Risk practitioners' theories of risk and organisational vulnerability

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- Too simplistic to argue that failures of governance have occurred due to a culture of greed or a failure of regulation
- Routines, norms and habits define the culture of an organisation which interacts with roles of different types of risk professionals
- Study identifies six distinct patterns of assumptions or cultural 'theories' of how best to manage risk

Recent high-profile corporate failures, including those associated with the global financial crisis, have raised serious questions about the effectiveness of mechanisms for governance. These failures have been largely attributed to inadequate regulation or to individual or institutional greed. As a consequence they have triggered a wide rethink by governments of the adequacy of regulatory regimes. We argue that this is too simplistic.

For a start, these failures have come at a time when risk management has developed into a multifaceted activity with many different professionals focused on building organisational resilience and sustainability in the face of uncertainty. This has largely been pursued by instituting oversight mechanisms and procedures which should have detected individual or institutionalised malpractice. Risk managers and systems will only detect failures which fit their mandate or are consistent with what they were designed to detect. The novel, unique, unexpected and rare may still go undetected until too late. This is all the more the case if each risk professional has a narrow view and if there is no organisational capacity to draw on the diverse perspectives each brings. In this article, we argue that the collective culture of an organisation has blind spots brought about by the assumptions held by each subgroup and to the extent that one risk professional does not perceive or talk the language of others, or of their key stakeholders, these may diminish the effectiveness of the overall governance system.

Definitions

What do we mean by culture? We need to be clear that culture is something the organisation is not something it *has*.[1] Culture results from deeply embedded habits of action, shaped and reinforced by formal and informal aspect of organisation — from organisation structure, through human resources practices, as well as the historical and current styles of managers and staff at all levels.[2]

The dynamic patterns which characterise an organisation, and which we call culture, result from the complex interaction of many aspects of organisational design, including rules, policy and procedures, but more importantly managerial and staff sense-making and behaviour.[3] These patterns will, however, be shaped and maintained by just a few key drivers[4] that will be unique to the organisation's history and context.[5] If we have a culture of minimal or non-compliance, for example, we need to know what it is about how people think, what they do and how these habits of collective thinking and acting have become embedded in organisational systems and artefacts.[6] Together, these maintain that pattern and make it appear as rational, normal and perhaps inevitable — beyond the reach of individuals to change. The drivers of these patterns are deep and subtle, involving habits and norms beyond our awareness, especially difficult to notice and then change for those who live them every day.[7] Where attempts are made to influence a culture, it is often through action on the undesirable symptoms rather than the causes of the patterns, with limited insight into the underlying drivers. This type of activity will not support sustainable change [8] and the frequent result is that the culture reverts to the previously held patterns.

Changing culture does not lend itself to formulas, quick fixes or one-off interventions no matter how well supported or how well funded. Nor will changing rules and procedures necessarily have the intended effect. Rather, they may have unintended consequences, changing the nature of any non-compliance or leading those to whom they are directed to game the system in a new way. It is therefore necessary to intervene on multiple fronts at the same time and over an extended period, monitoring, learning and realigning the intervention design as deeper insight is gained about what keeps things as they are and where the opportunities are to exert a little pressure to get a large change. The approach will need to be based on an understanding of the organisational specific factors which maintain the cultural patterns.

Building cultures which are disposed to 'doing the right thing' is a challenge for boards and executive management. The remainder of this article explores the different ways in which the nature of risk is construed by different disciplinary groupings. The differences and similarities in approach highlight some of the cultural challenges associated with the introduction of new governance models, by illustrating different ways in which these disciplines interpret the risk and through extension enact a governance framework.

The study

To find out more about what cultural patterns exist in relation to organisational risk, we designed a study to identify manager's assumptions about 'how best to act' in response to different types of uncertainty. The study included respondents who were actuaries, auditors, strategic and operational risk managers, line managers, entrepreneurs, those working in structured finance related roles, as well as compliance professionals.

We asked each respondent to identify two personal experiences which had influenced their approach to risk, one where the risk they perceived was realised and one where it was mitigated. We then conducted in-depth interviews with them about these experiences. The stories the interviewees told could be from any facet of their life, and so represented a sample of both personal and professional risks they had taken. The crucial criterion was that the experience must have affected the way in which they approached risks subsequent to its occurrence.

