



Wicked problems and the role of leadership

Resolving performance problems has always been a key role of leaders¹ throughout organisations. But there is one variety of problem that demands non-traditional methods from leaders. This different type of problem-solving becomes even more critical at times when high levels of organisational stress are emanating from the economic environment. The challenge for leaders is to recognise that there are different types of problem, and that they demand different approaches if they are to be successfully resolved.

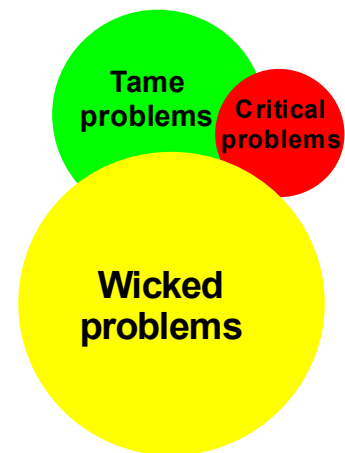
Tame, critical and wicked problems²

Tame problems are where the causes of the problem are known. Experience is a good guide here, and the problems can be tackled by applying known processes through conventional plans and projects. A typical tame problem would be a quality standard drifting outside control limits. The underlying approach is one of 'management' – sharing information and other resources; delegating responsibility; and working through familiar structures and processes – just doing the same things better.

Critical problems require a different approach. Because these problems threaten the very survival of the organisation in the short term, decisive action is called for, and people are required to follow the call for action in a highly disciplined way. In the absence of time to do a detailed, objective analysis for cause, solutions may be adopted that are based on causes that are assumed to be valid. But a partially successful response is better than standing by idly as the organisation expires. A not-uncommon critical problem is a company running out of funds to support its continuing existence. With this type of problem a 'leader' takes charge, often using an authoritarian command and control style.

Wicked problems are different again. They involve complex, messy and often intractable challenges, that can probably rarely be totally eliminated. There are no known solutions, partly because there are no simple, linear causes – the actual causes are themselves complex, ambiguous and often interconnected – multiple causes and causal chains abound. Similarly, multiple, partial solutions are the order of the day – the aim is always to take bite-sized chunks out of the wicked problem, so that its magnitude or severity is reduced.

Here are a few examples of typical wicked problems:



¹ We do not wish to engage in a debate about the difference between management and leadership. To us, these are just different facets of the same things. People seeking excellent performance will sometimes act as 'managers', and at other times they will act as 'leaders'. This point is made obliquely in the text. Tame problems require management; critical and wicked problems require leadership. One underlying theme of this paper is that the forms of leadership required by critical and wicked problems are different from each other.

² Wicked problems and clumsy solutions ~ Keith Grint ~ 2009

● Achieving needed sales while complying with regulations	● Developing sustainable competitive advantage – especially when money is in short supply
● Reducing crime	● Losing too many good people
● The 'sick organisation syndrome' – low performance, disengaged employees and dysfunctional silos	● Disruptive changes in markets or technologies
● Mergers and acquisitions (especially Government sponsored!)	● Social problems – such as substance abuse / anti-social behaviour
● Major change programmes	● Complex supply chains

A few ideas from the research on wicked problems provide some insights into the nature of the challenge for leaders. Wicked problems:

- Need clumsy solutions – call for the bricoleurs! ³
- Need high levels of connectivity - within and between organisations. It is the sharing of knowledge and skills across functional boundaries that enables the development of novel solutions and new knowledge creation
- Need positive deviance & constructive dissent - this is where people move away from the conventional wisdom, and challenge existing policies and practices
- Are essentially unique and novel, and that means that the problem is not fully understood until a solution has been developed and applied. Analysis of the results achieved drives more learning
- Are 'one-shot operations'. The solution applied is rarely, if ever, repeatable. Applying the solution changes the original problem, and this requires new analysis and the development of a new solution
- Can be considered to be a symptom of another problem. Often this arises because an earlier wicked problem was treated as tame, and temporarily suppressed. Sadly, either the original wicked problem rears its ugly head again, or appears in a new, often worse form
- Have no stopping rule. If they cannot be totally eliminated, there is no point where the problem can be written off as finally resolved
- Have solutions that are not right or wrong, but better or worse
- Have no given solutions – there is no best practice. It is not possible to transfer a successful solution from one place to another. It is, however, possible to transfer the method that was used to develop a successful, partial solution

³ In France, bricoleurs sit somewhere between a handy man and a jobbing builder. Whereas an architect normally begins with a clean sheet of paper, and designs from scratch to meet a specified requirement, the bricoleur always begins with an existing building, in whatever state it is, and makes it better.

