





HOME > CATEGORIES > EDUCATION AND SKILL TRAINING > SYSTEMS THINKING AT WORK

EDUCATION AND SKILL TRAINING OPINIONS

Systems Thinking At Work

By Rajneesh Chowdhury, Vice-President, The Practice - September 4, 2017

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In my first piece in this three-part series, I introduced systems thinking and discussed why it is so relevant for the development sector and CSR. In this second piece, I will talk about some prominent approaches, methodologies and tools for the on-ground application of systems thinking.

Systems thinking has inspired several approaches and methodologies over time. These can be categorised under three main waves.

The first wave looked at situations from a "hard" standpoint and relied on prediction and control. The second wave took a "soft" approach and proposed that situations can only be understood when one immerses themselves into the condition of the target group and looks inside-out. The third wave lends a critical lens into systemic interventions. It approaches every situation as a "human activity system" and seeks to identify the inherent purpose behind the existence of individuals and emergent systems.

Let's consider a development project through the stages of design, implementation and measurement.

Design

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, employees, 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.

Stakeholder Mapping is an often used systems tool to exhaustively lists out your stakeholder universe, and understand them in the context of their power in the ecosystem and their interest in your organisation/project.

Appreciative Inquiry is another approach that focuses on what works right in a human activity system by exploring strengths, successes, values and aspirations.

Soft System Methodology (SSM) is a classic systems methodology that helps converge a wide range of stakeholders through a creative seven-step process. The process attempts to embrace complexity by not shying away from eliciting differences, by digging into root causes and by tapping into creative energies of participants through a well-structured process.

FSG 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. The tool is inspired by the understanding that adaptiveness and sustainability of organisations are impingement on those organisations undergoing periodic natural processes of destruction and renewal.

For highly complex projects where there are various sub-systems interacting with numerous variables, System Dynamics (SD) comes in handy to understand nonlinear behaviour and emergent patterns. There is various simulation-based software in the market that can help in an SD analysis for scientific prediction and forecasting.

Implementation

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.

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. VSM helps in implementation by putting in place a well-oiled machinery of five sub-systems – implementation, coordination, control, development, and strategy – with each having its own distinct role and interactions between one another.

Often, during implementation, there can be major differences between teams or groups, which come as roadblocks to development projects. When there are two dominant opposing sides, Strategic Assumption Surfacing and Testing (SAST) can come handy for an interventionist to help teams work towards "synthesis". SAST follows a four-step process where tools like stakeholder mapping, group formation, risk analyses, assumption ratings and dialectic debate come into play to facilitate convergence towards a common agreement, which helps the program to move forward overcoming hindrances.

As implementation proceeds, it is important to document the experiences in line with internal and external factors. This helps to understand of how your initiative is progressing in relation to the overall plan laid out in the design stage. FSG 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.

Measurement

Measurement needs to be built into all the stages of an intervention, and not something that is considered as an after-thought. 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.

A systems interventionist will approach measurement holistically with an assessment framework that takes into account aspects around community outcomes, stakeholders influenced, process efficiencies & effectiveness, and summative impact.

The Theory of Change is a globally well-accepted program management and measurement methodology for the development sector, but it has also attracted its fair share of critics due to its inability to take into consideration the more qualitative and critical elements of change of a human activity system. This can be complemented with Critical System Heuristics (CSH), a systems approach that can come as a good assessment technique that looks at interventions from two perspectives – what is happening in an intervention and what out to have happened. This technique is well structured with a set of a twelve-question framework that explores several aspects of an intervention in the "is" and the "ought" modes, pinned on the systems concept of "boundaries".

Rethinking strategy and planning is an important outcome, once measurement and assessment is completed. Interactive Planning (IP) is a well-documented methodology that can help in the retrospection progress made and how an organization 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.

Concluding Remarks

Systems thinking brings in a wide array of tools and methodologies for an interventionist. Above are some of the most commonly used that can come handy for a development interventionist.

These tools and methodologies are influenced by the different waves in systems thinking that I introduced right at the beginning of this article. The most optimum leverage is achieved when they are used complementary to one another. Similarly in the development sector, design, implementation and measurement may not be treated as water-tight stages. Systems approaches introduced above can be used through the different stages depending on which aspect of the tool is emphasised more at the what stage.

In the next and concluding piece, I will reflect upon some of the skill sets required for a systems interventionist.



Rajneesh Chowdhury is Vice-President at The PRactice, a strategic public relations firm. His work focuses on stakeholder engagement strategy, corporate reputation advisory and employee communications. He publishes widely in the field of management systems thinking and application.

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Regards, The CSR Journal Team

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