



Foresight: an introduction

A Thinking Futures Reference Guide

Thinking Futures

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A THINKING FUTURES REFERENCE GUIDE

Foresight: an introduction

Maree Conway





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Maree Conway
Thinking Futures
Melbourne, Australia
<http://thinkingfutures.net>

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Dedicated to those people who are ready to think in new ways about their possible futures.

You cannot create the future using the old strategy tools ... The big challenge in creating the future is not predicting the future; instead the goal is to try to imagine a future that is plausible, that you can create.

—CHARLES HANDY

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Introduction

When I was called into the Vice-Chancellor's office at Swinburne University where I was working in 1999, I knew it was about the future of my role – we were in the midst of a major restructure. He asked me to manage a new university planning unit and almost as an afterthought, he said 'and we'd like you to do foresight'. I had no idea what he was talking about – not that I told him that! I went back to my office and did a google search to find out more. I was lucky enough to have time over the next six months to immerse myself in the foresight literature and to have the advice of Richard Slaughter when he arrived at Swinburne to set up postgraduate foresight courses. I was even luckier to employ Joseph Voros in 2000 as a Strategic Foresight Analyst and to be exposed to his amazing mind as we designed how to do foresight at Swinburne. Unfortunately, not everyone is that lucky.

This book is the Guide I wished I had to read when the Vice-Chancellor asked me to do foresight. It provides a broad overview of foresight – what is it is, some fundamental principles, methods, what using foresight in strategy development means and some lessons from the field.

What I write here is based on my experience using foresight with people in organisations since 1999. It reflects the methods I use and the industries in which I have worked. The context of my work is strategy development but foresight approaches can be used for a range of activities such as community visioning, technology road mapping, government policy development and individual futures.

My aim here is to provide you with an introduction to the field that lets you get to know foresight and to understand the value of using it, rather than give you the detail about how to 'do' foresight in organisations. My Strategic Futures Guides available on the Thinking Futures website provide that detail for each of the major foresight activities – designing a framework, environmental scanning and strategic thinking to explore possible futures.

Terminology

Like any field, foresight has its own jargon. There are levels of depth in foresight work and the jargon increases in complexity and abstractness as you increase the depth of knowledge and practice. Foresight is very closely associated with the term *futures* and the two terms are often used interchangeably. I prefer to keep them separate as I've defined them here.

Foresight is the capacity to think systematically about the future to inform decision making today. It is a cognitive capacity that we need to develop as individuals, as organisations and as a society. In individuals, it is usually an unconscious capacity and needs to be surfaced to be used in any meaningful way to inform decision making, either as individuals or in organisations. It's a capacity we use every day.

Foresight Infused Strategy is strategy developed using foresight approaches. It has people at the core of these processes and collaboration as its main process. It is strategy that links the known about the past and the present with the unknowns of the future to create stronger, futures ready strategy.

Foresight Practitioners: I prefer this term because my experience has shown me that *futurists* unfortunately comes with connotations of prediction and crystal balls, as unfair and unreasonable as that may be. In addition, anyone can call themselves a futurist – it's a common term appropriated by anyone who wants to use it, as opposed to academically trained futurists.

Futures refers to the broad academic and professional field now developing globally as well as research, methods and tools that are available to us to use to develop a foresight capacity. The term 'futures' should be viewed as a collective noun, in the same way that we talk of 'economics' or 'politics'. The term is always plural, because there is **always** more than one future to consider.

Futures Ready Strategy is flexible strategy that positions your organisation to respond quickly and effectively to the challenges and uncertainties of the future. It is strategy built on long term thinking. Futures ready strategy is designed with the future at its core and allows proactive responses to change to be developed and implemented today, or at a time in the future when a response becomes appropriate.

Futurists: those who do foresight work as academics, consultants (outside organisations) and as practitioners within organisations.

Futures/Foresight Approaches: the tools, methods and thinking styles used to build an organisational foresight capacity, usually interdisciplinary and inclusive rather than restricted to a particular philosophy, discipline or method.

