Customer First, Quality Focus and Dignity of the Individual; where Dignity of the Individual is articulated as: “We will value individual dignity, uphold the right to express disagreement and respect the time and efforts of others. Through our actions, we will nurture fairness, trust and transparency”. The actions of the corporation also brought to life the recent ruling of the country’s judicial system and established itself as a forerunner in the case of dignity and human rights.

Engagement is not a one-sided game but involves multiple dimensions of interactions between multiple stakeholders. The cases highlighted above involve communication at different levels of regulatory bodies, patient groups, pharmaceutical retainers, scientists and media (to name a few in the case of AstraZeneca) and employees, NGOs, legal systems and media (to name a few in the case of Tech Mahindra). This communication is rooted in transparent action and genuine intent to create a more balanced and just society, pinned at the corporation’s core values.

17.3.3 Safeguard

Safeguarding reputation needs to be on the topmost priority in the mind of the C-suite. In the volatile environment corporations exist in, a threat to reputation can come from anywhere anytime, some of which the corporation may have control over, and some that may be completely out of its control. The corporation needs to get into intense scenario planning and brainstorming exercises to identify threat situations. Setting up of listening and monitoring systems will enable the organisation to have a pulse of ongoing sentiments in the environment and identify any unpleasant situation that may be on the horizon. Currently, where the virtual and the real have merged, it is important to have a constant sense of the sentiments in social media and keep track of criticisms and concerning comments about the organisation. Public relations consultants can come in with expert monitoring systems that can track, analyse and report on any red flags and recommend adequate action. Search criteria need to change from time-to-time depending on ongoing issues and market realities. Knowledge from listening and monitoring in turn should inform scenario planning; this becomes a dynamic cyclical process.

During scenario planning, some of the situations could be preventable by simply modifying existing methods of operation. In some cases, a crisis may be predictable; for instance, if the corporate is planning to acquire another firm, there may be employee layoffs that are inevitable especially from the support functions such as HR, Finance, IT, etc. Management layers could be rationalised and workforce optimisation exercises are common in such situations. A crisis assessment and process should take into consideration several aspects such as the organisation’s values, culture, business needs and threats to prepare a response plan that includes both operational and communications components.

A threat to reputation can lead to severe consequences for the corporation and lead to severe impact on its brand and revenue. Understanding of likely threats and preparing for the same is the key to safeguarding reputation. A Crisis Management

Team (CMT) needs to be put in place with representation from key personnel from various disciplines and business operations to ensure a comprehensive point of view is considered in all decisions. Multidisciplinary teams bring in variety in thinking as the nature of the crises may be of any kind including bribery, employee harassment, compliance, fraud, product/service fraud, health and safety, data theft, privacy breach or even third-party damage. It is important to note that often claims of wrongdoing may not even be legitimate, but in the age of social media and a 24*7 media cycle, the media comes in with its own “judgements” and the incumbent remains guilty until proven innocent. Hence putting in place a credible CFT is an important step here. Bernstein and Bernstein (2010) say that the CFT should be led by the CEO, with the firm’s top public relations executive and legal counsel as their chief advisers. The Public Relations consultant can play the role of a trusted advisor to bring in specialist knowledge and experience. They go on to cite that during a crisis there may be situations where the legal counsel and the public relations counsel come up with different suggestions; but it is always advisable to communicate than staying numb as silence can be interpreted in its own ways by the interpreter.

Sometimes, during a crisis, a natural conflict arises between the recommendations of the organisation’s legal counsel on the one hand, and those of the public relations counsel on the other. While it may be legally prudent not to say anything, this kind of reaction can land the organisation in public relations “hot water” that is potentially, as damaging, or even more damaging, than any financial or legal ramification. Fortunately, more and more legal advisors are becoming aware of this fact and are working in close cooperation with public relations counsel. The importance of this understanding cannot be underestimated. Arthur Anderson lost its case and went out of business due to the judgment rendered by the court of public opinion, not the judgment of a court of law (Bernstein and Bernstein 2010).

Needless to say that spokespersons should be designated by the corporation who are trained in advance and equipped with adequate holding statements and the right skills to face tough questions.

When it comes to cyberattacks, organisations also need to move away from the culture of secrecy and disclose their experiences, if any. Keeping hacks to itself and tucking them under the carpet hinder information sharing between intelligence agencies and experts to track down the “dark web” in search of miscreants.

I will make a note on key considerations for select stakeholder cohorts for times when a reputational threat actually hits a corporation.

- **Employees:** To underscore the corporation’s commitment to its employees and to ensure they are part of the solution to any adverse consequences of the crisis, this audience must be a priority. They will be more vulnerable to misinformation and rumour; they will be sought out by others for information and insight; but they will have high credibility based on awareness and involvement if the information is provided to them in a prompt, comprehensive manner.
- **Partners:** Based on the nature and impact of the crisis, the partner base is a very important audience to consider. How the partners’ businesses will be affected by the crisis will, of course, be of most concern. And, if their operations will not be affected, they will want to know that.