The interviews provided input to a Cultural Sensitivity Analysis™, a proprietary method which combines qualitative and quantitative data about the individual's personal constructs and the circumstances of their experience. These distinct data sets are analysed to produce what can be called 'theories of risk', clusters of constructs and behaviours that recur and present a distinct pattern or approach to risk. The analysis therefore focuses on assumptions which are both shared within the group as well as held as important by each individual within that group. Six distinct patterns, or 'theories', emerged through the analysis.

The ability to understand which of these patterns exist in a particular organisation and what maintains them provides two key advantages:

- the best indicator of the way in which the organisation is likely to react in the face of uncertainty, particularly in an adverse or crisis situation
- guidance on how to improve the levels of stakeholder engagement about the amount of risk it is prepared to take in the execution of its strategy and achieving alignment around these.

This need for alignment is reinforced in the new ASX Corporate Governance Council *Corporate Governance Principles* (*2nd Edition*), and in particular 'Principle 3: Promote ethical and responsible decision-making'. The focus of this principle is not only on the behaviours of people but more importantly on their mindsets and worldviews.

To the extent that management judges that the response capability in these patterns is inconsistent with that required — given the organisation's current or future environment — or where there appear to be different parts of the organisation which operate with different assumptions about acceptable risk, a cultural change intervention may be required.[9]

Thinking about these patterns as theories is justified as they reflect the way in which individuals and groups make sense of their environment and explain and defend their decisions.

Findings

In this study, patterns were found to be strongly influenced by the individuals' risk appetites as well as their roles and the range and types of uncertainty which formed the focus of their decision-making. The theories and their defining characteristics are summarised in Table 1. No group of individuals surveyed subscribed to a single theory but rather exhibited a combination of influences.

Individuals employed these different 'theories' to varying degrees in mitigating the risks they recalled, creating different profiles for each of the functional subgroupings in our sample. These profiles will now be described in more detail. The accompanying diagrams show the degree to which different groups adopted a particular theory while managing the risks in their stories. Through the analysis, we distinguished the theories that were actually enacted by the interviewees (what they did), the theories they advocated (what they thought should be done) and those that they rejected (seen as an inappropriate way to manage the risk). The diagrams in the next section show the enacted profiles for each of the groups.

Table 1: Six theories of risk

Hyper-rational

- A methodical approach
- Need for evidence
- Desire to remove sources of uncertainty
- A concern for completeness of knowledge use of the past as a predictor
- A focus on rational analysis
- Professional (disciplinary) knowledge
- A need to know detail
- Need to follow rules
- Stay within the boundaries of authority

Designed automaticity

- Anticipatory
- Scenario-based
- Plan for contingency
- Balance of probabilities
- Reinforce routines
- Follow practiced routines
- Build response capability
- Collective interests

Abstracted

- A long-term view
- Gain alternative perspectives
- A lack of interest in detail
- A concern for the influence of organisational and team culture
- Stronger faith in existing relationships

Responsive

- Thinking strategically
- Thinking on one's feet
- Using direct experience as a source of insight
- Building a sense of agency in others
- Keeping options open
- A sense of optimism with no need for a safety net

Absolute values

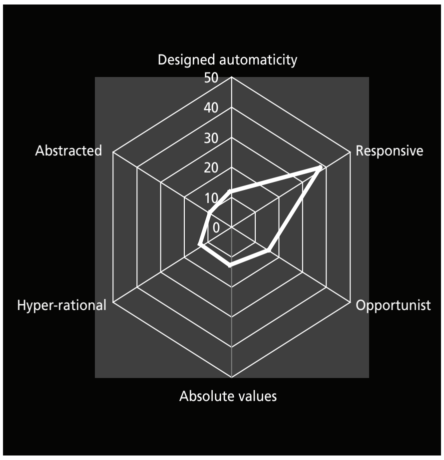
- Do what is right irrespective of circumstances
- Strong consciousness of responsibility
- A focus on independence
- A tendency towards pessimism

Opportunist

- A lack of trust of others
- A win at all costs attitude and
- A short-term perspective
- Preparedness to gamble

Operational managers

Figure 1: Operational managers' enacted theory



Operational and strategic managers had a similar profile dominated by what we have termed a responsive approach. This theory is characterised by the view that there is little value to be gained by prior analysis or planning on the grounds that risk events are unpredictable, or at least the risk that catches you out will be the one you did not anticipate. Those who enacted this theory also placed importance on acting in a manner congruent with personal values and beliefs. Consistent with this they showed a high level of willingness to 'back themselves' that they could handle the situation.