Strategic Foresight: an organisational foresight capacity that informs the development of strategy, the development of which happens when there is a critical mass of foresight aware individuals in organisations.

No matter what term is used, those who work in this field share two things: a commitment to using the future to inform action today and an acceptance of responsibility for future generations.

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About Foresight

Foresight is first and foremost a state of mind that determines how you think about the future. It underpins how you design foresight approaches and how you implement them in your organisations. It needs ways of thinking and doing that are unlike those required for conventional strategic planning processes.

Foresight is therefore a strategic thinking capacity. Done well, it expands perceptions of future options available to the organisation and enhances the operational context in which strategy is developed. Its use allows new strategic options to emerge and proactive responses to change to be developed. Done less well, it usually generates an interesting experience but there is little change to how strategy is developed or the understanding of the scope of change shaping the organisation's future.

Why should we bother infusing foresight into current strategy approaches? Primarily because the future will not be more of the same or business as usual, tweaked around the edges. Intuitively we recognise that because we know change is all around us, and we owe it to ourselves and to those who follow us to understand as best we can the shape of possible futures that might emerge *before* we make strategic decisions today.

Short term and long term thinking

Conventional strategic plans will usually have a page on the external environment and a vision of the future as part of their contents. In most cases, the 'future' is around 5 years hence and therefore focused on the short term. Foresight approaches use a longer term 10 to 20 or more year time frame to facilitate thinking that moves beyond the boundaries of convention and the status-quo.

It can be quite difficult for people to deal with much beyond the short term future however, if minds are closed to the potential of what *might* happen rather than the tangible *what is*. If people are overwhelmed with the busyness of today they will not be able to see a space in their schedules to be able to devote time to thinking about change and its implications.

Short term thinking allows people to remain within their comfort zones. They can subconsciously convince themselves that the future will be more of the same as a way of coping with what's going on around them. Innovative thinking and futures ready strategy development does not emerge from comfort zones. And thinking you are happy in your comfort zone – which is a comment I do hear in workshops - is a dangerous place to be when disruptive change is all around your organisation.

Which is why 10-20 years in the minimum time frame for foresight work – taking people away from the conceivable present stretches thinking and takes them into new spaces where new thinking emerges. The constraints of the present are removed and people have permission to think in new ways about their work and their organisation. This is still uncomfortable though because it's an unfamiliar space. A key success factor in my foresight work is whether one of more participants say 'my brain hurts' at some stage during the project. This is a sign that their thinking is being stretched beyond the conventional.

The current belief in data driven or evidence driven decision making also exacerbates our inability to deal with more than the short term future. There are no future facts - there are no data about the future and crystal balls don't work, don't matter how many people make prediction lists every year. Those wedded to data and evidence as the basis for decision making about the future will generally have a difficult time seeing any value in exploring the future, yet as Ian Wilson, a US scenario planner says:

'However good our futures research may be, we shall never be able to escape from the ultimate dilemma that all our knowledge is about the past, and all our decisions are about the future.'

While the past and present will undoubtedly shape the future to some degree and some artifacts from the past and the present will persist into the future, what we see as reasonable today is unlikely to be seen as reasonable in the future. Basing our decisions about the unknown and uncertain future only on information from the past and the present is shortsighted and will result in strategy that fails when it meets the future.

We need to be clear about the timeframe in which we are operating when doing foresight work because that will influence both the choice of methods and the outcomes achieved, as well as the degree to which participants think in new ways about the future or whether they remain trapped in the present. Whatever time frame is chosen, it must be more than 10 years.

Foresight Principles

Using foresight approaches in organisations comes with a set of underlying principles that define what thinking about the future means. Ask a group of futurists and foresight practitioners what they think these principles are though and you will get a long list. Here are the principles that I use in my work that were largely formed for me while working at Swinburne University.

- *The future does not yet exist* – foresight explores ideas about and images of the future. There are no data about the future and extrapolating what we know about the present is seldom useful. Today's data are essential but so are our imaginations about the possible – images and ideas that are underpinned by knowledge, experience and expertise are a valid data source.