- **Media:** Very early in the analysis of priorities is the role the media may be playing—or could play—in providing information about the crisis to the organisation’s key audiences. If, when and how to engage with the media—either proactively or reactively—is an important decision. It is obvious that media coverage can inform and influence the opinions of key audiences. Media coverage inconsistent with the information being communicated directly by the organisation will confuse the audiences and, perhaps, erode the trust it deserves. And, the coverage that is wrong can do even more damage. Media coverage that supports and reinforces the organisation’s position reinforces the goodwill required to reduce the negative impact on the brand. The communications team responsible for managing the media function during a crisis must be identified for the entire company. Close and ongoing coordination with the CMT is critical.
- **Influencers:** There are a number of individuals and organisations who are in positions to influence the opinions of others—either positively or negatively. Special efforts need to be made to ensure these key stakeholders are informed appropriately. As a result, they can be allies to the organisation in ensuring its positions and key messages are being communicated and understood by the larger audiences they impact. Specific influencers will vary based on the nature of the incident. They may include elected officials, government regulators, analysts/investors, industry associations, former employees, NGOs, activist groups, bloggers, religious leaders, environmentalists, authors, etc. Relationships with the highest priority influencers (regardless of the nature of the crisis) should be maintained on an ongoing basis. There will not be time or the appropriate credibility to seek the development of a relationship that could be beneficial when the crisis has occurred. The CMT needs to identify the priority influencers to ensure outreach and ongoing contact is maintained.
- **General public:** The general public is always an important audience when it comes to reputation, whether it be a B2B or a B2C company. Interacting with this external audience requires special attention specifically because it is not part of an organisation’s ongoing communications effort. Systems and procedures to communicate with the general public need to be put in place and this may as well be through identified influencers. Normally CSR efforts form effective engagement platforms for corporations to engage with the general public on a regular basis. Reputation is never private, it is always public!

Safeguarding reputation does not stop as a step with pre-empting and managing a threat, but extends to actions undertaken beyond the time a crisis breaks out as well. Post a threat situation is managed, the corporation needs to critically evaluate what went right and the opportunities for improvement during that situation. Learning needs to be fed back into the crisis management plan as part of an iterative process. This learning equally influences the first two stages of “create” and “engage” as actual crisis management has the potential to challenge mental models, unleashes new modes of communication and engagements that would have never been seen before, and brings home the fact that no matter, however, strong and robust the

messaging is, it is liable to be adapted and changed real-time depending on the situation.

Throughout this discussion, I have referred to engaging with stakeholders as an important element in corporate reputation. In the next section, I will share some perspectives specific to stakeholder engagements drawn from my experience from working at The PRactice, where I received the opportunity to lead a strategic project on developing a solution focused on the subject.

17.4 Corporate Reputation and Stakeholder Engagement

Managing corporate reputation, as we have seen, is about managing engagements with a variety of stakeholders not just when it comes to perception, but also in real action. A stakeholder is anyone who is involved and/or affected by the actions of a corporation. I have made several references to the range of stakeholder cohorts an organisation exists within. Freeman (2011) talks about the distinction between managing “issues” and managing “stakeholders” and he says that managing reputation is more about the latter than the former. This is because issues come to the forefront due to the interaction of stakeholders. To quote him:

“Issue” is simply the wrong unit of analysis. Groups and individuals behave, not issues. Issues emerge through the behaviour and interactions of stakeholders, therefore “stakeholders” is a more fundamental and useful unit of analysis. Finally, the major implication of this argument, which cannot be overemphasised today given the development of stakeholder theory, is that “stakeholders are about the business, and the business is about the stakeholders (Freeman 2011).

There have been a number of reports and studies that have talked about the positive business benefits that a company can reap by engaging proactively with its stakeholders. Clear correlation has been established between the quality of stakeholder relationship and a company’s financial performance (Waddock and Graves 1997; Svendsen et al. 2001; Post et al. 2002), the positive impact the same can have in corporate reputation (Dowling 1994), and a company’s competitive advantage (Svendsen 1998). Ackoff and Churchman applied a systems lens to organisational studies by talking about organisations as open systems that are continually in interaction with their surroundings (as cited in Sinclair 2010). Similar was the work by Katz and Kahn (1966) (as cited in Sinclair 2010) who talk about organisations relative to a particular time and space defined by a network of stakeholders. A systemic view of approaching stakeholder engagement brings understanding networks, interrelationships, constant flow of energy and communication, and goodwill between the organisation and its environment (meaning stakeholders) at the centre of approaching long-term success and sustainability. From the management standpoint, one has to consider a variety of stakeholders whilst working towards the corporation’s long-term viability as a social and financial entity. I borrow the stakeholder wheel from Ameshi (2010) as represented in Fig. 17.2 as it takes Mitchell et al. (1997) and Agle et al. (1999) argument