A lot of this is scary stuff for leaders still besotted with old, discredited 'command and control' management styles. If 'clumsy solutions' as a concept was not enough, how about 'positive deviance and constructive dissent'? For the risk-averse among us, the statement that there is 'no best practice' is also more than worrying. Where is the 'safe haven' that is provided by doing what has already been done elsewhere, and supposed to be a proven solution?

Leaders and collective intelligence

Collective intelligence is, like wicked problems, not a new idea. Both date from the 1970s. Both are coming into focus – one as a current major concern and, the other as a good route for dealing with it.

Collective intelligence emerges from the collaboration of many individuals. This definition is underpinned by the research that suggests that new learning is created by people sharing their knowledge to solve problems, which in turn, fits well with the evidence that this is how novel solutions are developed to tackle wicked problems. The snag is that, as with all emergent phenomena, just as wicked problems can't be tackled using conventional management approaches, collective intelligence can't be managed that same way.

So the challenge is to identify what type of leadership is appropriate for harnessing collective intelligence to tackle wicked problems. The answer is provided by the definition of collective intelligence – and that is emergent leadership. The next snag is that of definition again. It turns out there are two different views of what emergent leadership is. One is that it is the leader that emerges – the informal leader. The other is that the leader who works happily with emergence as a fact of life in their organisation. We will use the second definition as our guiding principle. The logic is as follows.

Whether anyone in a position of formal power likes it or not, emergence and self-organisation are facts of life and here to stay. The implication is that leaders need to work with both characteristics of the organisation, instead of trying to manage them or, even worse, try to suppress them. Secondly, tackling wicked problems depends on emergence - so the leader had better learn to live with that idea too - and that all demands a very different approach to managing the performance of the organisation. Here is a brief review of some of the characteristic behaviours of emergent leaders, as they apply to tackling wicked problems.

The first decisive step in tackling wicked problems is for leaders to recognise them for what they are, and avoid applying management or command actions. Making an open declaration that the solution to the problem is not known, and that there are no simple solutions, follows by default. There are two dimensions associated with this position. The first is that it is an open acceptance of reality, and opens the door to 'non-management' solutions. The second is that it is a vivid demonstration that it is OK for other people to acknowledge the same reality. This avoids the trap of people believing that it would be career threatening not to have instant solutions, that can be 'managed'. This also avoids those inevitable new problems that would follow. Creating safety and comfort in tackling the unknown is the key goal.

To describe other key behaviours of emergent leaders requires the introduction of another term – the heterarchy. This is a group of hierarchies, within an organisation or involving more than one organisation, that are collaborating (or need to collaborate) in pursuit of the achievement of shared goals. The fact that tackling wicked problems requires new learning, created by people sharing knowledge across functional boundaries implies that heterarchies are commonly occurring. A related observation is that it is only operational people that deliver actual results. Everyone else is an enabler of operational peoples' capacity to succeed.

These insights lead directly to identifying a set of behaviours that are deployed by emergent leaders. Here are some headlines.