- *The future is not predetermined, inevitable or fixed.* There are alternative futures – always. Conventional planning approaches assume a single linear future and result in ‘bet the farm’ strategies, the equivalent to crossing your fingers and hoping you are right. Using foresight approaches encourages deep understanding of the range of alternative futures always available to an organisation *before* strategy is developed.
- *The future is uncertain and not predictable – we have choices today.* As listed on Page 30, attempting to predict the future can result in smart people making predictions that turn out to be very stupid in hindsight. Spending time to think about what is changing and the implications for your organisation will allow sensemaking that helps promote futures ready strategy and move your focus beyond prediction to engaging with future uncertainty.
- *There is always more than one future whether preposterous, potential, possible, plausible and preferable.* Using foresight in strategy development usually focuses on the preferable future. You will only arrive at an understanding of what that is however, by working through the other types first, reducing the scale as your understanding of what matters for your organisation increases in depth.
- *Futures outcomes can be influenced by our action or inaction today.* We can and should take action to move towards a preferred future or to mitigate an undesirable future. Inaction however, means ending up in someone else’s future and in that case, you have no option but to deal with whatever you get.
- *We are all responsible for future generations – every decision made today affects them.* For me, this principle is the most critical when doing foresight work. We use foresight in strategy development to craft robust strategy today *and* to ensure we do no harm to future generations. The two are not mutually exclusive.

A Foresight Framework

The Generic Foresight Process was developed by Dr Joseph Voros while we were working together at Swinburne University. Figure 1 shows the process and indicates clearly that there is a structured and integrated process for using foresight in strategy development. Using foresight is not an add-on or an optional extra if you have time – it needs to infuse strategy development from the very beginning of the process.

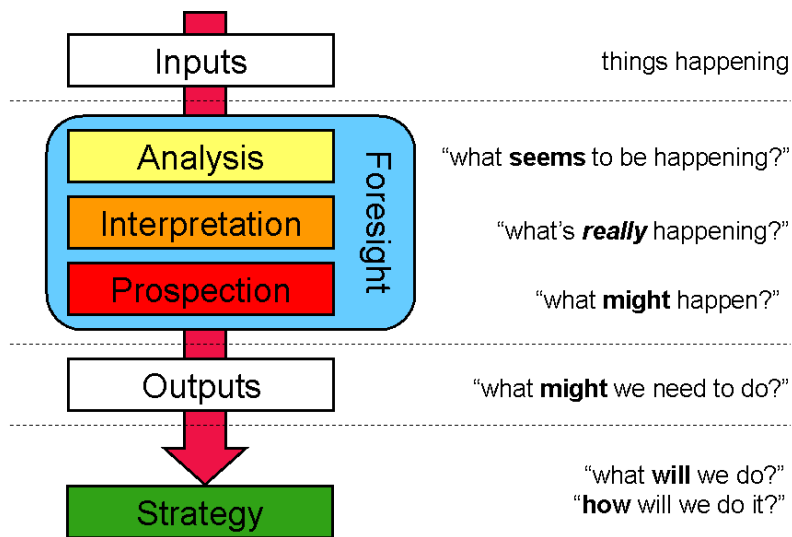


Figure 1: Generic Foresight Process (Copyright Joseph Voros 2000)

It's this process that structures how I design my foresight approach around three major activities: environmental scanning, strategic thinking and taking action today. These three activities together are the primary steps in Foresight Infused Strategy Development. This term recognises that foresight doesn't replace existing processes but rather enables thinking about the future in new ways to be integrated into those processes and becomes the norm. Foresight is infused into strategy development.

There are of course other ways of describing how to use foresight in practice. Table 1 provides a summary of four other frameworks – and there are many others.

