2010

Refresher on horizon scanning and scenario planning for Environment Waikato

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March 2010

The purpose of this document

This document is intended to refresh participants' knowledge about two important strategic thinking techniques: horizon scanning and scenario planning. These techniques, when used appropriately allow policy analysts, strategists, and senior decision-makers, amongst others, to identify and consider strategic issues that might otherwise be neglected. It also allows an organisation to:

A. Test assumptions that underpin important plans and investments

Thinking and acting strategically involves being able to plot a course of action that leads to results in light of opportunities, obstacles and change. Strategic action involves ensuring activity is undertaken in the right way at the right time to achieve the desired outcome.[2]

In government, a principal raison d'être underpinning futures, critical, creative and strategic thinking is that we test assumptions held – at an individual and collective level. Understanding our images and beliefs about the future helps us make wiser decisions today, and helps foster a sense of empowerment and responsibility towards future generations

B. Discuss how best to manage inevitable surprises (they can be managed)

There are no facts about the future.

We can be more certain about some aspects of the future than others and we can control some aspects more than others (p. 8).

The most disruptive surprises – good and bad – come from aspects of the future that are both unpredictable and uncontrollable.

Horizon scanning and scenario planning complement other strategic thinking and planning processes undertaken by organisations; they are not replacements for them. Teams and people responsible for policy analysis, corporate planning and, to some extent, strategy typically have a greater focus on more immediate and longer-term problem-solving. Scenario and scanning teams are focussed on providing the 'heads up' to change. Like other strategy methods and approaches, these two methods embody the **'easy to learn, hard to master'** dictum.

Figure 1: Focus of attention
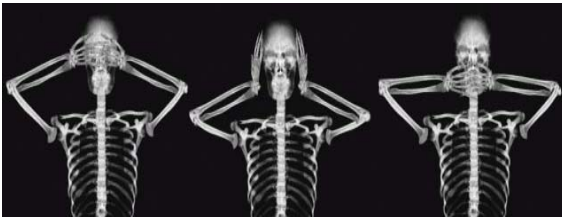
'It is often the case that we focus our attention on things we know well; the things that we know we know. However, it is the factors that we know little about that take us by surprise, often leading to strategic failure. We are not looking at them because they are not prominent in our organisation and therefore do not become part of the conversations within the organisation.'[1]

Horizon scanning

Horizon scanning has a long tradition of use in governments, businesses, not-for-profit and international organisations and groups to help senior decision-makers, strategic or corporate planners, communications specialists, policy writers and others to: (1) identify emerging issues or issues relevant to strategic decisions that they may have missed; (2) to explore, critically judge and exploit information coming in to and within their organisation; and, (3) examine known issues with fresh eyes. The process of horizon scanning helps organisations to develop a more holistic understanding beyond a business-as-usual mindset.

The literature and experience suggest that organisations that use horizon scanning are better able to achieve a balance between exploration (discover new opportunities or research into ways of solving intractable problems) and exploitation (doing what you do better over time) . Structured horizon scanning has, according to Sohail Inayatullah, both a forecasting utility – it provides information on potential futures; and a disruptive dimension – it calls into question our assumptions about the present. Together, with other forward-looking methods and approaches structured horizon scanning leads to improved advice being delivered to key decision-makers.[3]

Adopting a structured approach to 'minding' and 'mining' the abundant information available to them will help organisations better understand the context which the organisation has to operate in and decide which ideas are worth taking seriously, worth planning for and investing in and which ideas to be wary of. Scanning has stimulated conversations and provided some additional evidence about how to respond to difficult circumstances. It has also provided indicators that can help senior executives determine the course and timing of new initiatives under uncertain conditions – should we '**watch and wait**' or should we '**believe and lead**.'[4]

Twenty-two economic heavyweights at the British Academy, including the Treasury permanent secretary Sir Nick Macpherson, met in December to discuss ways to develop an early warning capacity as a result of an exchange that started last summer when the Queen asked 'why no one had predicted the credit crunch'. Correspondence sent to the Queen following the meeting, explained the need for less complacency and more horizon scanning. '*There is a need to develop a culture of questioning in which no assumption is accepted without scepticism and a sufficiently broad array of outcomes is considered.*' 'Horizon scanning may explore novel and unexpected issues, as well as persistent problems or trends.[5]

For example in the United Kingdom, government-sponsored horizon scans have informed policy such as the 'Healthy Weight, Healthy Lives: a cross-government strategy for England' and lead to development of co-ordinated action plans, for key stakeholder from across and outside Government, on coastal and flood planning (http://www.foresight.gov.uk/index.asp).

