Stealth Foresight for Innovation: Creating Support for Creative Change in Large Organisations in Australia

| **Tom Graves**
| **Tetradian Consulting**
| **England**

Abstract

Whilst large organisations need foresight, they are also notorious in their bias for short term thinking, sometimes rejecting or even suppressing foresight. This paper describes a variety of 'stealth' techniques to embed foresight methods and models within mainstream business and strategy-development processes as a means to support internal innovation and summarises experience gained in applying these techniques in Australia across a range of industries and government portfolios.

Keywords: stealth foresight, foresight techniques, practice, organisations, enterprise-architecture, constraints on practice

Over the past three decades, in my practice as a consultant, I have come to see organisations as complex organisms: they need foresight, and the ability to create innovative responses to their environment, if they are to survive and thrive in a changing world (Kurtz & Snowden, 2003). Systematic foresight practices can provide direction, drivers and contextual filters to underpin innovation from within. There are other paths to innovation, of course, but it does seem that without support from foresight, innovation suffers – and hence, in the longer term, so does the organisation itself.

That much should, I believe, be self-evident to anyone who does foresight work as part of their profession. Yet most foresight practitioners do their work as external consultants (Ramos, 2004). Hence what is perhaps not so self-evident from that perspective is how hard it can be to do foresight work from within an organisation, especially in large commercial or government organisations. From the 'insider' perspective, it can often feel that whilst organisations may need foresight, they rarely seem to want it!

Foresight practice includes not just the strategic 'long view' – or at least a greater timespan than the usual business focus only on the next quarter – but also participation, engagement, allowing

space for creativity and complexity, crossing boundaries, creating strange connections. It's about sensing weak signals, and sometimes paying more attention to those than to the strong signals nearby – behaviour which will not make much sense to a results-focused middle-management. In short, foresight practices can easily be seen as distracting, disturbing, disruptive: and being seen to be disruptive in business is a career-threatening move. As Andy Hines (2002) put it, from much personal experience, "If you're employed as a futurist, and you're not being fired at least once every two years, you're probably not doing your job properly...".

Yet even though it may feel dangerous to engage in 'foresightful practices', the business ultimately depends on that 'disruption'. So one strategy for doing futures work as an employee or a contractor within a business is to go undercover – in other words, to introduce foresight by stealth. I've used this approach often over the past couple of decades, working as a contractor on the fringes of IT in large Australian organisations.[1] I've also seen others do much the same in other aspects of these organisations, such as quality-systems, privacy-management, process-improvement and, of course, strategy.

So what is 'stealth foresight'? In essence, we take a standard strategy-review tool or technique, and rework it to embed within it true foresight capabilities: the long-view, support for emergence and natural complexity, participation, engagement, and so on. We need to make room for playfulness, for chance, intuition, the 'accidents' that drive so much of scientific innovation, for example (Beveridge, 1961). But we do this in such a way that, if necessary, we can still use the tool in the conventional way, and in the conventional contexts of organisational 'control'.

The classic example is scenarios. Back in the 1970s, strategy development focussed on variously-futile attempts to predict 'the future'. Arie de Geus, Peter Schwartz and others at Shell grafted onto that model the broader foresight concept of futures – plural, not singular (de Geus, 1997) – with the aim of developing preparedness to respond effectively to any emergent future. The rest, one might say, is history. And even though most texts still seem to describe scenarios as a simple 'tell me a story' for 'what-if' analysis (Open Group, 2006, chapter 34), the full power of foresight is available there when we need it.