Table 1: Some Foresight Frameworks

Author	Name	Process Steps
Avril Horton (1999)	A successful foresight process	Inputs (collection, collation and summarizing) Foresight (translation and interpretation) Outputs and Action (assimilation and commitment)
Peter Bishop and Andy Hines (2006)	Thinking about the Future: Guidelines for Strategic Foresight	Framing Scanning Forecasting Visioning Planning Action
Wendy Schultz (2006)	Key activities of integrated foresight	Identify and Monitor change Assess and Critique Impacts Imagine Alternative Outcomes Imagine Alternative Outcomes Envision Preferred Futures Plan and Implement Change
Michael Keenan (2007)	Five mental acts (stages) for Foresight	Understanding Synthesising and models of the future Analysis and selection Transformation Action

At its most basic what we are asking people to do when we ask them to use foresight is to:

- i. expand their perceptual horizons to *look more broadly* to see what's changing,
- ii. *think* more deeply about the implications of that change, explore how it might evolve over time, and identify a wider range of possible strategic responses and actions, and then
- iii. *decide* on what to do today.

No matter what terms are used and how many discussions are held about the 'right' or 'appropriate' terms to use, foresight is at its core about understanding change to develop an deeper insights about the future relevant to your organisation's context to inform strategic decision making today.

Challenging Assumptions

One of the hidden obstacles in developing a foresight capacity, or even using a method on a single occasion, is that you will be challenging the status quo – both in terms of where the organisation is and what it does and how people think about the future of their organisation. The status quo is underpinned by assumptions about how the world will evolve into the future. This is why you will need to work on shifting assumptions that, while they seem very appropriate and reasonable today, may not be appropriate or reasonable in 10 or 20 years.

Challenging assumptions is uncomfortable for you and others because it asks you to question deeply held and unquestioned ways of making sense of the world. Even if presented with information that challenges those assumptions, people often don't change them because they can retreat to the 'that's rubbish' or 'that will never happen' response. Our brains are covert supporters in this process because the pattern recognition processes that underpin our thinking are based on attempting to deal with new information by matching what you are seeing or hearing to what you have seen or heard before. You need to build new thinking patterns to think about the future in new ways and foresight processes, done well, will help you do that.

If you get those responses like "that's rubbish" or "that won't happen", then you are hitting what I call assumption walls and some unrecognized blindspots. If you get a response such as "we don't have the time to do this" or as one senior manager was fond of saying when he didn't agree with something, "I'm not sure I understand what you are getting at", you are probably running up against organisational politics. You need to be alert to both challenges when convincing people of the value of using foresight.

Andy Hines (2003) writes that while "futures work is really all about challenging worldviews or epistemologies ... the number of organizations, particularly corporations, intellectually ready for this is very, very small." Unquestioned assumptions and the status quo can constrain the degree of openness of an organisation to new information and new methods of strategy development. Influencing decision making is the ultimate aim of using foresight but influencing the minds and assumptions of people who make those decisions will be a very real challenge. Influencing long term strategic decision making involves understanding the degree to which organisational leaders have an open mind and are willing to explore what value a strategic foresight capacity might have for their organisational strategy, and whether they are willing to receive new information

that might conflict with their mindsets. The reality is that there is not much point having a strong process and methods if senior leaders and managers place little value on using the outcomes.

A strong process *is* important because it places people in a new context that frees up thinking. Underpinning that thinking, however, are *always* unquestioned assumptions and cognitive biases that will influence how people respond to the images of the future that emerge – that is, whether they view those images as credible or rubbish. The quality of the process won't matter if these assumptions and biases about how change might shape the organisation's future aren't surfaced and challenged for future relevance and usefulness. And that won't happen unless you have organisational support to use foresight. People will go back to their desk thinking that the process was fun and different but they are unlikely to change anything about how they work and how they think, and they will maintain status quo thinking.

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About Foresight and Strategy

Strategy is about the future, but as I mentioned in Chapter 2, most information used to inform strategic decision making today is derived from the past and the present, or by extrapolating current trends into the future without challenging the assumptions upon which that information is based. Foresight approaches allow organisations to systematically explore their potential futures over time and begin to understand how external imperatives and challenges may play out for them over time. The intention is to craft strategies today that are relevant and robust for longer periods of time. The aim is to consider what *might* happen before strategic decisions are taken, so that an organisation can be better prepared for the impact of the now inevitable rapid changes in its operating environment.