Horizon scanning involves '*the systematic examination of potential threats, opportunities and likely future developments which are at the margins of current thinking and planning. Horizon scanning may explore novel and unexpected issues, as well as persistent problems or trends.*'[7]

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A key challenge for such scanning in a public service environment is to address what Dr Wendy Schulz calls a 'cultural contradiction', based on her work with the UK's largest Horizon Scanning Unit within the Department for Environment, Food and Rural Affairs (DEFRA): The 'cultural contradiction' is that good strategic thinking requires early detection of possible emerging trends and issues and yet when issues are emerging there is little evidence for them. A further cultural challenge arises in that evidence-based decision makers are used to scanning certain types of 'reliable' literature whereas emerging issues are often detected in 'fringe' literature that is not always peer reviewed or credible.[8]

The purpose of scanning systems is simply to find early indications of possibly important future trajectories and developments to gain as much lead-time as possible. Overall, horizon scanning is intended to improve the robustness of [the Department's] policies and evidence base.'

A good horizon scanning service draws attention to organizations' blind spots, surfacing untested assumptions about how the world works, reduces the prominence of organizations' confirmation and status quo ('if it ain't broke...') biases and negates, to some degree, the sunk-cost effect.

Figure 2: framework used to determine areas of the periphery to scan[6]

Horizon scanning services should help start conversations about:

- What is driving this (new situation)?

- What is happening now in the broader environment that matters or that could matter in the future?

- What are we not looking at that we should be looking at?

- What are other ways of looking at the situation?

- What are the implicit assumptions in our current thinking that we need to question?

Horizon scanning processes will help organisations address a range of 'hidden' strategic thinking flaws that have been identified by behavioural economists[9], organisational behaviour specialists like Karl Albrecht, and Columbia University's Centre for Research on Climate Decisions (CRED) [10], amongst others. [11]No horizon scanning system will be able to eliminate all uncertainty.

Scenarios

The seeds of the future exist today. The decisions we make today create tomorrow, and those decisions can be influenced by deepening insight into the complex question of what kind of future each decision would help to define. [12]

Scenario planning arose as a way to deal with increasing complexity and uncertainty, which is the nature of our modern world. A useful definition of uncertainty is *not knowing which forces and trends really matter*. Scenarios have been described as: *stories about how the future might unfold for our organisations, our issues, our nations, and even our world*. Scenarios are not predictions but thought-provoking and plausible stories about multiple ways that the future might evolve and the sorts of challenges and opportunities that it might pose.

Scenarios are not primarily about those aspects of the future that are within our control or which are to a large degree predictable. They focus on those elements of the future that are important, uncertain and beyond our ability to control (Figure 1). The term 'critical uncertainties' describes these elements.[13] The relatively certain aspects of the future are not forgotten, however. They are included in the scenarios along with a range of other aspects, both certain and uncertain. The purpose of developing scenarios is not to pinpoint a single future but to experience multiple futures and to learn from all of them.

In a review of scenario planning around the World, Dr Peter O'Brien, previously Director of the Bureau of Rural Sciences in the Australian Government and now Managing Director of the Rural Industries Research and Development Corporation, wrote:

> '*Scenario planning takes users beyond the tactical and deterministic, to embrace the uncertainty of 'what if'. The future is unknowable, but we routinely take decisions now which will play out in an uncertain future. Approaches which systematically focus our thinking on that uncertainty improve our capacity to take decisions now. Our plans are our intentions and our best intentions will take account of uncertainty, be flexible and will play out well in a range of possible futures.*'[14]

The time and resources devoted to scenario planning theory vary widely between practitioners, companies, and applications. For example, Royal Dutch Shell and the Global Business Network tend to adopt detailed and deliberate approaches to scenario planning, taking as much as 2 years for one iteration of the process.

Figure 3: Surprises can be managed

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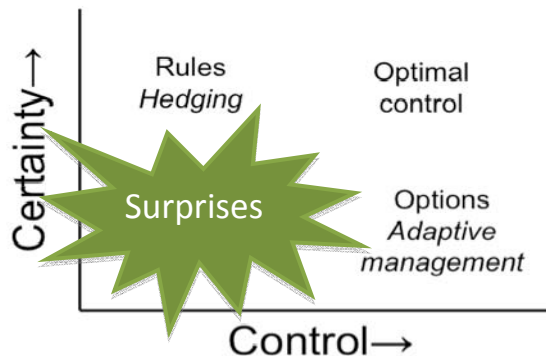
On the other hand, other practitioners believe that it is important to move quickly and get through a first iteration of scenario planning within a few months once organisations decide to start thinking about change. The Henley Centre in the United Kingdom has observed that when groups are not used to doing scenario planning it is advisable to allow them to see an end product quickly so they feel comfortable that the approach is useful. In this way enthusiasm and commitment can be maintained and it is more likely that people will participate in subsequent iterations to refine and deepen their thinking.