Visioning is another example. As systems-theorist Peter Senge (1990) put it, "Where there is a genuine vision (as opposed to the all-too-familiar 'vision-statement'), people excel and learn, not because they are told to, but because they want to." Vision acts as the organisation's ultimate anchor, not only for pragmatic concerns such as quality-systems (ISO, 2000) and business-plans (BRG, 2005), but also for the 'soul' or 'spirit' of the organisation. To work well, it needs to be stable, singular, universal – a succinct, evocative description of a 'world' which includes yet extends beyond the organisation itself. "A sociable world" (brewers Lion Nathan) and "boundaryless information-sharing" (IT consortium The Open Group) (2007) are good examples, with immediate and practical applications: the vision clarifies desirable and undesirable characteristics for hiring and firing, and provides the end-point for a motivation 'audit-trail' to align business-activity to business-purpose (Graves, 2007a, p. 21).

Another approach to stealth-foresight came from my own work with large organisations. We can take the classic SWOT analysis – Strengths, Weaknesses,

Opportunities, Threats – and tweak it with a taste of foresight. The result is SCORE: Strengths, Challenges, Opportunities and risks, Responses and rewards, and Effectiveness (Tetradian, 2007c). The first four items are close enough to SWOT to keep analysts in their 'comfort zone', so that SCORE can, if necessary, be used as a direct replacement for SWOT. But the emphasis on overall effectiveness provides the necessary 'stretch' to enhance awareness of foresight, by rotating the awareness through five different perspectives: efficient, reliable, elegant – in effect, a 'people perspective' – appropriate, and integrated. This grounds the strategy in the immediate, the everyday – and in the engagement with individual people that makes it all happen. I've used this in practice for a wide variety of contexts, such as long-term knowledge-management for an engineering research laboratory, and data-architecture for a medium-sized energy provider (Tetradian, 2007c).

In many organisations, 'knowledge management' is regarded as a minor branch of IT: but the reality is that most organisational knowledge is embedded in people, as 'tacit' knowledge, and can never be made explicit enough to store in software or systems. As David Snowden (2000) puts it, "people know more than they can say, and can say more than they can write down". More importantly, such knowledge can only be volunteered, it cannot be conscripted (Drucker, 2000): any attempt at control may cost the organisation that knowledge. This again can be a valuable opportunity for the participative emphasis of stealth-foresight tactics. Social networks, narrative-knowledge techniques (Callahan, 2006), practical applications of systems-theory (Espejo & Gill, 2002), broader concepts of organisational complexity (Wikipedia, 2007; Cognitive Edge, 2007) and large-group interventions (Leith, 2003) such as Open Space (2007) have all been proven to help to create engagement, commitment, drive – and, in turn, a culture of innovation.

A practical application of this occurred in one of my contract roles for a major business-transformation project in a national logistics organisation. Such knowledge-management as existed there was strictly IT-based: not much more than a central glossary and a out-of-date, web-based handbook of standard practice. Working from the organisation's Functional Business Model (Tetradian, 2007b), and using a foresight-oriented adaptation of Stafford Beer's Viable System Model (Tetradian, 2007a, slide 14), we were able to identify that quality-management was poorly represented in the map of business functions. No great surprise there, as quality was a known problem for the organisation – yet little had been done about it in the past. The conventional approach, immediately suggested by a senior manager, was to call in an external consultant to develop new processes. The stealth-foresight approach which we used instead was to find the appropriate knowledge from within the organisation, using the social-networks to find existing 'champions' of quality-management. These people were committed, passionate – yet had been ignored, often even derided, by their immediate management. We created a simple framework – a combination of IT and social-network support, with some subtle protection from head-office where required – to build a nationwide 'community of practice' (Wenger, McDermott & Snyder, 2002) for quality specialists. We also used a variety of other tactics from elsewhere, such as Senge's 'Fifth Discipline' group (Senge et al., 1999) and the developments at BP by Collison and Parcell (2001). In this way the 'champions' became active intrapreneurs

for the organisation, sharing ideas from across different divisions and work-areas and creating a fertile ground for innovation in quality practice and process improvement.