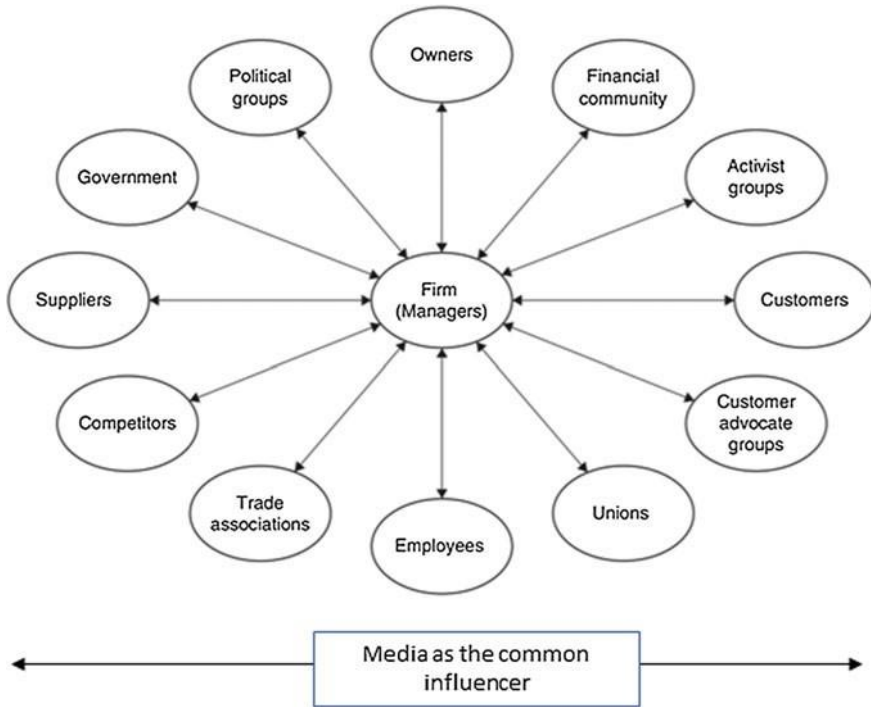


Fig. 17.2 Stakeholder wheel (Adapted from Ameshi 2010; earlier version borrowed from Mitchell et al. 1997 and Agle et al. 1999; media added as the common influencer)

of the management view of stakeholder management by adding the emphasis on the “manager” in the centre of the wheel.

This emphasis is important as it is the manager or the consultant who will often find themselves in that position having to navigate through a complex set of issues and stakeholders keeping the organisation’s strategic objective in mind. I bring about a further nuance to the stakeholder wheel by introducing the media as we discuss this in context of corporate reputation. I call the media the common influencer because it is responsible for passage or curation of news and information between the organisation and the public that form opinions and perceptions. The manager and/or the consultant needs to bring in a 360° perspective in appreciating stakeholder needs and concerns, understanding their concerns, responding appropriately and engaging with them in alignment to the organisation’s values, market realities and business objectives. Communication takes the centre-stage here. In the words of Al-Khafaji et al. (2010):

The survival of any organisation depends on its ability to develop and maintain effective and continuing relationships with its stakeholders. In business, communication in its various forms is the primary tool used for building long-lasting relationships and partnerships (p. 159).

Taking a well informed and balanced approach to communication is paramount in such situations so that an organisation responds to diverse needs (both in deed and in perception) in an environment where it is constantly under the scrutiny of social media, 24 * 7 news cycle and citizen journalism.

Recent developments in organisation management and literature have seen a more responsible evolution of the subject that advocates that stakeholder engagement needs to be beyond just managing reputation or towards realising financial goals of the corporation. This is the multi-fiduciary approach that states that the organisation and its stakeholders exist in a trusted relationship of coexistence. Financial goals do exist for the corporation but that is not the sole aim for existence. Rather there is a responsibility of mutual support and a sense of duty that the corporation has towards stakeholders and vice versa (Carroll and Buchholtz 2006). This kind of a sentiment is clearly reflected in organisations that operate in the social setting such as NGOs, social impact firms and cooperatives. Having said that, given the sensitisation of the triple bottom line for organisations and the focus on sustainability as a competitive advantage itself, the multi-fiduciary approach to stakeholder engagement is relevant even for corporations in the private sector.

The consultant may have to encounter situations where stakeholders are in a conflicting position or even where the client's agenda may be different from that of an important stakeholder. Dorshimer (1996) studies this aspect in detail and talks about a series of reasons why such situations may occur. Cultural incongruence between the parties involved is a common reason and this itself may give rise to other complications such as misinterpretation of viewpoints. The manner in which the organisation presents its engagement proposition plays an important role here in providing clarity and vision to all parties involved. Strategies are formulated by organisations and more specifically people (consultant and/or client); needless to say that people come with their own biases and baggage that lend subjectivity to managing relationships and coming up with conflict resolution techniques (Moura and Teixeira 2010). It is important to recognise and accept such conflicts at whatever levels they may exist in. Challenging mental models and preconceived notions, bringing in diversity to the team crafting stakeholder strategies and humility are important characteristics to overcome such conflicts.

The consultant always treads at the danger line in a client situation where they have to assess and infer the true bases of laid down objectives and mandates. Here I bring in The Clarkson Principles to complement the systemic approach to corporate reputation as a reference point for the consultant. The Clarkson Centre for Business Ethics and Board Effectiveness at the University of Toronto draws out the following principles for stakeholder engagement (which later came to be known as The Clarkson Principles):

Principle 1: Managers should acknowledge and actively monitor the concerns of all legitimate stakeholders, and should take their interests appropriately into account in decision-making and operations.

Principle 2: Managers should listen to and openly communicate with stakeholders about their respective concerns and contributions, and about the risks that they assume because of their involvement with the corporation.

Principle 3: Managers should adopt processes and modes of behaviour that are sensitive to the concerns and capabilities of each stakeholder constituency.

Principle 4: Managers should recognise the interdependence of efforts and rewards among stakeholders, and should attempt to achieve a fair distribution of the benefits and burdens of corporate activity among them, taking into account their respective risks and vulnerabilities.

Principle 5: Managers should work cooperatively with other entities, both public and private, to insure that risks and harms arising from corporate activities are minimised and, where they cannot be avoided, appropriately compensated.

Principle 6: Managers should avoid altogether activities that might jeopardise inalienable human rights (e.g. the right to life) or give rise to risks which, if clearly understood, would be patently unacceptable to relevant stakeholders.