To be useful scenarios must be relevant, challenging and plausible; they should be internally could and consistent and based on credible interpretations of today's reality. They should also be creative and compelling enough to engage the imagination. They challenge assumptions, raise awareness of underlying factors and stimulate participants into fresh thinking about what could happen and what it would mean for them. They offer both a new perspective on events and a framework for constructive discussions. Scenarios are more robust when their development involves a diverse range of stakeholders

Building the scenarios

Scenario thinking is both a process and an ongoing approach to strategic thinking. The process begins by considering factors that might bring about change in the world, such as technology, social change, and environmental change. It then moves on to consider which of these factors are most critical and uncertain and explores the implications of these 'critical uncertainties' as they combine in different plausible ways to create a range of possible futures. The process works best when the imagination of participants is stimulated early on so that divergent and new ideas are created. But it is also important once these new ideas have emerged that the process is completed by bringing the thinking together with a focus on the real-world challenges that stakeholders will face here and now.[15] [16]

Figure 4: think out before you think in
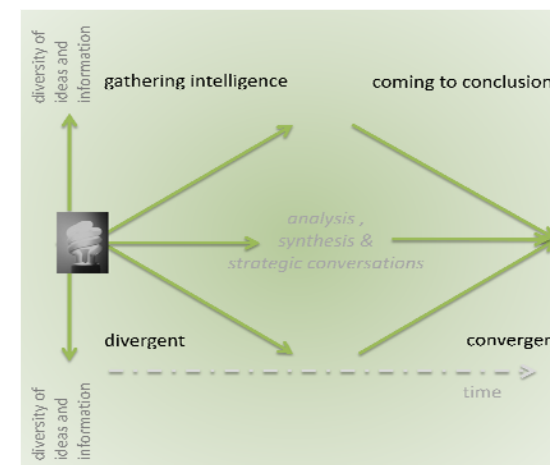
Scenarios enable us to emphasise or draw out different aspects of the future to see more clearly the opportunities and challenges we might face. We can try to nurture the things we want to keep; to shape the future. Conversely, if we allow bad things to happen they might prompt future difficulties.

The goal of scenario construction is to increase the breadth of options considered in an organisation's or individual's strategic thinking; to see flaws in an organisation's positioning or its planning assumptions; and, to encourage broad strategic thinking rather than detailed tactical solutions. Scenarios invite us to be sceptical of conventional wisdom; to look for hints about how things are not what they seem; to appreciate random effects may influence us. And, finally, scenarios are designed to stretch our thinking about the opportunities and threats that the future might hold, and to weigh those opportunities and threats carefully when making both short-term and long-term strategic decisions.

The 'strategy' result of a good scenario planning process is the realisation that this policy, program, process or that regulation needs to be introduced, shored up or abandoned.

Remember that scenarios will not:

- Make the decisions

- Begin an unstoppable course of action

- Ever be entirely right (although elements of each scenario could be)

- Persuade everybody

Any particular scenario is unlikely. However, the features of scenarios are both possible and uncomfortable. Scenario planning should help policy/decision-makers anticipate hidden weaknesses and inflexibility in organisation structures, policies and/or methods. In essence, well-constructed scenarios should deliver a broader and more insightful basis for decision-making which allows participants to identify (new) options for action.

Finally, each scenario should accurately depict how the system actually functions. For instance, a scenario that describes the economic crash of a country should be an accurate description of the sequence of events that would have to happen for a particular outcome to occur. This part of the process can often be a very powerful one as participants gain a richer understanding of how key systems function and why they sometimes break down/fail or deliver unintended consequences.

Anyone can create scenarios. But it will be much easier if you are willing to encourage your own imagination, novelty, and even sense of the absurd—as well as your sense of realism.'

Peter Schwartz, co-founder of the Global Business Network

Eight Steps to Develop Scenarios

Step 1	Formulate the Strategic Question
Step 2	Indicate important external factors that may influence 'success or failure' when addressing the issue
Step 3	Identify additional driving forces that influence the factors of step 2
Step 4	Rank the factors according to their impact and uncertainty
Step 5	Select the forces that are most uncertain and important
Step 6	Describe a story (a 'scenario') about the future for each combination of the selected forces
Step 7	Determine the implications for the strategic question or issue in each of the scenarios
Step 8	Select indicators and early warning signs to monitor

Learning from the scenarios

More useful time can be spent on the questions raised by basic scenarios. Place less emphasis on elaborate, detailed scenario construction and more on the strategic conversations about trends and drivers, how they might play out over time and what this means for the people and organisations involved. This focus will allow the organisation to further develop their understanding of the logic and the machinery that governs their fate – for example, understanding 'inevitable surprises'.

Learning from the scenarios is the crux of scenario planning. Typically, discussion themes around the scenarios can be broken down into three areas:

1. That which is surprising to us about each scenario (which really gets into what the scenario teaches us about our perspective and mental models)

2. What knowledge gaps did we discover (the areas in which we need more research

End Notes

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[4] Adapted from Day, G. S. and P. J. Schoemaker (2006). <u>Peripheral Vision: Detecting the Weak Signals that Will Make or Break Your Company</u>. Boston, Massachusetts, Harvard Business School Press.

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[12] Delaney, Kate (2009) Scenario Learning Concepts for Regional Development Victoria, Melbourne, RDV. Most of this section is based on a paper prepared for a scenario planning project undertaken last year.

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