

An aerial photograph of a river winding through a desert canyon. The river is a deep blue-green color, contrasting with the reddish-brown, layered rock formations of the canyon walls. A large, prominent rock formation sits in the middle of the river's path, creating a sharp U-turn. The sky is a clear, pale blue with a few wispy clouds. The overall scene is a dramatic and natural landscape.

Boundaries, interrelationships, emergence
Learnings for a systems practitioner

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Learning outcomes

- Compare and contrast between **systems thinking and reductionist thinking**
- Examine multiple **boundaries** in a system and recognize interrelationships between subsystems
- Explain **emergence** in terms of possible desired and undesired consequences
- Defend your own stand for working in **collaboration** across departments
- Critique current **leadership** styles in your own context and discuss how to offer alternatives in the public sector



Flow of the session

- Reductionist thinking Vs Systems thinking
- Dangers of reductionist thinking through a public sector case study
- Discussion/reflections
- Evaluation of the project from a systems lens
- What role can leadership play in such situations?
- Discussion/reflection/Q&A





**Reductionist
thinking**

Vs



**Systems
thinking**

Reductionist Vs systems thinking

Systems thinking	Reductionist thinking
Focus on the whole and interrelationships of parts	Focus on individual parts and independent functioning
The environment of a system is important, so is its contextuality	The parts of a system are important, so is understanding them in separation from the context
Driven by the understanding of “ boundaries ”; boundaries are “protective” identifies environment	Tends to create “ barriers ” around a system; barriers are “prohibitive” and excludes one system from another
Appreciates complexity and emergent patterns	Appreciates linearity and cause-effect linkages
Focuses on structuring problems by understanding stakeholders, issues, and mental models	Focuses on solving problems by digging into an issue in itself and the manifested events
Approaches problems from a stakeholder-led mindset	Approaches problems from an expert-led mindset
Aspires to enable empowerment of people	Aspires to enable optimization of resources
Identified with flexibility and openness	Identified with rigidity and strict processes

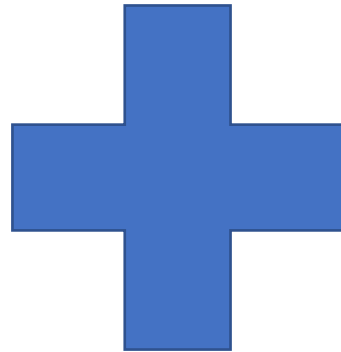


**Dangers of reductionist thinking through
a public sector case study**

Context – IT project challenges

IT project challenges

- Inaccurate requirements
- Uninvolved project sponsors
- Shifting project objectives
- Inaccurate estimates
- Unexpected risks
- Dependency delays
- Inadequate resources
- Poor project management
- Team member procrastination



Healthcare IT project challenges

- Multiple relationships
- External stakeholders
- Recording inconsistencies
- Privacy and security
- Change resistance
- Business dynamics

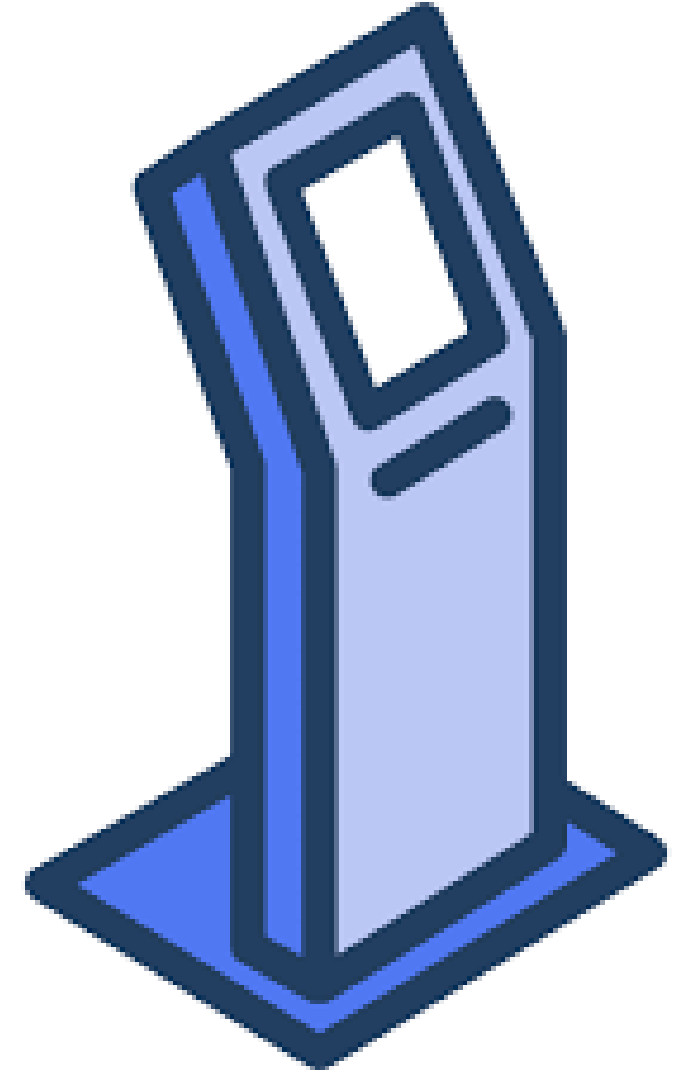
Case background – Primary Care Trust (PCT)

- The city (East of England) had a total population of approximately **250,000**
- Ethnic minority population of **3%**
- Concentration of population of refugees and asylum seekers in certain wards under a specific PCT was as high as **25%**
- Inadequate provision of patient support and patient information in **ethnic minority languages** in the PCT
- In certain practices, patient support in languages other than English was totally **absent**
- Implications on **equity** in healthcare information



