

Complexity Leadership: it's complicated...

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Being the Chef d'Equipe in any organisation brings a unique set of challenges. Leaders and managers need project, communication, and adaptability skills. However, when challenged, do you know whether you are dealing with a complicated or complex issue? This article aims to outline the differences between complicated and complex issues and provides you with the tools to manage

Who doesn't love an organisation chart? What's the point of an induction day if we don't know where we sit in the hierarchy or to whom we can pass the monkey when things have gone a little off-kilter? How else would the Chief Executive Officer (CEO) marshal his or her managers in times of challenge?

But therein lies the problem – not the chart itself *per se*, just the fact that our default systems in times of flux, challenge or complexity, is to use a top-down process to corral everyone onto their usual pens and then use a cattle-stick to prod them into productivity, usually doing exactly what they've done before. But that approach doesn't work; we all know that if you always do what we've always done, we'll always get what we've always got. And probably lose a few staff along the way.

So, what does work? Perhaps we need a change of perception. When we talk about organisations such as the National Health Service (NHS) for example, we tend to use the descriptors 'busy', 'dynamic', and 'pioneering'. But are such organisations really dynamic or merely doing things in the way they know because 'we tried it in a different way and it didn't work; it's a complicated organisation'. Perhaps in order to facilitate, implement and bed-in change, we need to better understand

our organisation, its employees and the challenges faced.

Complex vs Complicated

Central to this understanding is knowing whether your organisation sees the issues and challenges as complex or complicated, as this will tend to dictate the approach taken to problem solving. While most of us use these terms interchangeably, they do in fact have very different meanings in organisational leadership. As stated by Sargut and McGrath¹

"If you manage a complex organization as if it were just a complicated one, you'll make serious, expensive mistakes."

Unfortunately, most management models focus on the 'recipe' approach to problem solving or change management; the basic issues of technique and terminology are taught and once these are mastered, following the recipe is usually successful. This may work for simple issues, but complicated or complex systems and problems require different approaches.

Experience does not necessarily mean success; it was successful only in the context of the particular circumstances at that time.

Complicated

Complicated systems (or problems) may have many parts, yet when these parts interact, they do not change each other.² The outcomes in a complicated system can usually be predicted by knowing the starting condition(s).¹ Messervy³ suggests that leaders and organisations working in the ‘complicated’ space break down problems and use expertise, best practice, and data analysis, to set a direction. Reaching the agreed goal is the measure of success.³

Complex

Complex systems comprise features and components that may operate in patterned ways but whose interactions and interconnectivity change one another, with such change being irreversible and largely unexpected.² The ‘components’ may of course, be human; this adds to complexity as human actions are not totally or necessarily predictable, and such actions can change the context and actions of others. The number of interacting elements, their interdependence and their degree of heterogeneity will affect the level of complexity.

To illustrate the differences, Uhi-Bien and Arena² suggest that an aeroplane

is complicated, and that mayonnaise is complex; if you add parts to an aeroplane, you may make it bigger but the original components do not change – a wheel remains a wheel and its function does not change. However, if you add oil to eggs and vinegar and then whisk, you can never unmix those ingredients – they are changed.

*An aeroplane is complicated,
mayonnaise is complex.
Real Healthcare Solutions can
help you uncomplicate the
mayonnaise!*

Glouberman and Zimmerman⁴ demonstrate the differences by comparing the issues of sending a rocket to the moon (complicated) and bringing up a child (complex) (Table 1).

Why Taylorism doesn't work in a complex organisation

In order to explore management approaches that ensure complex organisations can survive and thrive, we need to know what not to do. Let's take a National Health Service hospital as an example. In simple terms, it exists to make sick people better; the process looks something like this...

Table 1: Complicated and Complex Problems

(adapted from Glouberman S, Zimmerman B. Reproduced with kind permission from the Copyright Services of Library and Archives Canada.)