Principle 7: Managers should acknowledge the potential conflicts between (a) their own role as corporate stakeholders, and (b) their legal and moral responsibilities for the interests of all stakeholders, and should address such conflicts through open communication, appropriate reporting and incentive systems and, where necessary, third-party review.

The Clarkson Principles bring in the ethical dimension for crafting stakeholder strategies that lend the multi-fiduciary approach to stakeholder management. These principles can support a long-term perspective for the organisation as a social entity and enables the consultant to live the tenets of responsible consulting.

17.4.1 My Experience of Building a Stakeholder Engagement Platform

Having worked with organisations in a range of industries with varying degrees of evolution, complexities and business requirements during my tenure at The PRactice, our team went through numerous deliberations on bettering our advisory on stakeholder engagements to safeguard corporate reputation. The intricate nuances posed by the current social, economic and regulatory realities drive companies to constantly re-evaluate how they engage with their stakeholders. This is further heightened by the era of hypertransparency that we live in. There are growing calls for organisations to become more responsible and inclusive partners in supporting responsible business and a sustainable environment. Companies increasingly need to have a holistic view of their ecosystem and adopt an inclusive approach with their stakeholders. This also enables companies to be more agile and adaptive in times of reputational threats. Technological disruption has migrated to every aspect of our lives. In today's post-truth world, objective facts are less influential in shaping public opinion than appeals to emotion or personal belief. The challenge for organisations, therefore, is

to establish trust and credibility with stakeholders, which can only be overcome by authentic dialogue and engagement. It is hard to find an organisation that disagrees with the idea that stakeholder engagement matters to the organisational success. However, very often, while the concept exists in an organisation's vocabulary, it is an afterthought. Companies also face challenges when it comes to resonating their engagement objective with the needs and wants of their diverse stakeholder groups.

Our deliberations and experiments resulted in the birth of a proprietary stakeholder engagement platform for The PRactice, a project I was privileged to have led. Nandita Lakshmanan (Chairperson), was the principal sponsor of the project, along with Vivek Rana (CEO) playing the mentor role, and Bharat Kundra (Client Operations Lead) as a team member. We named the platform CUBE (Collaborate-Understand-Build-Engage) after a series of brainstorming sessions led by Sameer Rajadnya (Creative Director). Following are some of the key tenets that drove the development of the CUBE:

- **Stakeholders are individuals and not organisations:** When one speaks of stakeholders, it is common practice to consider an organisation; for example an industry body, association or a ministry in the government. But as corporate reputation managers, it was clear to us that we were constantly working with specific individuals within these bodies and not the overall collective organisation. The health of a relationship with an organisation means the health of that relationship with an individual in the organisation. Having to understand the issues, concerns, interest areas and background of an individual is of utmost importance when we are trying to build a relationship with them. Further to this is the understanding of which particular individual to tap within an organisation depending on their influence level. Take for instance a particular ministry in the government. It may be desirable to say that we are building a relationship with the minister; but it is not easy. Engagement with the ministry would start normally at the secretarial level when we would reach out to a principal or a joint secretary who may be working on a particular area of public interest or framing a policy. They would be looking out for industry perspectives or experiences to be fed into consultation dossiers or recommendations to be presented to the minister. It is important to understand who the right officials are in such bodies and initiate engagements with them. This makes dialogue and deliberation more meaningful and sustainable.
- **Listening as the live-input:** Catering to individuals in organisations, addressing their concern areas and engaging with them mean that the stakeholder's perspectives and opinions need to be captured and understood—what they feel about a subject, how they react to public opinion and the change they seek. This can only be enriched by monitoring general sentiments in the environment about a particular subject, so that the engagement with the stakeholder is topical and relevant. In the age of social media, live tracking of sentiments and data analytics play an important part in keeping track of conversations and the same can be leveraged as live-inputs to the engagement plan a manager or a consultant follows for a specific stakeholder.

- **Stakeholder assessment a journey, not a one-time project:** There is no static in a stakeholder engagement journey. Change can be in two ways—change in the person himself/herself or change in the opinion that a person has. To address the former case, it is common to notice that officials change from time to time and this means that new stakeholders need to be considered and studied. In addition, listening and tracking the environment itself can bring out names of new stakeholders who were not considered in the beginning and they are later found to be important for inclusion. This is bringing boundary critique to life in drawing the stakeholder map. In the latter case of opinion change, a stakeholder's position about the organisation may change over time as a result of continued engagement led by a manager with them on behalf of the organisation. With this change in position and opinion, the nature of engagement with the stakeholder also needs to undergo a change.

With the above edifice in mind, we set out to build the CUBE as a technology-enabled platform with the purpose to support clients facilitate understanding of the stakeholder ecosystem in a holistic and comprehensive manner that would enable better management decisions. Our belief was that stakeholder engagement lies at the heart of corporate reputation and insights generated from the CUBE would help companies initiate and sustain constructive relationships over time with their stakeholders contributing to building a long-term reputation. CUBE stood on the principles of solid research, accountability, proactive action and market differentiation for The PRactice.

Using the CUBE as a technology-enabled platform has five steps that are described below.