The new technology – description

- A pilot project on **multilingual health information system** (HIS) was commissioned
- The new technology consisted of **touch-screen kiosks**
- 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
- Two **GP practices** selected for deploying the systems
- In one practice, the kiosk was placed in the patients' **waiting room**, and in the other, it was placed in the **community development room**
- The technology allowed for **translation** of old leaflets to digital formats



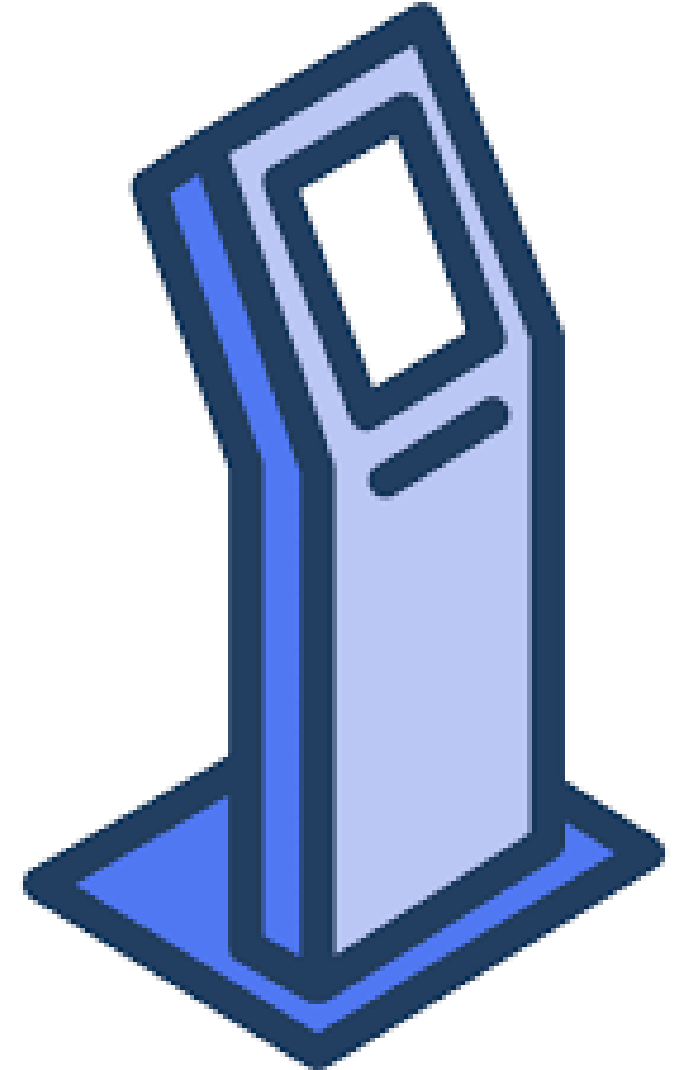
Expectations

Outcomes

- Equitably serve a multi-cultural society
- Address issues of public health and welfare
- Standardised system provision