Sending Rocket to Moon	Bringing up a Child
Formulae are critical and necessary	Formulae have a limited application
Sending one rocket increases assurance that the next will be OK	Raising one child provides experience but no assurance of success with the next
High levels of expertise in a variety of fields are necessary for success	Expertise can contribute but is neither necessary nor sufficient to assure success
Rockets are similar in critical ways	Every child is unique and must be understood as an individual
There is a high degree of certainty of outcome	Uncertainty of outcome remains
Optimistic approach to problem possible	Optimistic approach to problem possible

- i. Patient walks through door after hospital has received and processed referral letter from GP
- ii. Patient is seen by Consultant (or other senior person) who orders tests
- iii. Patient sees Consultant sometime later – given results of tests and a management plan is created
- iv. Management plan implemented – patient gets better/is managed

Therefore, in theory, the principles of Taylorism (Box 1), could be applied; however, the reality goes something like this...

- i. Patient walks through door. However; the appointment is cancelled but no-one told patient; or the referral letter incomplete; or no appropriate signage (or help) to find clinic so patient is late; or clinic running late as Consultant is elsewhere.
- ii. Patient seen by minion who must speak to Consultant who is in another part of building (or country) before taking any further action such as speaking to patient or ordering tests.
- iii. Upon return to clinic, not all tests/results back leading to delay in diagnosis and treatment. Wasted journey.
- iv. Management plan confounded by NICE guidance, multidisciplinary team and resources

Why is the reality, albeit slightly tongue-in-cheek, like this? Rather like 'the knee-bone being connected to the thigh bone', the organisation relies on *complicated* processes to ensure the first scenario – indeed, care pathways are almost Taylor-esque in their content and delivery. However, the *complexity* of the human interactions and subsequent reactions, may skew the delivery of the pathway.

Do what the situation requires rather than what you are comfortable with.

Complexity; The Leadership Style-Guide

Given the complexities of organisations and the constant external disruptions that threaten viability and stability, organisations need to adapt. While the 'ugly sister' approach, where an entirely inappropriate theory of organisational management is shoe-horned into an organisation previously using a different one (the 1983 NHS reforms for example),⁵ is not advocated, organisations do need to adapt their leadership and problem-solving styles. What is required is a move from 'rational' leaders, who are not unlike Actuaries; in times of complexity or when implementing change, they rely on ordered solutions known to work. They use the top-down approach, want more for less, and increase regulatory control and demands for accountability.² This does of course ensure order and decision making, but stifles creativity. Staff are told to do 'x' by 'y' using only 'z' amount. Conversely, organisations and their leaders who have Emotional Intelligence are better at managing the complex. They use a complex adaptive systems (CAS) approach² and complexity leadership theory (CLT), to focus on emergent processes within complex systems and operate in a contextual and interactive fashion, emphasising the importance of social interactions in the change process.⁶

The traditional management approaches tend not to acknowledge that some things may be not be 'do-able', such as the Seven Bridges of Königsberg (box 2), the CAS approach⁷:

- challenges assumptions
- focuses on relationships rather than simple cause and effect models
- can be applied in a variety of contexts
- provides a framework for categorising and analysing knowledge and agents
- suggests new possibilities for change
- provides a more complete picture of forces affecting change

Indeed, Euler despite being a mathematician and thus a man of logic, embodied the CAS approach by inventing graph theory as a solution to complex problems. Adapting is something we often do unconsciously. For example:

- when a set of traffic lights fail, initially there is chaos, then drivers organise themselves and let traffic from each direction flow fairly
- during the Covid-19 pandemic, communities organised shopping for vulnerable people locally and made masks to sell on various shopping sites
- companies have found creative ways to keep their business afloat by facilitating working from home, or re-tooling their business to make hand sanitizer or personal protective equipment.

In effect, CLT is shared leadership – as with the examples above, the social interactions within a workplace ‘network’ enable leadership through social capital.⁸ Messervy suggests that complexity requires us to release control over our ability to predict what will happen, and support the opportunities that develop.³

If you manage a complex organization as if it were just a complicated one, you'll make serious, expensive mistakes.

Real Healthcare Solutions can help you understand the difference – we've been there!

Adaptability and Coping with Uncertainty

Hindsight is a wonderful thing for telling us what we COULD have done when we were in the middle of a crisis. But what do we, in the healthcare arena, do right NOW to ensure that we have the right mix of skills and capabilities to address all of the challenges that are going to come about when we emerge out of a crisis? Surrounded by

uncertainty, how do we plan for the future and decide on what to do next?

