



Organisational complexity and evaluation

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Overview

- 'Complex' vs. 'complicated' organisations, systems, programmes and other evaluands
- The complexity perspective in practice
- Where does organisational capacity fit in? Capacity, complexity and the changing nature of work
- Complexity and evaluation – conclusions



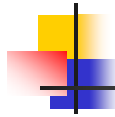
Complicated vs. complex systems

Complicated evaluands:

- May span multiple organisations/contexts
- May have different versions in different locations
- May have multiple causal paths to outcomes
- May require analysis at multiple levels

Complex evaluands:

- Exhibit several of the specific characteristics of '**complex adaptive systems**' ...



Characteristics of complex systems

1. Nonlinear causation and feedback systems (e.g., virtuous and vicious causal loops)
2. Spontaneous self-organisation (due to 'minimum specifications,' i.e. few rules)
3. Emergent (unpredictable) outcomes
4. Disproportionate causal paths ('butterfly effects')
5. Very sensitive 'tipping points'
6. 'Fractals' (patterns seen at multiple levels)

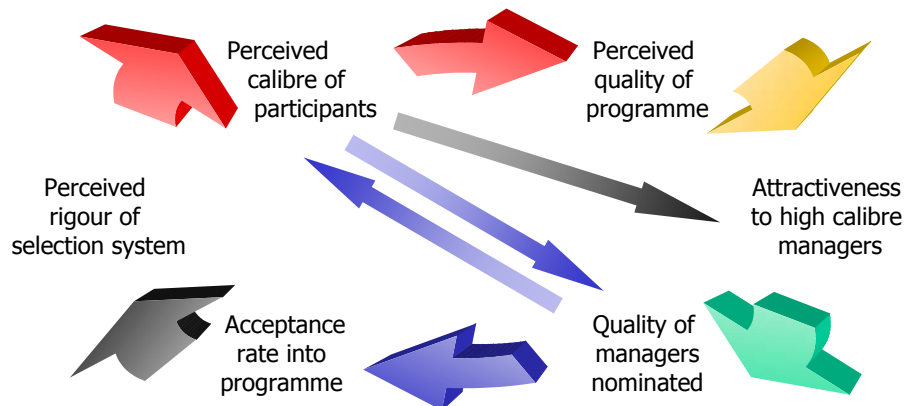
Note: We use these characteristics not to categorise something as a Complex Adaptive System (CAS) or not, but to look at it *as if it were a CAS*. How will the use of this lens add value to what we would find using a standard evaluation approach?

A complicated and complex case

- Evaluation of Senior Leadership and Management Development (SLMD) strategy
- Complicated aspects:
 - Spans 35 organisations of the NZ Public Service
 - Multifaceted (several programmes, initiatives, etc)
 - Flagship programme highly tailored to individuals
 - Different causal paths in play
 - Answers to evaluation questions are required at both 'strategic' and 'operational' levels

Complex aspects of SLMD: 1

Nonlinear feedback loops (virtuous & vicious cycles):





Complex aspects of SLMD: 2

Spontaneous self-organisation:

- Executive Leadership Programme (ELP) small group sessions spontaneously took very different paths from each other (effect of 'minimum specs')
- ELP participants starting to use informal ELP-related networks to assist in recruiting or seconding managers
- First cohort of Executive Masters in Public Administration (EMPA) possibly taking initiative to develop ongoing post-graduation network



Complex aspects of SLMD: 3

Emergent (unpredictable) outcomes:

- Executive Leadership Programme small group discussion sessions developed VERY differently, with interesting main and side effects
- Possible future effects on the senior leadership 'culture' across the Public Service if we were to see:
 - Different styles coming into the senior leadership pool
 - A substantial increase in the number of women available for very senior roles, compared to current representation
 - A larger cohort of emerging Māori leaders coming up through middle and senior management and remaining in the Public Service



Complex aspects of SLMD: 4

Disproportionate causal paths:

- Many potential 'butterfly effects' – small events that could have dramatic impacts across the system:
 - What ripple effects might be seen when the first senior leader from an underrepresented group is appointed to a generic CE role?
 - What is the potential impact on the SLMD 'brand' when the first Executive Leadership Programme participant is appointed to a very high profile leadership role?



Complex aspects of SLMD: 5

Very sensitive 'tipping' points:

- What are the critical events or decision points that have the potential to make or break the strategy?
 - What might happen to the SLMD brand if many key senior appointments are from overseas and/or outside the Public Service (or the wider state sector)?
 - How might this affect perceptions of the strategy's underlying principle of "valuing home-grown talent"?
 - What will happen if some participants 'stall' in the programme through being unable to find challenging, career-enhancing secondments (temporary appointments)?