- **Identification:** This is a collaborative step where both the consultant and the client brainstorm and discuss to identify a list of stakeholders that impacts the business or an issue directly or indirectly. The final list depends on the business and current engagement objectives. However, this list is meant to be dynamic and will change as the environment evolves and as stakeholders change their opinions. A detailed profile of every stakeholder is created based on in-depth research on their background, interests, contribution in current and previous roles, achievements and analysis of social media behaviour. Their current and past relationship with the client and competition is studied and inferences are drawn about their affinity to an organisation—both positive and negative. Any change in this affinity or affiliation over time is also studied as part of this research.
- **Mapping:** Once the list of stakeholders is created, further analysis of each stakeholder profile is carried out to better understand their perspective and nature of relationship they share with the client and to prioritise their profile and map them on the bases of two axes: Power (standing of the stakeholder in the industry/sector) and Interest (indicating the interest of the stakeholder who affect and may be affected by the organisation/issue). Power is further understood by the sub-parameters that assess the stakeholder's capacity to produce effects on the actions, behaviour and opinions of others, their ability of being topical and connected with current trends and developments, their horizon of effective action, and their quality of being a

reliable source of information or being convincing or believable. Interest is further understood by the parameters that assess the stakeholder's nature of opinions held towards a subject, their nature of connection/affiliation held, and the anticipated mutual outcome of the association).

To bring in further objectivity and credibility, each category is weighted differently according to industry perspectives. Based on the rankings an individual Power score and an Interest score is achieved, which gets profiled on a defined decision-matrix. Stakeholder positions can change, so they should be regularly reviewed, and also that new stakeholders may emerge.

- **Strategy:** This step is about creating focused engagement strategies for specific stakeholders based on their position in the decision-matrix. These strategies are formed by insights from the various parameters that have been identified and by the overall objective of the programme. This helps the client optimise resources to the best of abilities. Also, before the engagement strategy is embarked on, clear short-term and long-term goals for the engagement are defined and communicated between the consultant and the client.
- **Execution:** The consultant defines specific roles and responsibilities within the organisation with specific targets assigned to each person/team with timelines. A project management structure is created. Relevant systems and processes are created with weekly, monthly and annual reviews. This also helps to be more proactive and be prepared for the required actions much in advance. The management strategies are changeable, based on market dynamics or changes in stakeholder perceptions, willingness to engage, and influence in the sector. There should always be a channel to incorporate stakeholder expectations and feedback. Stakeholders should be encouraged to contribute equally to engagement.
- **Measurement:** Measurement helps evaluate the work and make course corrections if needed. Impact is about converting existing adversaries to advocates and existing advocates to champions. Champions will always play a seminal role in protecting and advocating for the reputation of an organisation. Measurement was complemented by the sophisticated listening platforms at The PRactice that constantly assesses if the right interpretation of messages is made. Any discrepancy can be tracked real time for course correction. Like everything else about stakeholder engagement, its metrics must also link back to organisational objectives. Therefore, organisations must prioritise the deliverables based on this premise. Once these metrics are formalised, they should be incorporated within the review and feedback mechanism.

In the development of this platform, our mission was to push our clients' imagination in terms of research, organisation and visualisation of existing information, different ways to engage with the stakeholders, and predict stakeholder actions and responses. The platform was meant to deliver actionable insights to mitigate risks and leverage opportunities for our clients.

17.4.1.1 Use of System Dynamics to Optimise Time and Resources

Taking the discussion forward, system dynamics can provide a valuable tool in understanding stakeholder behaviour and their movements in the decision-matrix; this is specifically relevant if there is a requirement of engaging with a large number of stakeholders in complex business settings where there is a range of dependencies and imposing factors. Using available system dynamic platforms, a System Dynamics Influence Diagram (SDID) can help visually depict the behaviour of a complex system using stocks and flows. Environmental conditions can be fed into the system and variations to engagement strategies can be introduced to see how stakeholders and outcomes change. Input can be taken from previous experiences to enrich the SDID. Karkkainen and Hallikas (2006) talk about three steps in the creation of SDID. The first being problem identification that includes asking why the engagement has been undertaken at the first place. Although safeguarding reputation may be the final objective in mind, stakeholder engagement is usually undertaken with a specific issue/situation in mind. This step is about charting out the variables and factors that exist in the system that is affecting the issue and how this impacts the stakeholder in question. Boundary critique plays an important role here to understand where the boundaries of the stakeholder interaction universe need to be drawn (that is both issue and consultant/client dependent). The second step is the generation of dynamic hypotheses by bringing in the interaction of the variables in the system from multiple angles. Interrelationships are to be surfaced, crafted and critically understood for dynamic hypotheses building. Finally, model building for the engagement that is represented by “stocks” and “flows” that come up by introducing various variables at different stages and nodes of the system to observe how it behaves and analyse how a change in one node can lead to bigger systemic changes and vice versa. Such models can help the consultant experiment with various scenarios and assumptions based on their mental models.

Execution of a stakeholder engagement strategy in case of complex projects can be heavy on both human and financial resources. It involves top leadership time and any wrong moves can cause serious damage to the firm’s reputation. Using system dynamics in the strategy making phase can introduce the added layer of verification and scientific analysis.

17.5 A Note on PR Consulting

With an emphasis on responsible outcomes for consultants, this chapter proposes a rethink of the role of a PR consultant. It is historically common to associate PR with work in image building and perception creation. Often such associations lead to an unfavourable perception of PR as a profession itself. PR professionals are referred to as “spin doctors” who would resort to deceit and focus on manipulated interpretation rather than factual presentation. PR consultancies (often just referred to as “agencies”) would be called in by an organisation at a time of crisis to mitigate

a situation or to “cover up” using their influence and connections. Organisations may also ask consultants to portray facts that are untrue or to propagate a negative story about a competitor that would harm the competitor’s business. This may not just be true for companies, but also for political parties and not-for-profit organisations. The role of a PR consultant has, therefore, come to be seen as one that create or destroy brands through “hook or by crook”; the life of a PR consultant, therefore, often associated with expensive dinners, cocktail parties, and wooing journalists and opinion makers.