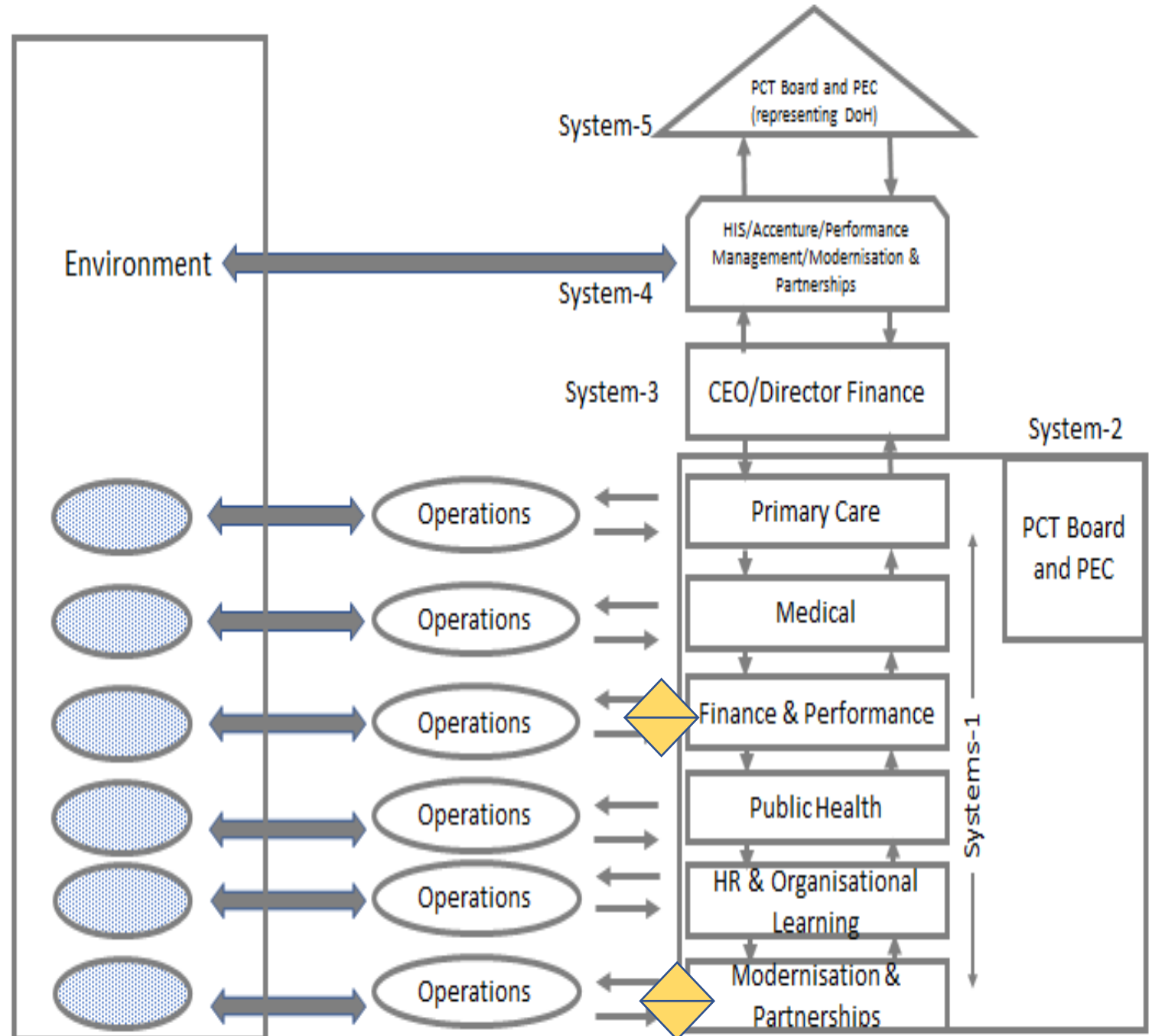
Metrics

- Better dissemination of health information
- Conversion of leaflets from paper to digital
- Increased user satisfaction



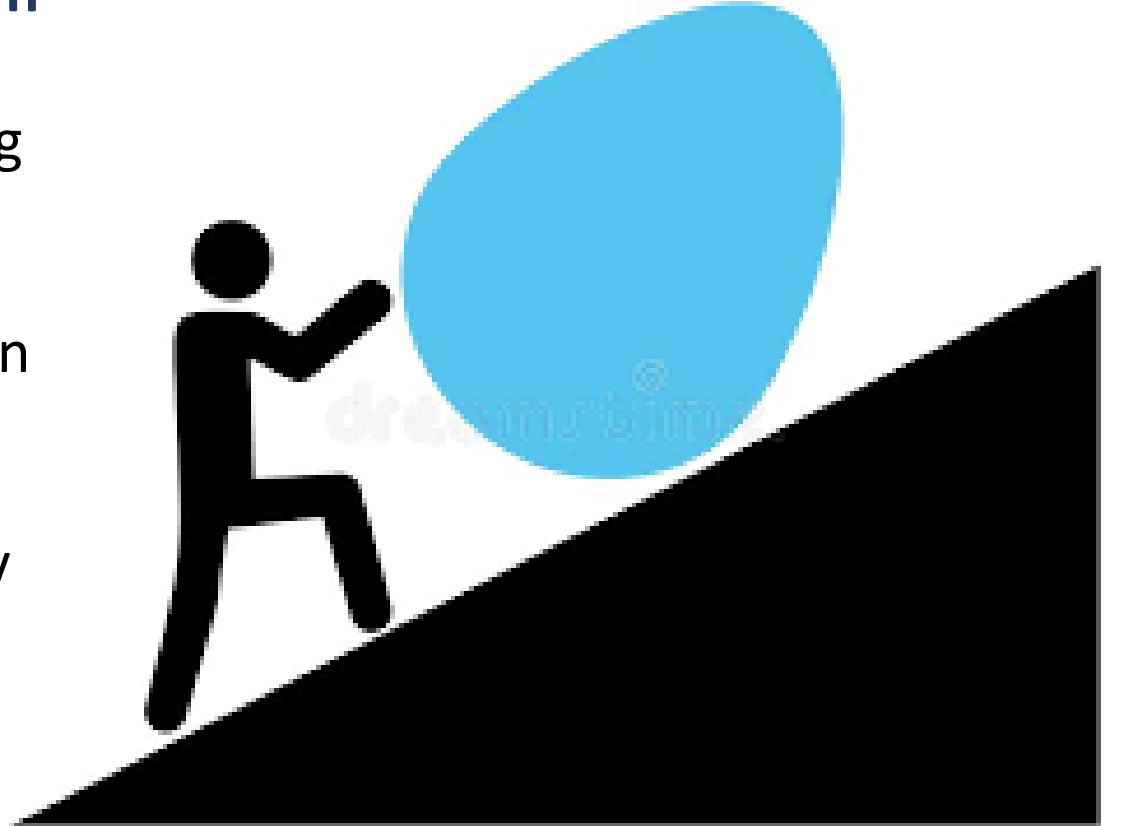
Implementation

- A private company called **Health Computer** was commissioned to deliver the service
- The **license** for use of the system was bought for one year
- The **Performance Management** Department (under the Finance and Performance Directorate) commissioned the project



Challenges

- People continued to work within their **own departments** pursuing their goals
- Departmental barriers led to the PIC being thought of as a **stand-alone system** that would be managed by the IT team
- The PCT continued to produce information in conventional **paper format**
- The **Directorate of Modernisation and Partnerships** thought that it was too early for the PCT to consider integrated
- The **Finance Directorate** showed little interest
- The **IT Department** came in only when they were asked for technical help



Evaluation

- The service was accessed by nearly **5000** users in 8 months
- 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**.*

- One Practice Manager 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 receptions stated that the machine has regular use by the patients, and sometimes it is the **children** showing their parents how to use the machine
- The Performance Management Department, that commissioned the project, was **confident** that a phased roll-out would be approved

Outcome

The Performance Management Department communicated:

- The PCT **did not have the budgets** for phased roll-out
- No budgets to renew the licences of the existing kiosks

Recommended that it would be taken up by the Local Delivery Plan (LDP) Committee and the Professional Executive Committee (PEC)

However, there was **no eventual agreement** on the renewal and the project was indefinitely suspended

Later emerged that the Performance Management Department had initially commissioned the funds to start the pilot because it had a **potential under-spent** in its finances



Discussion/reflection

- What do you think were the red flags?
- What could have been done differently?
- Have you witnessed similar situations?
- Have you been part of similar situations?