On the face of it, this theory appears appropriate in the context of situations with high levels of uncertainty, consistent with that predicted by theories of chaos and complexity applied to organisations.[10] These imply that many environments are sufficiently complex that they cannot be tamed by prior analysis.[11] The approach advocates maximising the organisation or individual's response capability without pre-committing resources to particular sources of risk.

The weakness of this approach is that it can involve managers assuming too much about their capacity to deal with the unexpected. Research into handling of crises, such as natural disasters or military skirmishes, shows that decision-makers in the field have limited capacity to process the complex, incomplete and often ambiguous or contradictory information typical of rapidly unfolding situations.[12] They easily succumb to cognitive overload. Cognitive research[13] also confirms that decision-makers make poor decisions under such circumstances unless the situation is sufficiently similar to those with which they have had prior experience, allowing them to construct a response framework on the run. If the situation being confronted is *genuinely* unique, they perform poorly.

Closer analysis suggests that there may be two variants of this theory:

- an egotistic one where the capacity to do whatever it takes is seen as located within the individual — the 'manager as hero'. This is probably its more dangerous form
- one when greater emphasis on building the agency of others. This approach is about building a deep capacity within the culture – one in which everyone is continually scanning for risks and acting to mitigate them and also ready and able to collaborate and learn in flexible ways to deal with a crisis. This carries fewer downsides as the problem of information overload is dealt with by the fact that there are many minds to share the load and an emergent heterogeneity of approach to limit groupthink. This later variant also harnesses the diversity of experience in the organisation and a deeper pool of relevant responses all combined through a capacity to learn by doing.

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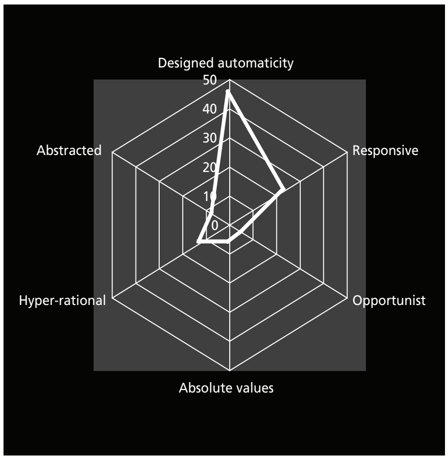
Emergency managers

Figure 2: Emergency managers' enacted theory



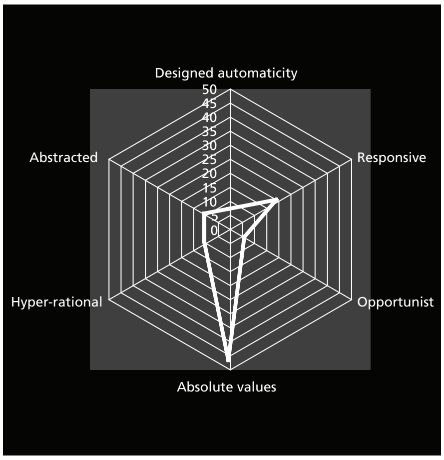
Crisis and emergency managers reflected a very different approach to that of their stakeholders, the operational and strategic managers. We call this approach 'designed automaticity'. In some cases this was combined with a significant degree of responsiveness. Designed automaticity attempts to address the problem of cognitive overload, or panic, by using rote learning of procedures to link the identification of risk with an appropriate response. The belief is that by identifying in advance what might happen, routines can be established or training undertaken to make appropriate responses a reflex action.

For example, this approach is clear in the training of air traffic controllers or pilots[14] and the armed services generally. Some emergency managers, particularly those with military or aviation experience, placed a great deal of emphasis on the value of this approach. Others blended it with responsiveness, recognising that there will always be residual uncertainty or variations in conditions, that need to be responded to as and when they occur.