These days my main area of work is in what's called 'enterprise architecture'. As with knowledge-management, it started out as a branch of IT, and is often described as such. More accurately, though, it's about the structure of the whole organisation – in effect, the organisation's knowledge of itself as a whole. Because it must deal with the whole, and with change at every scale from abstract strategy to low-level detail, the issues are not only complex, but emotive, disruptive, and highly political. To make matters worse, the industry's 'standards' – frameworks such as Zachman (ZIFA, 2007) and TOGAF (Open Group, 2006) – are firmly IT-centric: yet in large organisations the relationships between business and IT are often fraught, if not downright dysfunctional, which makes enterprise-architecture a perfect candidate for stealth-foresight.

To make the architecture work in practice, my approach has been to graft foresight characteristics onto the standard enterprise-architecture methods. For example, one simple tactic to create participation and engagement is to do much of my initial work for an organisation in the foyer café: visually-interesting diagrams scattered over a coffee-table are a good way to start conversations with people across all areas and levels of the organisation. Systems-theory frameworks are also useful here – the five themes of recursion, rotation, reciprocation, reflexion and resonance offer a means to describe and navigate through an organisation's complexity (Graves, 2007a, pp. 74-5), whilst an extended form of Stafford Beer's Viable System Model provides a comprehensive checklist to assess service-designs at every level (Tetradian, 2007a, slides 15-17). As documented in a pair of books (Graves, 2007a; Graves, 2007b), the result provides the organisation with a detailed knowledge of itself – expressed in practice as innovation in areas such as quality-management and system design.

Another practical example comes from our work with a large state-government department, where a small team of IT consultants were developing strategies for management of data-storage. They had taken a standard IT-style approach – divided the organisation into silos, and allocated fixed quotas of space according to the type of work done by the respective division – but the tactic was clearly not working, as staff frequently received flurries of system-generated warnings complaining that yet another file-server had run out of space. In our review, we used a disguised and simplified version of systems-theory to show that much of the organisation's work, and hence the storage needed, ran across divisions – and hence a strict silo-based model would cause more problems than it would solve. We also showed that the real issue was not technical, but social: the habit of sending large attachments via email to multiple recipients, and also the use of uncontrolled common storage for anything from personal photographs to shared copies of commercial software. Although reluctant to move out of their IT-centric comfort-zone, the consultants accepted that social engagement would need to be a major part of their solution, and were starting to put this into practice at the time my own contract there ended.

So stealth-foresight offers an alternative framework for introducing foresight methods or 'foresightful practices' into an organization at the level of design. Take any standard business technique or framework – particularly for a compatible area such as strategy – and look for suitable foresight tools which can be used to stretch its time-

horizon, its social horizon and so on: perhaps stretch SWOT with. Causal Layered Analysis (Inayatullah, 1998), for example, or change scenario-planning to emphasise not the 'stories' but the pathways that link them together (List, 2005).. To do so may be challenging not just to business managers, but even to some foresight practitioners: yet arguably "the only approach which does not inhibit progress (using whichever definition one sees fit) is 'anything goes'" (Feyerabend, 1975). Some care needs to be taken to ensure that the true power of the respective foresight tools are not 'diluted' and misused within the resultant hybrid techniques; but used appropriately, their effects can be foundational and cascading, providing a safe way to create greater awareness of foresight throughout the organisation.

The key take-away here is that in large organisations, foresight techniques and methods may need to be embedded, even subtly disguised, within everyday business tools and techniques. Stealth-foresight tactics provide employees and contractors with a means to do this, in ways that are unlikely to be seen as challenging or 'disruptive' by their management. If we want the breadth, inclusiveness and innovation of futures to be available to our organisations, and from within our organisations, stealth-foresight may perhaps be one of the best ways to make it happen.

Correspondence

Tom Graves
Principal Consultant
Tetradian Consulting (Europe and Australia)
12 Piper Road, Colchester, Essex CO3 3SF, England
Email: tom@tetradian.com

Notes

1. Some details intentionally withheld, for commercial confidentiality – please contact the author for additional information if required.