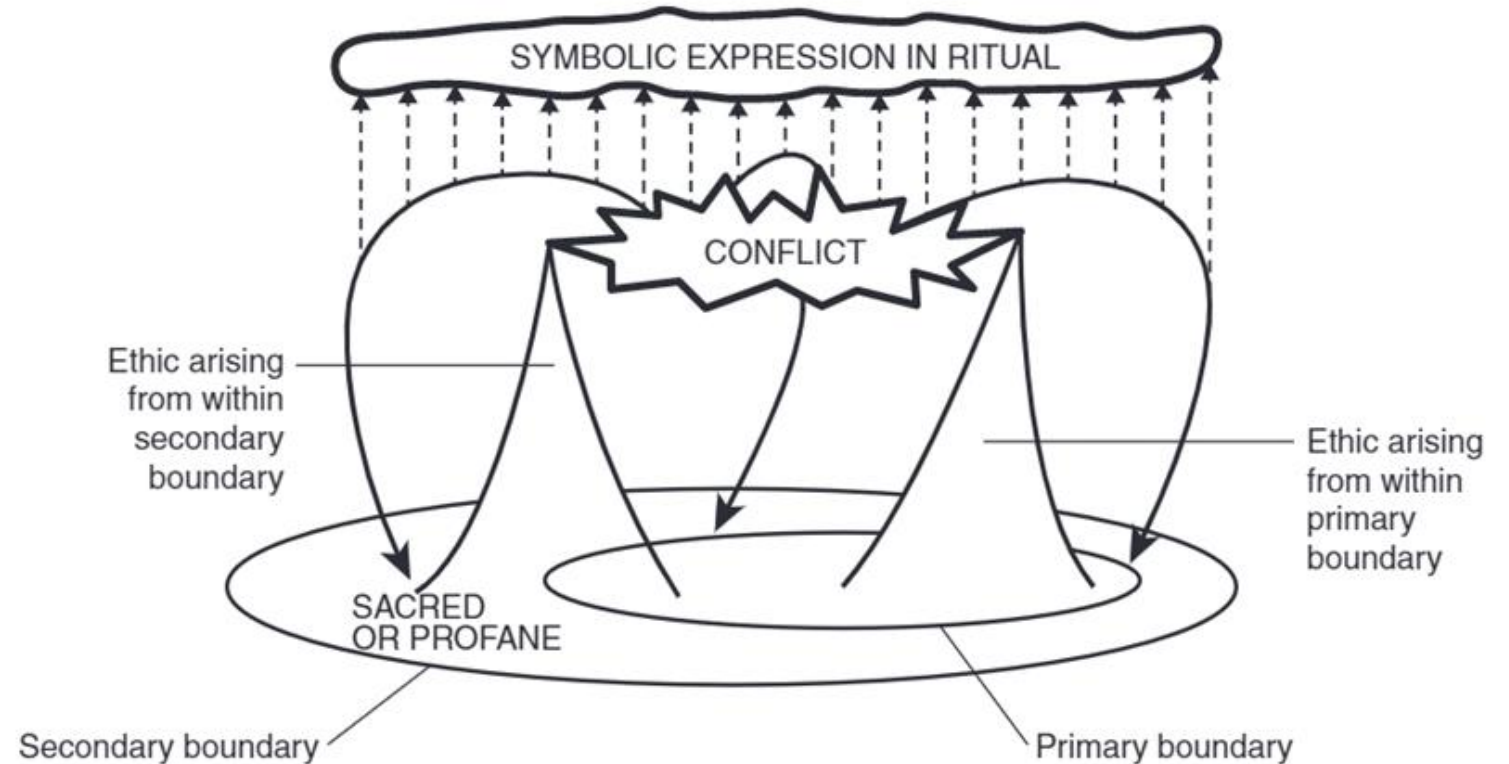


Evaluation of the project from a systems lens



Boundaries

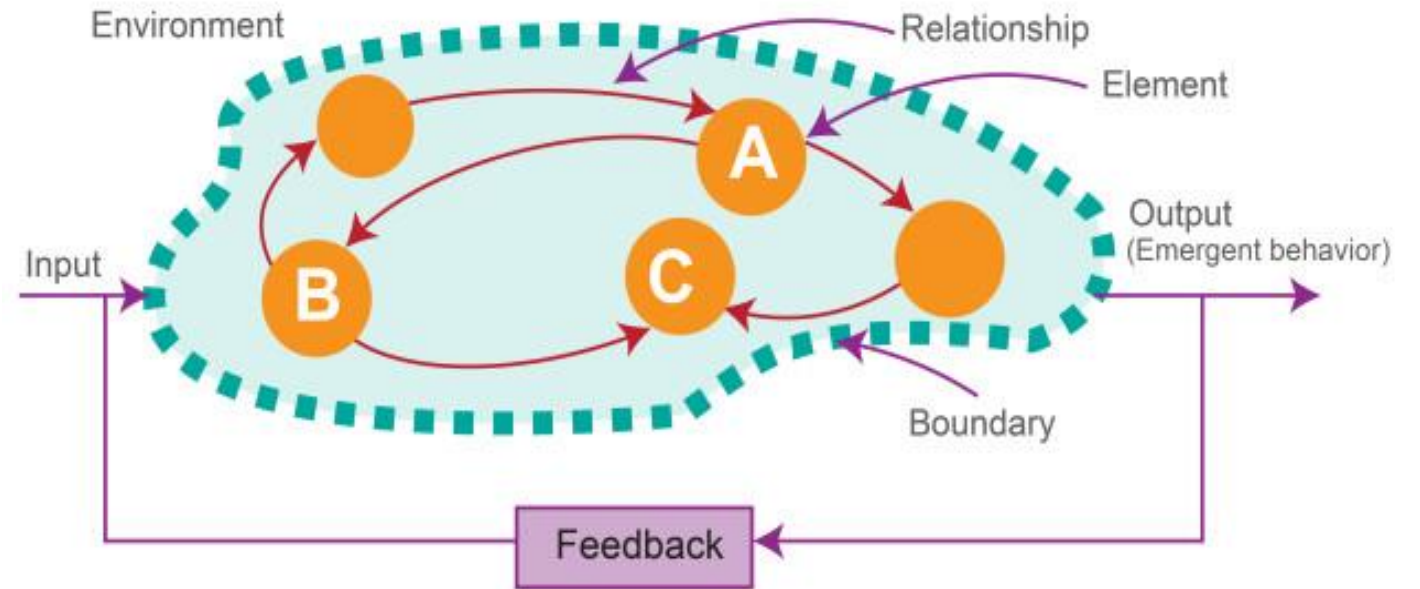
- Performance Management Department – IT – Finance – Modernisation & Partnership
- Pilot project management – wider information management teams
- Clinical professionals – NHS management
- Providers – users