The development of 'automated' responses was deeply internalised by those interviewed and can be seen as equivalent to the operational and strategic manager's learned approaches. The fact that they have become a reflex is their greatest strength (cognitive overload is avoided as there is no need to think) but also their greatest danger. To the extent that a crisis situation involves novel aspects or is unique, the hard wiring of response can limit the range of response which can be generated, making them ineffective or even harmful.[15] Many people trained in this approach may be unaware of the assumptions and scenarios for which they were designed and therefore unable to judge whether they are an appropriate response to the presenting situation.

Auditors

Figure 3: Auditors' enacted theory



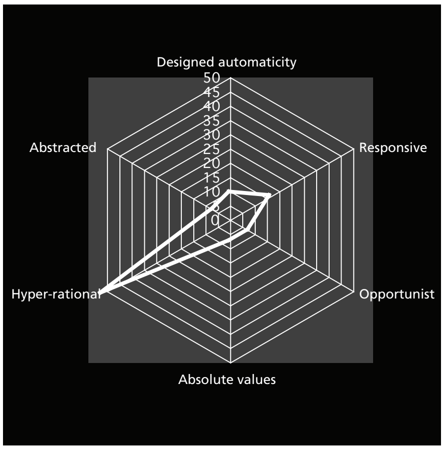
Auditors were characterised by a strong commitment to values. Unlike the operational managers who referred to a felt need to stay true to their personal values, auditors generally appealed to assumed universal values — there were right and wrong ways to do things no matter what the context. We call this the 'absolute values' theory. This view was underpinned by a willingness to step outside the bound of authority if necessary to ensure that the right thing was done. In the minds of some of their stakeholders, this amounted to a form of 'zealotry'.

Operational managers in particular saw issues in much more relativist terms and their acceptance of ambiguity and uncertainty meant also placing an emphasis on balancing conflicting demand – on adaptability and accommodation rather than standing by absolutes.

Given their statutory role, the auditor's standpoint is appropriate. The risk is an organisational one, where those seen as zealots are excluded from the decision-making circle due to an explicit or implicit rejection of the distinctive perspective they bring.

Actuaries

Figure 4: Actuaries' enacted theory

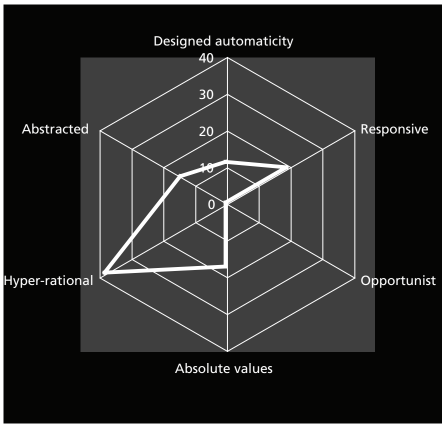


While the emergency managers and many auditors reflected at least some degree of the responsive approach, that is of the approach favored by their stakeholders, actuaries demonstrated the most single-minded approach, at least in terms of what they enacted. We have termed this approach 'hyper-rational' as it represents a commitment to the assumption that uncertainty can be tamed by rational analysis using past data and formal models. This group was distinctly risk-averse. This risk aversion, had a number of flow-on effects in the form of needing to know the detail, to follow rules and to stay within the boundaries of authority. Given their roles, much of this is appropriate. It is, however, limiting in that it restricts the actuary to dealing with uncertainties that respond to a particular form of analysis, that is where the future can be expected to unfold in a reasonably linear way and where past evidence provides a reliable means for estimating the future trajectory of a risk.

Given what we now understand about the implications of complexity and intrinsic uncertainty, this standpoint offers little at the enterprise level and, accordingly and quite reasonably, was often explicitly rejected as a useful and viable position by key stakeholders. All the actuaries in this study were aware of this and advocated the use of a 'responsive approach' although they did not frequently enact this approach themselves. As with auditors, at the very least, this marked difference in approach will present a barrier to acceptance at the decision-making table for this group. This may mean that the group's distinctive capabilities will continue to be applied in a narrow field even though there may be alternative ways in which the capability could be utilised by the organisation, as with more sophisticated non-linear modelling, for example.