Such practices have greatly affected the image of PR as a profession itself. Building and safeguarding reputation cannot be superficial; rather, it needs to be ingrained at the level of actual value system that the organisation espouses. Its business objectives are shaped by these values and the market realities within which the organisation exists. As I have argued earlier, although a PR consultant may be called in after the values and business objectives are decided on, he or she should still critically understand the same before embarking on the creating messages, executing engagement strategies and safeguarding reputation. Because this reputation itself cannot be created out of thin air in an environment of social media, 24 * 7 news cycle, citizen journalism and hypertransparency. Critical understanding of the market realities is important to building and safeguarding reputation. As we worked through building the CUBE platform at The PRactice, we spent significant time and held detailed discussions with subject matter experts on understanding market realities for different industries depending on the client we were advising. Social realities attempt to understand social patterns, human psychographics, consumption behaviours and reactionary patterns. Insights can be drawn from both sociology and psychology to understand social realities. When it comes to economic realities, both macro- and microeconomic trends need to be understood. Macroeconomics understands larger trends and patterns in global and national economic shifts and challenges. Microeconomics understands trends in the individual or sectoral level for decision-making. Finally, regulatory realities are those shaped by debates and shifts at the regulatory level of a country or a state (in case of federal systems) that enable or pose challenges to businesses; these discussions may as well be compliance related in case any controversies break out. I represent this thinking in Fig. 17.3.

The social, economic and regulatory perspectives are not mutually exclusive but touch one another to shape the market realities. Ability to understand boundaries dynamically and appreciate how interrelationships are formed and shaped are important characteristics for the consultant. At the same time, they need to be aware of the emergence of both intended and unintended consequences to pre-empt and manage crises.

These intersections and the concept of emergence perfectly come to light in a recent report of Bain & Company, “Labor 2030: The Collision of Demographics, Automation and Inequality”, that talks about the several macro shifts in global realities that will pose unprecedented challenges by 2030 (Harris et al. 2018). The report says that ageing workforces across the world will reduce potential supply growth. The baby boomers are moving into retirement and growth in the labour force has slowed down, leading to imperilment of growth. Oncoming automation will increase

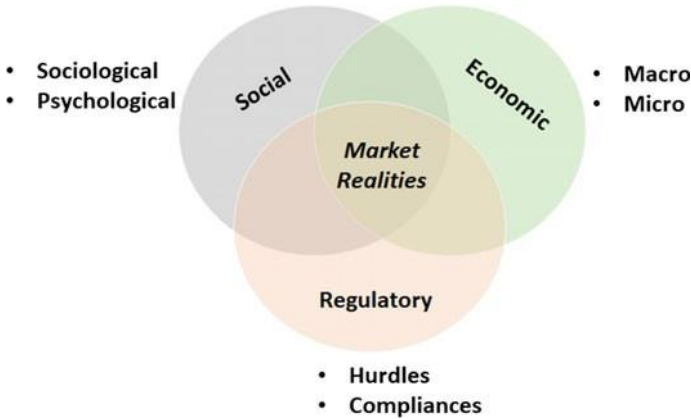


Fig. 17.3 Market realities (as approached by The PRactice for reputation management)

potential supply growth. But it will present other grave threats of potentially eliminating millions of jobs and suppressing wages for workers. Rising income inequality will reduce potential demand growth. This is likely to be amplified by the combination of the demographic shifts and automation putting more pressure on spending power of middle- and low-income families. The report goes on to say that new automation will contribute to a robust period of growth in the next few years that will eventually taper down as this growth is unsustainable. A false sense of optimism will, therefore, surface running up to looming gloom.

The collision of these shifts in demographics, automation and inequality will potentially reshape our world triggering economic disruption at a magnitude that humanity would not have witnessed in 60 years. Parallel to this is the new form of human agency that we have witnessed across the world either demanding a more equitable society or calling for more democratic governments.

At the intersection of such shifts is the rise of the new-right in leading countries of the world as an antithesis to inclusiveness and fairness. Existence of corporations cannot be understood in isolation to such complex realities of the world. Companies are not immune to the new world order that is constantly emerging, but are an integral part of shaping the same through their financial might and human capital. A PR consultant's role here cannot be "spin" or "image building"; it needs to be that of a trusted advisor for organisations to establish their relevance. Systems as a state of mind constantly remind them of such situational upheavals and/or realities; flexibility enables them to stay nimble and adaptive to an ever-changing world of market realities.

17.6 Conclusion

In this chapter, I took the reader through a narration of corporate reputation management and the role of Public Relations (PR) consultant plays in the same. I began by defining corporate reputation and establishing the importance of the same in the current climate where there are various social, economic and regulatory forces intersecting and resulting in a hypertransparent world. I highlighted several of the factors contributing to this environment. I brought in the role of a PR consultant in the situation and how their role needs to change from image building to creating and safeguarding reputation. I talked about why a systemic mindset is important for corporate reputation due to the complexities that have to be managed for advisory in this space. I introduced a systemic approach to corporate reputation management that stands on the edifice of organisational values, market realities and business objectives; I discussed in detail the aspects of creating, engaging and safeguarding reputation for a consultant. Illustrations of different stakeholder cohorts and expectations were drawn out to substantiate the argument. I highlighted the Clarkson Principles to guide a consultant work through complex situations where ethical boundaries may be tested.