Midgley, G. R. (2000). *Systemic intervention: philosophy, methodology and practice*. Kluwer.

Interrelationships

- What is my system in focus (Performance Management Department or the PCT)?
- Were interrelationships considered?
- How could feedback have made a difference?
- What is the environment (internal and external)?



Emergence

- People emergent properties
- Structural emergent properties
- Cultural emergent properties

Archer MS (2005). Structure, culture and agency.
In: Jacobs, MD & Hanrahan, NW (eds) The
Blackwell companion to the sociology of culture.
Blackwell.



The NHS was forecasted to be operating at a deficit of over a Billion Pounds. All Trusts in the UK were instructed to stay away from “avoidable” expenditure. The PCT under consideration was advised to save £ 2.9 Million. The result was that the new project was left in the middle of no less than a fiasco.

What role can leadership play in such situations?



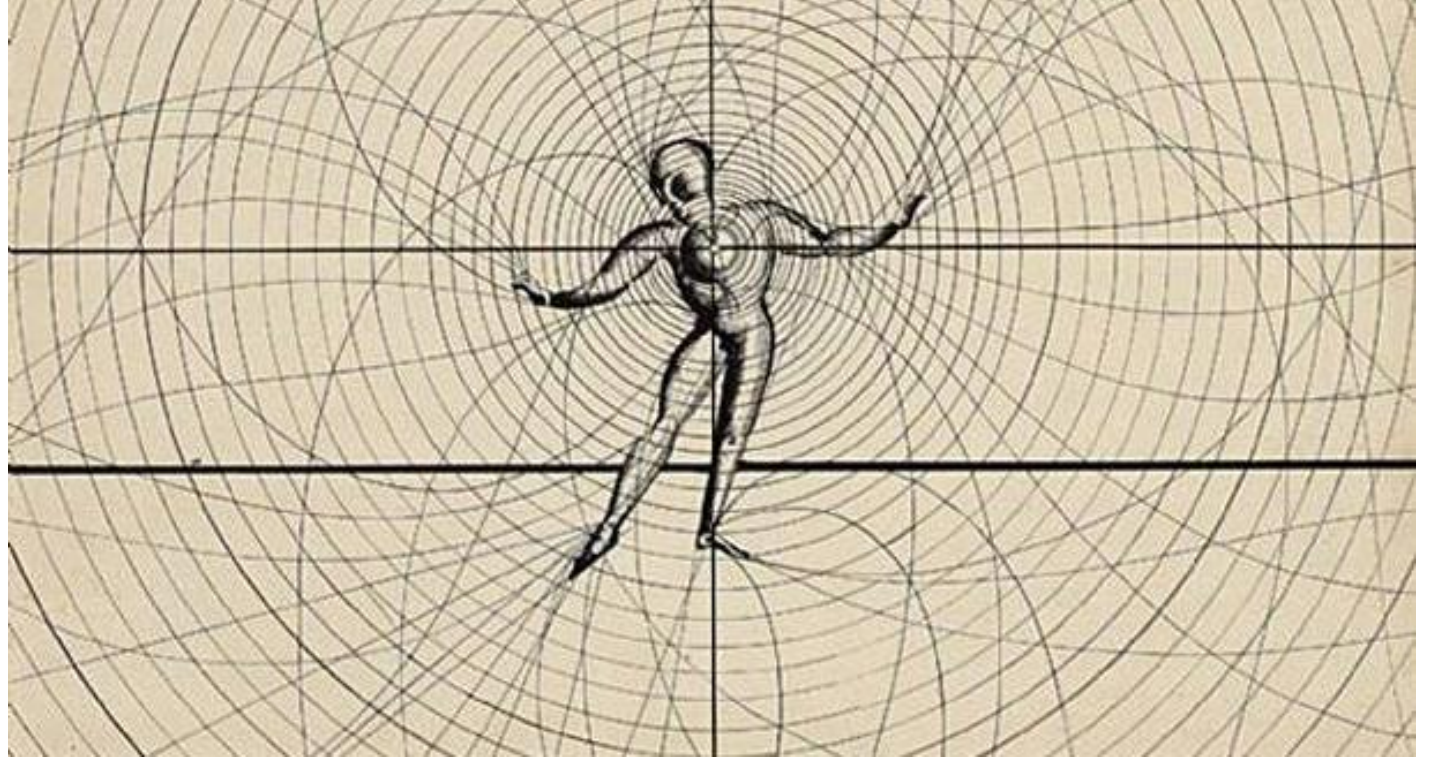
Pause and reflect

- What role did leadership play in this situation?
- Who was responsible for the project failure?
- Where was leadership displayed and where was it not?