Compliance officers

Figure 5: Compliance officers' enacted theory

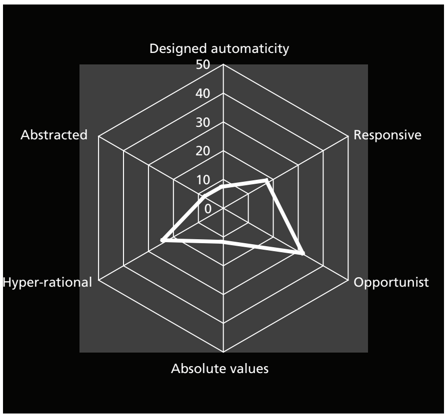


Compliance officers reflected quite a diverse set of perspectives. Overall, however, they had a low risk appetite and were similar in this regard to actuaries. Accordingly they were very motivated to avoid problems and saw risk almost entirely in terms of threat. Also like the actuaries, they most commonly enacted a hyper-rational approach, adopting a rational, methodical decision style, following rules and seeking to impose control while staying within the bounds of their authority.

The second most common theory was that of absolute values, although this was restricted to few respondents who showed a proclivity to independence and clearly communicating the organisational consequences of a risk. The ‘responsive approach’ was also evident. This was enacted in the case of the more experienced and advocated by the less experienced. The concern for responsiveness reflected an appreciation of the need to balance the demands of the business and the risk appetite of senior decision-makers with their own more conservative orientation. Among the less experienced, or in the stories recounted which related to an early career experience, compliance officers reflected more of an ‘abstracted approach’. This was primarily associated with a tendency to put faith in others and in systems which, with the benefit of hindsight, was attributed to naivety and inexperience.

Structured finance

Figure 6: Structured finance specialists’ enacted theory



The individuals in the study who primarily had a background in the service side of structured finance reflected the most diverse set of approaches. Dominant within this though were those of ‘opportunism’ and ‘hyper-rationality’. As described above, those who enact a hyper-rational approach placed value on past data and technical analysis. This group reflected a much lower concern

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with values than either the auditors or the operational and strategic risk managers. They also tended to reflect a lack of trust of others, a win-at-all-costs attitude and a short-term perspective with a willingness to gamble.

The ‘opportunist approach’ was the theory most commonly rejected by respondents. This rejection was near universal, being reflected across all sub-groups in the study, including — somewhat paradoxically — the structured finance subgroup. This group was most likely to reject opportunism when they were a victim of it rather than when they were enacting it, although in several cases, age and maturity played a part. In this latter case respondents who had been Opportunist had come to reject the approach in later life. Do opportunists offer a constructive role in organisations or, as most respondents reflected, is this approach always negative?

Former Prime Minister Paul Keating has argued that, at the level of the economy, the opportunistic hedge funds (funds largely run by this subgroup) help hasten market corrections. He argued that the probing of these opportunists helped test the economic system for resilience.[16] In so doing it prevented fundamental structural weakness from accumulating to the point where it could be catastrophic. In organisations, during rapid change and a collapse of existing business opportunities, perhaps opportunists have a role in breaking the established frames and unearthing new areas of potential business. If this is the case, the question still arises about how this may be constrained so that the upside can be realised and the downside — to which most of our respondents related — avoided.

Implications

Each approach has strengths and limitations. If integrated into organisational processes and decision-making, together they could contribute to the organisation’s capacity to maintain effective governance in the face of a wide range of external challenges. However, the research demonstrated that the necessary integration often had not been achieved. Indeed there was significant evidence that managers who held one theory actively rejected one or more of the alternatives, regarding it as invalid. This could support the development of political tensions and cliques within an organisation, reducing the contribution of each distinctive perspective in the organisation’s decision-making and creating an opportunity for non-compliant or inappropriate behaviour to go undetected.

Alternative theories of risk are grounded in deeply held assumptions and reflect embedded cultural norms. The effect on capability may not therefore be readily apparent. The cultural patterns will also manifest in ways which are quite specific to the organisation, its history and its context. Identifying them will therefore require organisation-specific analysis, intervention and monitoring over time.