- **Establishing shared goals** - partial solutions to wicked problems depend on high levels of connectivity in heterarchies. The definition of a heterarchy includes the concept of the pursuit of shared goals. Getting agreement of shared goals become an essential early step for good working partial solutions to be developed and implemented.
- **Building trust** – within and between hierarchies. Wicked problems are essentially unique and novel; there are no known solutions; and all (multiple, partial) solutions are one-shot operations. All this points to a need for innovation, and innovation that is not a one-off event, but an ongoing phenomenon. All innovation is, by definition, risky, and carries with it a high probability of failure. Implicit in innovation is learning through failure. Innovation simply does not happen unless there are high levels of trust. Trust that the organisation will not punish people who try good ideas that do not work as intended; trust when collectively developed ideas are tried then fail, and trust that each others' colleagues will not 'head for cover' when the analysis begins.
- **Exchanging information and other resources** – good partial solutions may be developed by sharing information across functional and organisational boundaries, and this may require some role-modelling actions by emergent leaders to make it comfortable. Good ideas still need implementing, and this requires the assignment of resources to make it happen. Too much high, downward pressure on budgets may make this difficult, unless emergent leaders demand it and make it safe to happen.
- **Embracing emergence** – the principle of emergence, among other things, means that it is impossible to predict the outcomes of the interactions of agents in a network. This means that the usual approach of defining objectives in measurable terms, and then assembling a tidy project plan on how to achieve them, simply does not apply. Emergent leaders signal that the principle of self-organisation is OK, and that the exploration of ideas to see where they lead is to be applauded, not constrained.
- **Exploring new territory** – too much thinking about possible solutions actually revolves around old ideas dressed up in a shiny new suit – or, even worse, a desire to revert to what was before. This is not to suggest that all old ideas should automatically be rejected. There is always the possibility that an old idea that did not

work well in the past might just be the answer now, in changed circumstances. Emergent leaders, however, always insist that new territory is explored.

- **Creating new knowledge** – much has been written about the 'learning organisation', and most of it has been ignored by too many senior people who are more concerned with status and power than investing in the development of a high-performing organisation. In a rapidly changing world 'running hard on the spot' is not an option if organisational longevity and growth are desired. The creation of new knowledge is a pre-requisite for the achievement of those goals, and this must apply to everyone in the organisation. Moreover, learning is not something that can be planned and achieved through yet another tidy project plan. It necessarily has to be organic and dynamic – in fact, a way of life. For new knowledge creation, two conditions are vital. The first is the sharing of knowledge across boundaries to solve problems. The second is comfort with the principle that learning only comes through failure. The iterative nature of analysis, design, implementation and analysis required for tackling wicked problems makes this essential.
- **Leaders as enablers, facilitators & coaches** – one implication of the observation that it is only operational people that deliver results concerns the role of leadership. Broadly, there are only two possible ways to go. One is the traditional 'command and control' model. The snag with this is that it is a mismatch with what is needed to tackle wicked problems. As there are no known solutions, it is a little difficult to identify what the leader is supposed to command. If emergence is a reality, 'control' also becomes challenging, since there are no measurable objectives and standards to use for 'control'. This just leaves the other option on the table – the 'enabling' option. The role of emergent leadership is to provide an environment in which operational people can get on with their jobs successfully, but that begs the question of the changes that are needed in the environment to enable it to happen. There is only way for emergent leaders to find out, and that is to go and ask the operational people what is needed. Since a lot of what will come back will focus on management structures, processes and practices, then what is being asked for is feedback. But this is implicit in the need for learning, and this applies to leaders as much as anyone else.

This all adds up to one simple observation. This is that the leader's key role is to ask challenging questions, including 'what ifs'. There are two complementary goals. One goal is to find patterns in the data describing the problem; use the collective intelligence built up through connections and relationships throughout the organisation; use constructive dissent to flush out new insights; and build comfort for people to explore the unknown and test innovative solutions. The other is to find out what leadership needs to change to enable other people to develop and implement novel solutions, all the while learning about the nature of the wicked problem and possible solutions.

Two tracks are better than one

These reflections about the role of the emergent leader suggest that there are connections with other research about what works and what does not work in respect of developing

excellent organisational performance.

Every wicked problem is an opportunity to gain a double advantage. This arises from the need for emergent leaders to implement enabling actions in parallel with the problem-solving actions of operational people. Both sets of actions imply a change in the way the organisation functions, including in its management practices and processes. Both may founder if the organisation is change-disabled. Logically, therefore, at least some of the enabling actions to be implemented by the emergent leader need to move the organisation along the spectrum from change-disabled to change-enabled. This will be a shift towards the organisation becoming more 'resilient'. Truly resilient organisations constantly adapt to a changing environment, either by reacting to current problems or by anticipating future problems. This, in turn, will mean an enhanced capacity for tackling future wicked problems. The neat trick here is to connect the two sets of actions.