Leadership

- A set of practices or activities that some people do some of the time
- Mobilises self and others to adapt to new realities or face tough challenges



Challenges expectations of 'authorisers' and takes the consequences

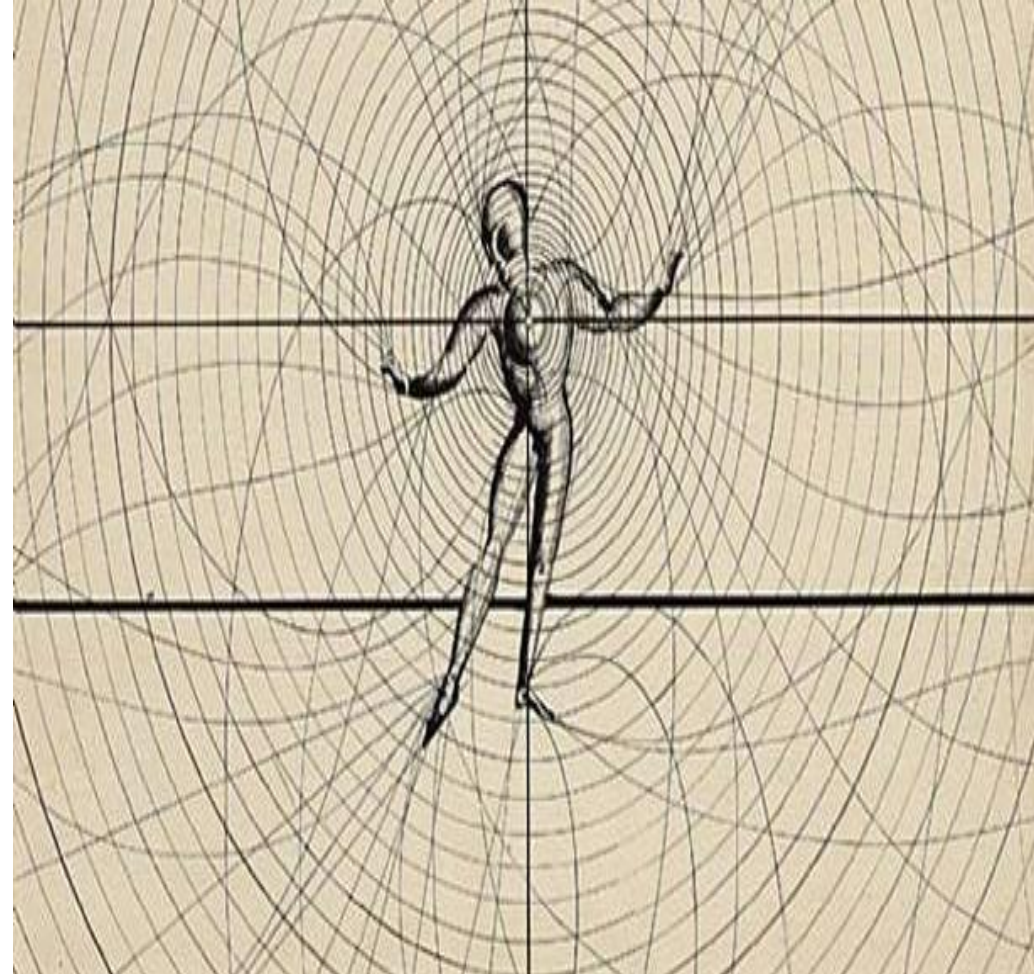


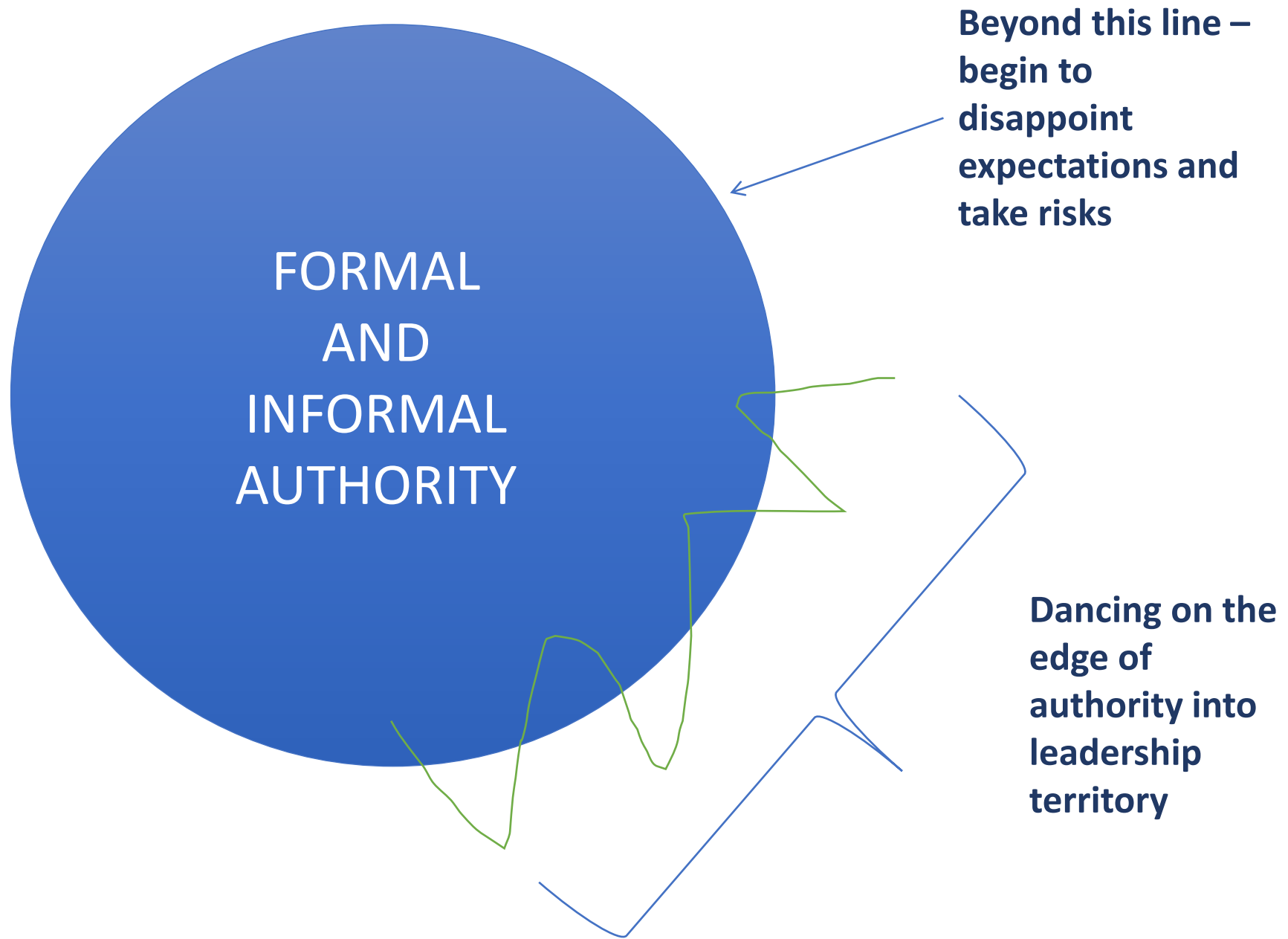
...you don't need to be in a leadership position to be in a position to practice leadership