The study has unearthed a number of issues which need further research as well as investigation within organisations. These are that:

- no single one of the theories identified through analysing the interview data can address complex risk environments that confront most organisations
- these different theories become associated with particular roles and represent a point of cultural division

which may limit the organisation's capacity to respond effectively to risk, even though it has within it a wide range of alternative perspectives

- the approach advocated by an interviewee as appropriate for the organisation, often reflected personal risk appetite and choice of profession rather than a reading of the nature and type of uncertainty the organisation needed to be able to confront. Nor were their views cognisant of the risk appetites of key stakeholders.

Our research suggests that many organisations are not well prepared for the conditions which now prevail and which influence every business. Complex and changing global environments offer significant opportunities for organisational growth but also bring new risks. Changes in industry regulation or organisational policy and procedures implemented without understanding how these interact with the 'soft' side of an organisation's culture may have unintended consequences. The problem of maintaining effective governance in the face of change is at least in part a cultural one rather than one of preparedness, resourcing, skill availability or procedural adequacy.

The evidence is that it is cultures which limit an organisation's ability to harness the diversity of different ways of understanding and responding to opportunity and risk and that these cultures manifest differently in different organisations. Hence, there are no universal solutions. It is imperative that organisations understand the nature of their risk culture and how it is likely to affect their ability to deal with the range and types of hazards they may encounter.

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Notes

1 Meek VL, 1988, 'Organisational Culture: Origins and Weaknesses, *Organisational Studies*, Vol 9 No 4, pp 453–473
2 See Dalmau T and Dick B, 1989, *From the Profane to the Sacred: Small Groups as Vehicles for Cultural Change*, Brisbane, Interchange; Dunford RW, 1992, *Organisational Behaviour*, Sydney, Addison-Wesley
3 Weick KE, 2001, *Managing the Unexpected*, San Francisco: Jossey Bass; Weick KE and Roberts K, 1993, 'Collective mind in organisations: heedful interrelating on flight decks' *Administrative Science Quarterly*, Vol 38, pp 357–381; Weick KE, 2001, Making Sense of Organisations, Oxford, Blackwell
4 Goldspink C and Kay R, 2003, 'Organisations as Self Organizing and Sustaining Systems: A Complex and Autopoietic Systems Perspective', *International Journal of General Systems*, Vol 32 No 5, pp 459–474
5 Goldspink C, Kay R and Preston A, 2008, 'Organisational Change: revealing the micro-macro patterns underlying social system dynamics in a financial services context', First ICC Workshop on Complexity in Social Sciences, ISCTE Lisbon, Portugal
6 Beyer JM and Trice HM, 1987, 'How an Organisation's Rites Reveal its Culture', *Organisational Dynamics*, Vol 15 No 4, pp 5–24
7 Schein EH,1985, *Organisational Culture and Leadership*, London, Jossey-Bass
8 Svyantek DJ and DeShon RP, 1993, 'Organisational Attractors: A Chaos theory explanation of why cultural change efforts often fail', *Public Administration Quarterly*, Vol 17 No 3, pp 339–350
9 Weick KE, 2001, *Making Sense of Organisations*, Oxford, Blackwell
10 Fulmer WE, 2000, *Shaping the Adaptive Organisation*, New York, Amacom; Pascale RT, 2000, *Surfing The Edge of Chaos*, New York, Texere; Stacey R, Griffin D and Shaw P, 2000, *Complexity and Management*, London, Routledge
11 Gilpin DR and Murphy PJ, 2008, *Crisis Management in a Complex World*, New York, Oxford University Press
12 Rudolph JW and Repenning NP, 2002, 'Disaster Dynamics: Understanding the Role of Quantity in Organisational Collapse', *Administrative Science Quarterly*, Vol 47, pp 1–30; Weeks MR, 2007, 'Organizing for Disaster: Lessons from the military', *Business Horizons*, Vol 50 No 6, pp 479–489
13 Lehrer J, 2009, *The Decisive Moment: How the brain makes up its mind*, Melbourne, Text Publishing
14 Weick and Roberts, op cit
15 Rudolph and Repenning, op cit
16 See Love D, 2008, *Unfinished Business: Paul Keating's interrupted revolution*, Carlton Vic, Scribe