Complex aspects of SLMD: 6

'Fractals':

- What patterns can be seen at multiple levels within the system, and how can they be leveraged?
 - To what extent are certain core leadership values, attitudes, behaviours and interactions reflected in:
 - Chief executives (individually)
 - The chief executives as a team
 - The senior leadership pool currently being developed
 - Organisational cultures throughout the Public Service
 - It *may* be possible to alter patterns at several of these levels by intervening at one of the levels and then creating conditions that will help the pattern replicate at others

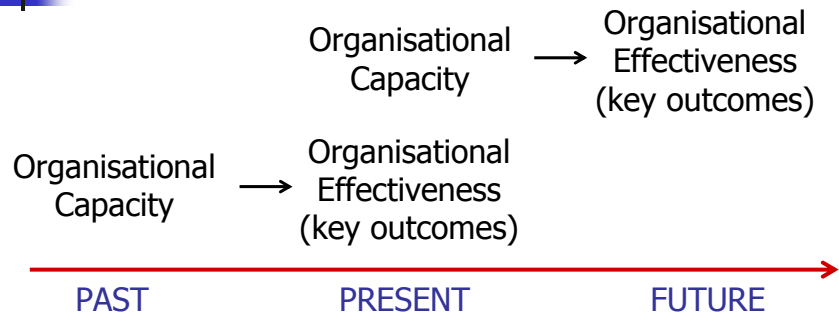


What is 'capacity'?

- Ability to perform or produce; capability
- The focus is on potential to produce value, not on actual value produced
- Capacity is a 'window on the future' – a gauge of possible future effectiveness



A 'window on the future'



Current organisational effectiveness (e.g., financial and other performance) is an indicator of what the organisation's capacity (or 'health') was at some earlier point in time – so which is more important to know NOW?



Dimensions of capacity

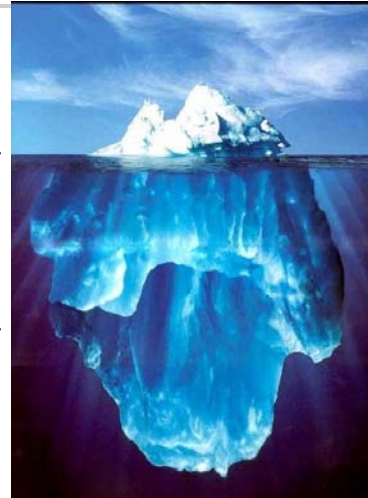
- What makes an organisation capable of performing to its potential?
 - Knowledge and know-how (or, explicit and tacit knowledge)
 - Resources and tools (including networks, systems and methods)
 - Organisational culture (at several levels)

The Organisational Culture Iceberg

Formal policies,
systems & practices

Informal practices
& symbolic actions

Beliefs, values
& attitudes



Culture for managing complexity

- What kind of organisational culture maximises an organisation's ability to get the most out of complexity?
- Some clues to this may be found in the emergence of 'knowledge work'



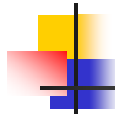
The emergence of 'knowledge work'

In traditional organisations

- Knowledge/expertise was greater at the 'top' (in management)
- 'Command and control' cultures were common
- Employees just had to 'do things right' (competently implement solutions developed by management)

In many modern organisations

- Knowledge/expertise is greater at the 'middle' and 'bottom'
- Managers have to lead/ facilitate people with specialised knowledge
- Employees have to identify the problems and figure out what to do for themselves ('do the right thing')



Leading 'knowledge workers'

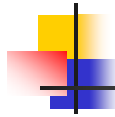
- Excessive structure, rules, goal and target setting can impede creativity and performance
- Leadership/management is about creating a work environment that maximises people's ability to identify and solve problems
- Organisations that have such a conducive work environment (among other things) have 'capacity' for managing complexity

Note: Many organisations (especially in the public sector) have elements of traditional organisation (e.g., customer call centres) and elements of knowledge work (e.g., policy analysis and advice); the complexity issues often won't apply to the whole organisation, but to pieces of it



Complexity and evaluation

- Rigid goal-based evaluation approaches will be virtually useless
- Attempts to anticipate possible outcomes (e.g., to do pre-post testing) can only be partially useful
- Programme theory will be most useful for explaining (rather than anticipating) outcomes
- Open-ended searches for outcomes are key
- When it is too early to see the main outcomes (or when the focus is formative), organisational capacity may be very useful to evaluate



Concluding thoughts

- Under conditions of complexity, evaluation design must be as 'organic' as the evaluand
- Organisational capacity takes many forms; it is not restricted to complex organisations
- The 'complexity' lens is a way of seeing programmes and organisations – but it is also a way of not seeing other features
- Is it worth using?
 - Only in the areas where complex features are important
 - Only where it adds value that outweighs its cost



Some additional references

- Davidson, E. J. (2004). *Evaluation methodology basics: The nuts and bolts of sound evaluation*. Sage.
- Davidson, E. J. (2003, April). *Applying evaluation-specific methodology to a specific case: Assessing organizational learning capacity*. Feature presentation, Arizona Evaluation Network. Available online: <http://davidsonconsulting.co.nz>
- Williams, B., & Imam, I. (Eds.) (forthcoming). *Systems thinking and evaluation*. American Evaluation Association Monograph Series.