Thoughts on leadership

- Important to distinguish between the authority available to individuals through the organization positions they hold (positional authority) and leadership which can happen at any level of the organization (or part of the system).
- Leadership is only apparent through the joint action of individuals working together, and arises from situations calling for 'joint plural action' (Kort, 2008).

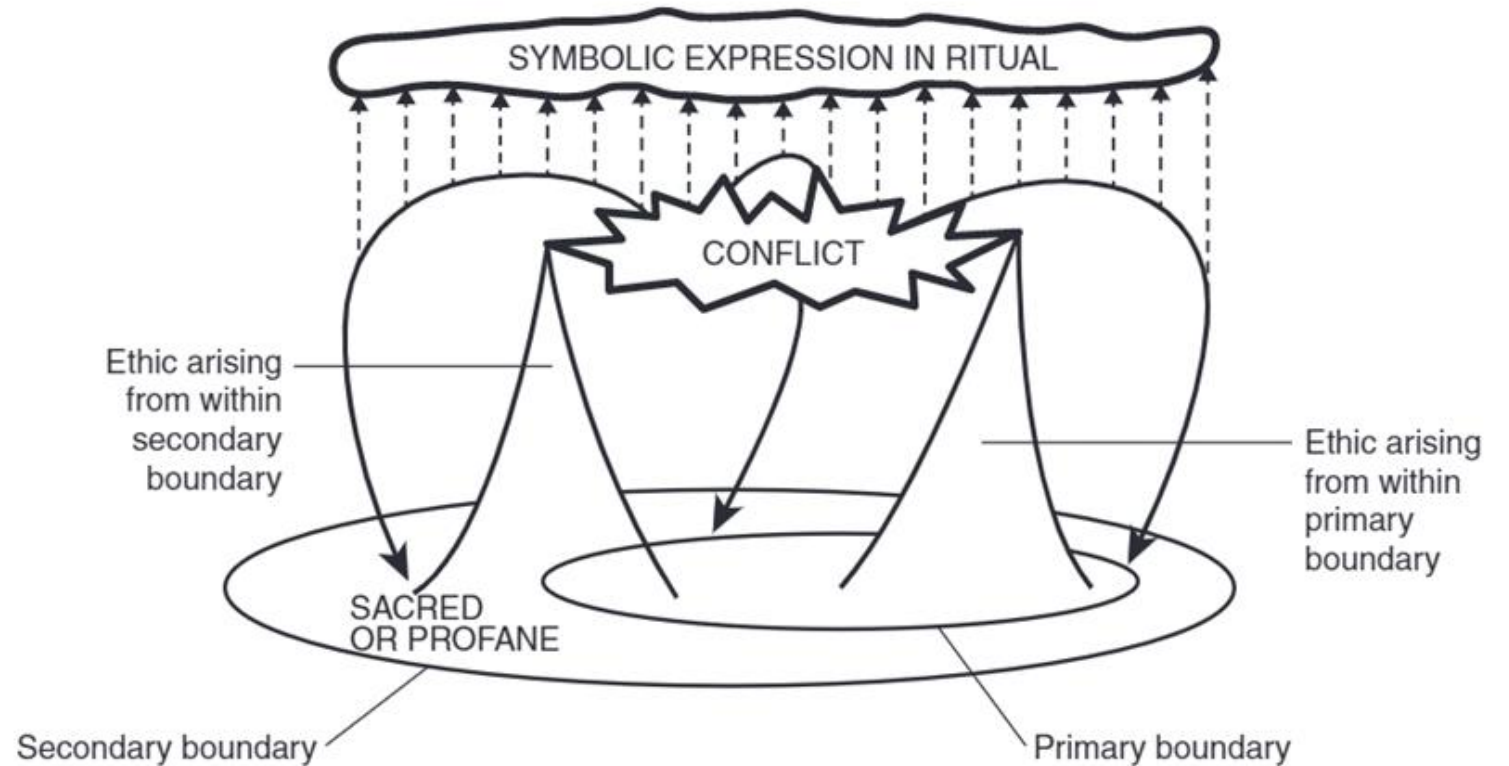




Source: Heifetz et. al. Practice of Adaptive Leadership

Boundaries shape identities

- Boundaries shape the identity of the system (change the boundaries and you change the system)
- What lies on one side of the boundary has one 'identity' and what lies on the other has a different 'identity'
- Shifting structural boundaries (i.e., restructure) compared to boundary crossing and consideration and identity formation