Before you do anything, you need to determine the scale of the actions that need to be taken and how far-reaching they will be. In times of crisis of the proportion of the current pandemic, where post-crisis things may not be the same again, decisions need to be made about the business model and whether it is still fit for purpose. As an example, virtual meetings may lead to a reduction in the requirement for office space, or changes to business travel changing the way work is undertaken.

Your role as a leader in a crisis is to help people get through it, to reassure them and give them the right perspective.

Any building is only as good as its foundations. The leadership equivalent is self-care: It is essential that leaders know themselves well, build in time to reflect, and look after their own wellbeing in order to be able to lead well - particularly when under pressure.

It is important for the leadership to be open, authentic and accountable for their decisions; ask yourself the following questions:

1. How are you coping with the shifting landscape?

The pressure on leaders at times like these is often forgotten; leaders are expected to know all of the answers – which is not easy to do when they themselves have more questions than answers!

2. What are you doing that enables you to keep moving forward? With confidence?

It's important to recognise that true confidence is not an absence of self-doubt. Confidence is better thought of as the ability to commit to action – decisively

and consistently – despite the presence of this doubt.

It is important to understand that we each have our own unique set of ‘lenses’ that we use when assessing situations and making decisions. This is perfectly normal and natural – but we need to remain mindful of the fact that we are likely to lean more heavily on our natural preferences, which can cause us to miss things.

This is particularly true when we’re under pressure, which makes stepping into our ‘less comfortable’ Mindsets a bit more of a stretch – but no less important. Perhaps you’ve experienced a situation where others have got impatient with the amount of detail you’ve gone into, feeling it unnecessary? Or a time when you’ve been trying to drive things forward, but feel others are dragging their feet? Maybe you have been perceived to be dragging your feet!

All of these are situations which may have their roots in strengths being overplayed – doing what is comfortable to us, rather than what the situation requires. When under pressure, we become more wedded to our preferred, or ‘*natural*’ style (comfort zone?) and thus become more likely to lead with those behaviours, regardless of context. It becomes all about us! The challenge is to ‘*get ourselves out of the*

way’, and deliver the behaviours required of the situation – which may not be those which are most comfortable to us.

Your role as a leader in a crisis is to help people get through it, to reassure them and give them the right perspective. Need help finding the right perspective? Get in touch with us at Real Healthcare Solutions.

Conclusion

In complexity we need to explore how we approach problem solving and innovation. Organisations require both ‘traditional’ management and emotionally intelligent approaches in order to facilitate maximum productivity and engagement, be that from staff or clients.

New ways of looking at issues, and indeed, changing one’s leadership style can be difficult. Managing staff to adopt a different approach to change can be equally challenging. However, now is the time for action! It is not only the United Kingdom that is having to work out how to survive in this ‘new normal’; the world is already exploring how this may work. You need to be part of this exciting challenge.

Real Healthcare Solutions can facilitate your journey!

Homework!

You are a division manager; the Department of Health has issued a unilateral decree that your services need to prove their effectiveness and quality of care. Your teams have to ensure that daily practice is aligned to the quality agenda and true measurements of this care are recorded. The extent of this challenge cannot be underestimated, especially as it may require a change of mind-set. In addition, the metrics that need to be measured have to be completed alongside the challenges of a busy work schedule and within current financial constraints.

How would you tackle this?

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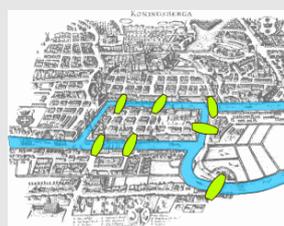
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Box 1: Principles of Scientific Management

(Taylor FW. The Principles of Scientific Management. 1911. Harper Brothers NY)

- i. The method of doing a task should be informed by a scientific investigation of the task
- ii. Employees should be selected and carefully trained for tasks
- iii. Tasks should have detailed instructions and should be subject to supervision
- iv. Management should evaluate tasks and formulate optimised approaches for the workers to follow

Box 2: The Seven Bridges of Königsberg



Königsberg was divided by the river Pregel; it comprised two islands with seven bridges linking the various land masses (right). The challenge was to find a walk through the city that crossed every bridge once only. Residents of the city made this a Sunday evening game. While many claimed they had the solution, they were unable to show it.

In 1735, a mathematician, Leonhard Euler, proved that the problem had no solution, yet until two of the bridges were destroyed, folk continued to try.