Stakeholder engagement is at the heart of effective engagements and I talked about my experience of building a stakeholder engagement platform called the CUBE during my tenure at The PRactice; I took this further by discussing how system dynamics can complement stakeholder engagements in complex situations.

Finally, I deliberated on the role of a PR consultant in changing times and in the light of trends that are ushering in a new future, where PR consultants need to evolve to be trusted advisors to stay relevant in their profession. The future is being shaped by new trends and that too at a pace never seen before. Consultants working in the space of corporate reputation cannot work in isolation but rather understand their clients at the space of intersections of these new trends shaping the world.

References

- Agle BR, Mitchell RK, Sonnenfeld JA (1999) Who matters to CEOs? an investigation of stakeholder attributes and salience, corporate performance, and CEO values. *Acad Manag J* 42(5):507–525
- Al-Khafaji A, Oberhelman DR, Baum W, Koch B (2010) Communication in stakeholder management. In: Chinyio E, Olomolaiye P (eds) *Construction stakeholder management*. Wiley-Blackwell, Chichester, pp 159–173
- Ameshi K (2010) Stakeholder management: theoretical perspectives and implications. In: Chinyio E, Olomolaiye P (eds) *Construction stakeholder management*. Wiley-Blackwell, Chichester
- Bernstein J, Bernstein E (2010) The 10 steps of crisis communications. <https://managementhelp.org/blogs/crisis-management/2010/03/30/the-10-steps-of-crisis-communications-part-1-2/>. Accessed 13 July 2016
- Bonini S, Court D, Marchi A (2009) Rebuilding corporate reputations. <https://www.mckinsey.com/featured-insights/leadership/rebuilding-corporate-reputations>. Accessed 23 Aug 2018
- Carroll AB, Buchholtz AK (2006) *Business and society: ethics and stakeholder management*. Thomson South-Western, Mason, Ohio

- Daubanes J, Rochet JC (2016) The rise of NGO activism. Economics working paper series; 16/244. ETH, Zurich
- Devinney TM, Richard PJ, Yip GS, Johnson G (2008) Measuring organisational performance in management research: a synthesis of measurement challenges and approaches. www2.agsm.edu.au/agsm/web.nsf/AttachmentsByTitle/.../ORGPREF.pdf. Accessed 20 Apr 2016
- Dorshimer KR (1996) Siting major projects & the NIMBY phenomenon: the Decker Energy Project in Charlotte, Michigan. *Econ Dev Rev* 14(1):60–62
- Dowling GR (1994) Corporate reputations-strategies for developing the corporate brand. Melbourne: Longman Professional
- Filiciak M, Danielewicz M, Halawa M., Mazurek P, Nowotny A (2010). Young and media. New media and participation in culture. SWPS, Warszawa. <http://bi.gazeta.pl/im/6/7600/m7600446.pdf>. Accessed 16 Jan 2019
- Fombrun CJ (1996) Reputation: realising value from the corporate image. Harvard Business School Press, Boston, MA
- Fombrun CJ, Van Riel CBM (2004) Fame and fortune: how successful companies build winning reputations. FT Prentice Hall, New York
- Freeman RE (2011) Stakeholder management and reputation. Values and ethics for the 21st century. madrid: BBVA. <https://www.bbvaopenmind.com/en/articles/stakeholder-management-and-reputation/>. Accessed 15 Jan 2019
- Harris K, Kimson A, Schwedel A (2018) Labor 2030: the collision of demographics, automation and inequality. Bain & Co. <https://www.bain.com/insights/labor-2030-the-collision-of-demographics-automation-and-inequality/>. Accessed 22 Jan 2019
- Harrison K (2017) Why a good corporate reputation is vital to your organisation. <https://cuttingedgepr.com/free-articles/reputation-trust-stakeholder-relations/good-corporate-reputation-important-organization/>. Accessed 23 Nov 2018
- Juju C, Jake L, Claire P, Geoff M. (2016) When fake news stories make real news headlines. Nightline. ABC News. <https://abcnews.go.com/Technology/fake-news-stories-make-real-news-headlines/story?id=43845383>. Accessed 16 Jan 2019
- Kantor J, Streifeld D (2015). Inside amazon: wrestling big ideas in a bruising workplace. The New York Times. <https://www.nytimes.com/2015/08/16/technology/inside-amazon-wrestling-big-ideas-in-a-bruising-workplace.html?ref=business&r=0>. Accessed 16 Jan 2017
- Karkkainen H, Hallikas J (2006) Decision making in inter-organisational relationships: implications from systems thinking. *Int J Technol Manage* 33(2–3):144–159
- Katz D, Kahn RL (1966) The social psychology of organization. Wiley, New York
- Mitchell R, Agle B, Wood D (1997) Towards a theory of stakeholder identification: defining the principle of who and what really counts. *Acad Manag Rev* 22(4):853–886
- Moura HM, Teixeira JC (2010) Managing stakeholder conflict. In: Chinyio E, Olomolaiye P (eds) Construction stakeholder management. Wiley-Blackwell, Chichester, pp 286–316
- Otunga SI (2010) Corporate reputation and financial performance of companies listed in the Nairobi stock exchange. PhD thesis, University of Nairobi. Nairobi. http://erepository.uonbi.ac.ke/bitstream/handle/11295/13993/Otunga_Corporate%20Reputation%20And%20Financial%20Performance%20Of%20Companies%20Listed%20In%20The%20Nairobi%20Stock%20Exchange.pdf?sequence=3&isAllowed=y. Accessed 18 Feb 2017
- Post J, Preston L, Sachs S (2002) Redefining the corporation. STAKEHOLDER management and organisational wealth. Stanford University Press, California
- Rana VP (2017). Listen. Understand. Engage: the elements of reputation. LinkedIn post. <https://www.linkedin.com/pulse/listen-understand-engage-elements-reputation-vivek-pradeep-rana/>. Accessed 22 Jan 2019
- Sinclair ML (2010) Developing a model for effective stakeholder engagement management. *Asia Pac Public Relat J* 11. Curtin University
- Svendsen A (1998) The stakeholder strategy. Profiting from collaborative business relationships. San Francisco: Berrett-Koehler