Reference

Beveridge, W.I.B. (1961). *The art of scientific investigation*. London: Heinemann Education Paperbacks.
Business Rules Group [BRG]. (2005). Business motivation model. Retrieved August 13, 2007, from http://www.businessrulesgroup.org/bmm.shtml
de Geus, Arie. (1997). *The living company*. Longview Publishing.
Callahan, Shawn. (2006). Ultimate guide to anecdote circles. Retrieved August 13, 2007, from http://www.anecdote.com.au/ Ultimate_Guide_to_ACs_v1.0.pdf
Cognitive Edge. (2007). Retrieved August 13, 2007, from http://www.cognitive-edge.com
Collison, Chris & Geoff Parcell. (2001). *Learning to fly: Practical lessons from one of the world's leading knowledge companies*. London: Capstone.
Espejo, Antonia & Antonia Gill. (2002) The viable system model as a framework for understanding organizations. Retrieved June 11, 2002, from http://www.phrontis.com/vsm.htm

Feyerabend, Paul. (1975). *Against method: Outline of an anarchistic theory of knowledge.* Atlantic Highlands, N.J.: Humanities Press.

Graves, Tom. (2007a). Real enterprise-architecture: *Beyond IT to the whole enterprise.* Colchester: Tetradian.

Graves, Tom. (2007b). Bridging the Silos: Enterprise-architecture for IT-architects. Colchester: Tetradian.

Hines, Andy. (2002, May). Presentation to Australian Institute of Foresight. Melbourne: Swinburne University.

Inayatullah, Sohail. (1998). Causal layered analysis: Poststructuralism as method. Futures *30*(8). pp. 815-829.

International Standards Organisation [ISO]. (2000). ISO-9000:2000. Retrieved August 13, 2007, from http://en.wikipedia.org/wiki/ISO_9000

Kurtz, Cynthia & Dave Snowden. (2003). The new dynamics of strategy: Sense-making in a complex and complicated world. *IBM Systems Journal 42*(3), 462-483.

Leith, Martin. (2003). Leith's guide to large group interventions: How to use large group intervention methods and collaborative gatherings to address complex strategic issues. Retrieved July 18, 2003, from http://www.martinleith.com/documents/lgiguide.pdf

List, Dennis. (2005). Scenario network mapping. Retrieved August 15, 2007, from http://www.audiencedialogue.org/scenario.html#snm

Open Group. (2006). The open group architecture framework (TOGAF). Retrieved August 15, 2007, from http://www.opengroup.org/architecture/togaf8-doc/arch/

Open Group. (2007). Retrieved August 15, 2007, from http://www.opengroup.org/overview/vision-mission.htm

Open Space. (2007). Open Space. Retrieved August 15, 2007, from http://www.openspaceworld.org

Ramos, Jose. (2004). *Metascanning foresight in Australia: A review of practitioners and organizations*. Melbourne: Australian Foresight Institute, Swinburne University of Technology.

Senge, Peter M. (1990). *The Fifth Discipline: The art and practice of the learning organization*. Random House. p. 9.

Senge, Peter et al. (1999). *The Dance of Change: The challenges of sustaining momentum in learning organisations*. Nicholas Brealey Publishing

Snowden, David. (2000, July). Story circles and heuristic based interventions. *Knowledge Management 3*(10), 15-19.

Tetradian Consulting. (2007a). Architecture as system: Enterprise architecture, service architecture and the Viable System Model. slide 14. Retrieved August 15, 2007, from http://www.tetradian.com/download/tet-vsm.pdf

Tetradian Consulting. (2007b). How to create a functional business model. Retrieved August 17, 2007, from http://www.tetradian.com/download/fbm-visio2003.zip

Tetradian Consulting. (2007c). Introduction to SCORE. Retrieved August 13, 2007, from http://www.tetradian.com/download/intro-to-score.pdf

Wenger, Etienne, Richard McDermott & William M. Snyder. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston: Harvard Business School Press.