This is actually easier to accomplish than it might, at first sight, appear. A 1989 research report⁴ concluded that the determinants of an organisation's position on the spectrum from change-disabled to change-enabled were the self-same management practices and processes referred to above.

The table on the next page summarises the characteristics of both change-enabled and change-disabled organisations. Using this table to perform a quick check of the current state of the organisation will quickly reveal its current position on the spectrum. If the left hand column is a pretty good description of the current state, then tackling wicked problems will come easy. If the right hand column is a better description of the current state, then tackling wicked problems is more likely to be a test of manhood than a comfortable way of life. In that case, perhaps it is time for a different type of leadership approach to be adopted, and the one we recommend is that of emergent leaders. That way, two related challenges can be met at the same time.

Here is a final summary of the set of characteristics of organisations that are highly desirable, if there is to be success in tackling wicked problems. People need to:

- Have better information to guide their decision making
- Engage in multiple, collaborative interactions with colleagues
- Network more effectively with colleagues inside and outside the organisation
- Feel safe to develop and try innovative, new ideas with colleagues
- Learn and develop through doing rather than just taking in information

A final thought. Whether it be against the bullet points noted above, or the 'resilient organisation' lists on the next page, it may not be a good idea to rely on your own observations about the current state. It would be an excellent idea to check with some of those operational people to see what their experience suggests. In any case, asking for and acting on feedback from the coal face is one of the behaviours of emergent leaders anyway, so no great departure there!

4 Managing change in the real world ~ TMEL

Change-enabled	Change-disabled
The organisation continually increases its capability to innovate in delivering quality products and services	The organisation tries to defend its market position by focusing on existing products and services
Risk acceptance - the risk involved in all decisions is assessed and managed – important business decisions are made quickly	Risk aversion - analysis paralysis – failing to make business decisions until certainty beckons - often when it is too late
Managers are the drivers and exemplars of open feedback and experiential learning	Managers are closed to feedback and experiential learning
Leadership is demonstrated and valued throughout the organisation	Leadership is assumed to be the responsibility of, and something that only happens in, top management
The organisation creates new and innovative ways of delivering value to customers – new and existing	The organisation mainly relies on conventional approaches for delivering products and services to mainly existing customers
Power to decide and influence important decisions is widely and openly distributed throughout the organisation	Power is held tightly by a small group of people, and it may be exercised covertly
There is a clear sense of direction in the business - everyone knows it, and their contribution to it	Few seem to know where the business is heading - it's a bit like wandering around, lost in the fog
Top management is acutely aware of the real external and internal environments - critical issues are anticipated / actioned	Top management is out of touch with the external and internal environments – fails to anticipate and action critical issues
Cross-functional working and temporary power coalitions for developmental actions and problem solving are the norm – the focus is on achieving the objectives of the organisation as a whole	The mud hut syndrome is alive and well – the focus is on achieving departmental objectives, even at the expense of other departments or the organisation as a whole
Managers tend to have an outward-looking, future-oriented, longer term focus on performance issues	Managers tend to have an inward-looking, backward-facing, short term focus on performance issues
The organisation values its people. They generally seek responsibility and opportunities to contribute to organisational success	People are not valued. They generally avoid responsibility and often only work above the norm if they are bribed (money) or threatened (fear)
Employee performance improvements generally arise through working with their managers to adapt job methods to meet changing needs	Employee performance improvements generally arise through working with their managers to raise standards in applying existing job methods
Time, energy and money are mainly invested in trying a variety of different, new methods for improving organisation effectiveness	Time, energy and money are mainly invested in optimising existing processes and practices for managing the organisation
Strategy development is influenced widely through the organisation - through an informal, emergent process	The business strategy is developed by managers and communicated formally, but gets little attention from employees
Challenging existing practices is common and new ways of working often start from a 'clean sheet of paper' and can be very different from existing practices	Challenging existing practices is rare, and new ideas generally start from 'current thinking' and are extensions of or modifications to existing practices