Leadership and identities

Grint (2001): **Leaders need to be 'entrepreneurs of identity'!**

Leaders need to name who 'we' are, together, and, together, what 'we' will do, especially in response to changing and uncertain circumstances



Leadership, identities, framing



Example: Framing Poverty

Meritocracy

Poverty exists because of lack of effort of people in poverty. The individual in poverty is responsible, and need to take advantage of the opportunities that exist

Unfair System

Economic system unfairly benefits some while failing others. The system needs to be fixed (somehow)

Leadership, identities, framing

Reference to: IT project case-study

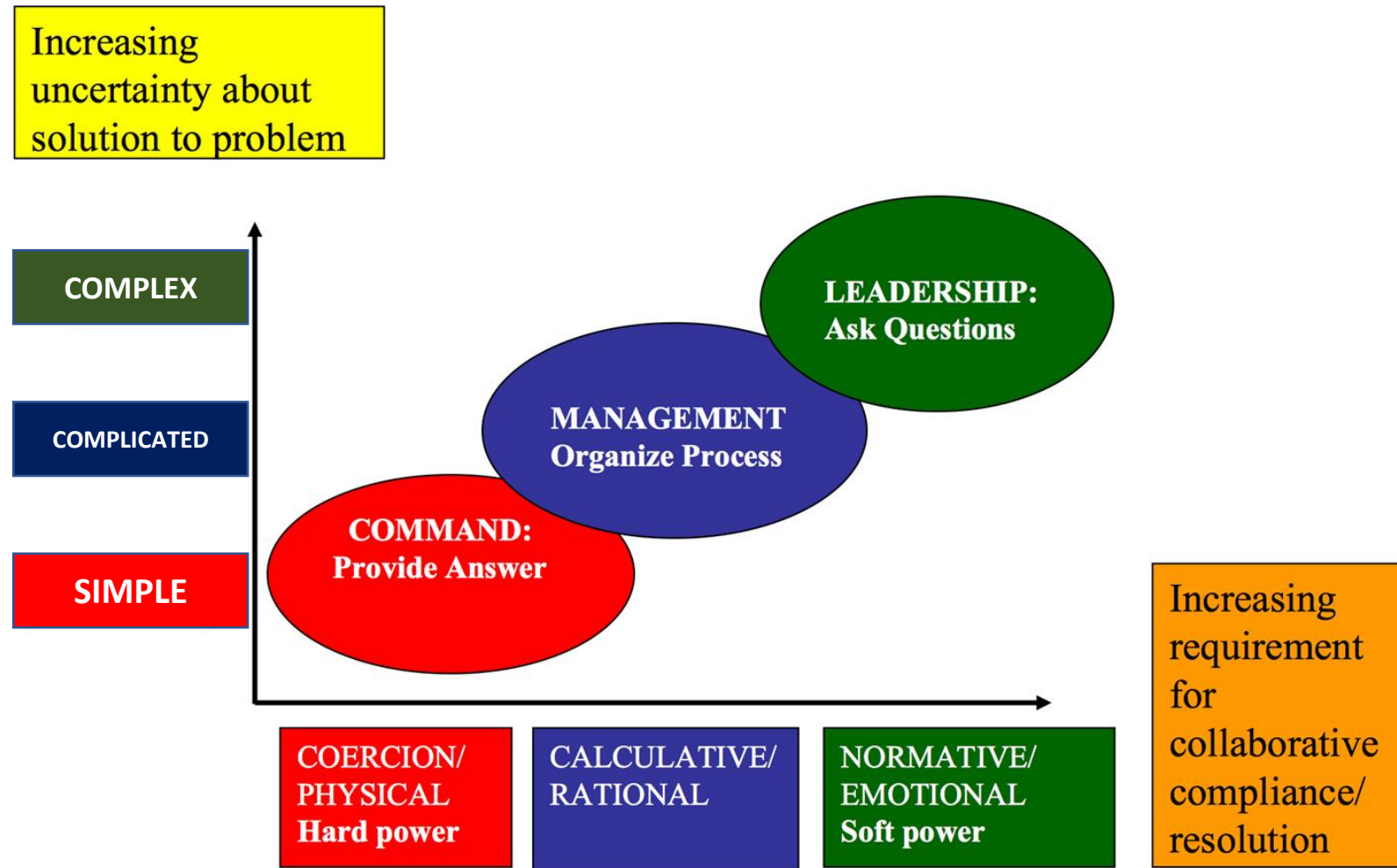
IT projects always fail

There are credible statistics that suggest that 50-70% of IT projects in the public sector fail because they just don't get it. There is no point of directing our efforts to IT projects.

Politicians over leaders

The NHS is a political organisation and there are no health leaders. Everyone blindly works as per the whims and fancies of politicians. So, there is no congruence between the departs in public sector organisations. IT projects waste tax payers' money.

Leadership is about asking questions



Myron's maxims

- Real change happens in real work
- People own what they help create
- Those who do the work do the change
- Connect the system to more of itself
- Start anywhere follow it everywhere
- The process you use to get to the future is the future you get.

Myron Rogers



**Did the project fail
or did the system
fail the project**

?

**Outcome is an
emergent property
of the system**

!

**Was there no leader
in the project or in
the PCT system**

?

**Leadership is an
emergent property
of the system**

!

Discussion/reflection/Q&A

- What are the leadership challenges you face in your role?
- Have you applied a systems lens in approaching your challenges?
- Have you been able to progress in your situation using systems methodologies?



Holistic Flexibility

Holism

Flexibility

State of Mind

State of Intervention



Responsible Outcomes

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