- Svendsen AC, Boutilier RG, Abbott RM, Wheeler D (2001) Measuring the business value of stakeholder relationships part one. The Centre for Innovation in Management. www.stakeholder360.com/C7.htm. Accessed 19 Jan 2019
- Vettehen H, Beentjes PGJ, Nuijten JWJ, Peeters CMA (2011) Arousing news characteristics in Dutch television news 1990–2004: an exploration of competitive strategies. *Mass Commun Soc* 14:1–20
- Vettehen PH, Kleemans M (2018) Proving the obvious? what sensationalism contributes to the time spent on news video. *Electr News* 12(2):113–127. <https://doi.org/10.1177/1931243117739947>
- Waddock S, Graves S (1997) Quality of management and quality of stakeholder relations: are they synonymous? *Bus Soc Rev* 36(3):250
- Weaver DH, Beam RA, Brownlee BJ, Voakes PS, Wilhoit GC (2007) The american journalist in the 21st century: U.S. news people at the dawn of a new millennium. *Polit Commun* 24(4):459–461

Afterword

In this book, I presented a wide variety of discussions touching the theory and application of systems thinking. My endeavour through this dialogue has been to establish the case for a grounded and articulated concept on the intersection of holism and flexibility that I called “holistic flexibility”.

Both the subjects of systems and flexibility have huge bodies of research. The arguments and concepts I have referred to here are pertinent to the select cases and deliberations I have presented. The references here are by no means meant to do justice to the entire body of knowledge and theories in these multidisciplinary subjects, and that which continue to evolve.

I would also like to note that my arguments and case presentations have been from a consultant’s point of view, hence the title of this book. The perspectives may appear one-sided, but I am reiterating this as I close this book.

I began the book with a theoretical deliberation leading to the methodological intersection of systems and flexibility. Then, I presented a selection of detailed case narratives and shared my experiences of working in a diverse set of client situations. Finally, I articulated the concept of “holistic flexibility” and shared some consulting considerations that may serve as a reference for systems consultants in three broad fields—organisational development, social impact and corporate reputation.

Holistic flexibility is applicable to any industry and is relevant for any field. This book covers only select application areas where I have had the opportunity to work in. I have made an attempt to highlight my own successes and limitations as we went along the case narrations and situational discussions.

I am particularly passionate about aspiring for responsible outcomes in the consulting process that emerged out of my deliberations with my colleagues and as a result of my self-reflection as I was going through the journey of writing this book. As professionals, today, we serve our clients at the crux of some of the most pressing challenges humanity has ever seen. Industrialisation has created ample wealth and comfort but there is a cost to everything we do. Our pursuit of wealth and control has led to over-utilisation of natural resources to an extent that even drinking water and clean air to breathe are precious commodities today. The

situation is yet to worsen with global warming threatening to dramatically shift climatic patterns and displace humanity. Human action has led the sixth extinction to be underway as I write this with life forms becoming extinct at a significantly faster rate today than ever before. These can still be “just statements”, but look at what we see around us today. We have crowded our cities to the extent that it takes hours to drive from home to work when it could take minutes to walk. Pollution in some of the world’s fastest fastest-growing metropolis has made chest infections and allergies the new-normal. And how have we tackled this? By producing and selling more air-purifiers! By dispersing salts from aircrafts to create artificial rains! Or even go to colonise the moon as the earth will soon become uninhabitable! And we do not stop there. We move on and beyond, and spend Billions billions to create solutions that may create “designer babies” when millions of newborns die within the first few days of birth due to lack of access to the bare minimum necessities. The world’s richest 1% owns half of the world’s wealth. Some of the world’s richest live overlooking desperate shanties from their living rooms. Our bastardised pursuit of wealth has led us to wear blinkers to conceive life as a “game of thrones”.

There is no other time than now to recognise the need for responsible outcomes as the fundamental element for systems consultants. Otherwise, our deeds, our actions and our pursuit for blind wealth creation will be a perfect story for our future generations to look back and call their forefathers and foremothers great authors of a Frankenstein reality-show. Consultants are bearers of great responsibility when they go in as experts to client situations. Responsible consulting will enable them to reflect on their own advisory and actions as experts in their own ways to bring value to the client and to the world: Are we focusing on systemic value-add? Are we fostering emancipation? Are we there to create sustainable solutions? What better than holistic flexibility to direct us towards answering these questions.