Organisations that carve out time and allocate resources to explore future uncertainties by infusing foresight approaches into their strategy development processes will build more robust strategy. They will be futures ready and better prepared to deal with any challenges the future might bring them. After all, the aim is not to predict the future, but to avoid getting it wrong. The first step is to move beyond conventional strategic planning.

Rethinking Conventional Strategic Planning

Because foresight is a cognitive capacity it infuses existing processes with a futures perspective to a degree that just isn't present in formulaic and conventional strategic planning.

Conventional strategic planning is often defined as an all-encompassing process that includes scanning the environment for change, strategic thinking, strategic decision making about future options, documenting and implementing plans and then monitoring of outcomes. These stages overlap and blur, but conventional strategic planning tends to focus on producing tangible plans rather than on the thinking processes that informs the plans.

As a result 'planning' becomes the whole game, encompassing everything from thinking about the future, decision making, writing plans, and then monitoring and reporting on those plans. But, strategic planning is not about planning strategically and as Henry Mintzberg (1994) suggested, the term itself is an oxymoron. Strategy is about the future while strategic planning is the way we go about developing a plan to implement that strategy.

I see the following issues with conventional strategic planning processes:

- they assume tomorrow is going to be more of today – they develop a single 'default future' which is usually a linear extrapolation of the present,
- they usually don't include any processes for systematically exploring the long term future of the organisation – they develop plans for 3-5 years out and that's not long term,
- they can't cope with the unexpected – they often lack the flexibility to deal with unexpected changes in the external environment,
- they tend to rely heavily on quantitative data which suggests a single outcome, and dismiss the validity of more qualitative data,
- they miss potential innovation and strategic options because they don't challenge organisational assumptions and ideologies about doing business now and into the future – they bypass the opportunity to spend some time in the future to test whether what they do today will be relevant in that future.
- they downplay or dismiss staff hopes, fears and beliefs about the future – they usually don't include any systematic processes for listening to the views of staff **before** a plan is written.

Because there is a general acceptance of what strategic planning means, what it involves and what it produces, there is often a reluctance to change it by introducing foresight processes which might be seen as lacking the same amount of literature, case studies and consultants. When I am involved in integrating a foresight approach into existing planning systems, I am often told that "I see no point in this" or "our plan is clear and documented" or "we consider the future in our thinking already – why do we have to do this?" What they mean is: I don't want to change and we know where we are going and we don't need help. But any mention of the future in their plans usually results from an ad hoc environmental scan so they can write a page about their external context, which then allows them to tick the box to satisfy the strategic planning requirement that the future has been considered.

Conventional strategic planning processes cannot be viewed as taking the future into account unless there is a defined stage in those processes that allows systematic exploration of change over time, of alternative futures and of alternative future strategic options. And at the risk of being repetitive, those processes need to be designed to surface and challenge assumptions, beliefs and ideas about the future to ensure people use their foresight capacity and not their hindsight to inform their thinking.

The Future Doesn't Belong to Senior Managers Alone

Managers, leaders and CEOs are not paid to admit they are uncertain about anything, and they often have a strong emotional investment in the status-quo that they helped to build. So they create plans that pay lip service to the future and the ask staff to comment on their plan when it's almost too late to change. This may be an exaggeration but it's increasingly clear that conventional planning focused on the executive suite and that's based on certainties without a strong foresight approach is no longer enough. Strategic planning as we know it has passed its use by date.

Using foresight involves moving strategy development beyond the realm of senior managers only to the rest of the organisation and moving it beyond decisions made by those senior managers and feedback on a fait accompli strategic plan sought from staff. Instead of strategic thinking being quarantined to specific roles, strategy development becomes an open process accessible by people in the organisation. Value is placed on seeking multiple inputs into strategic thinking and challenging rather than reinforcing deeply held assumptions about change and the future.

Including staff in this way does require preparation and time to gather information and run processes not usually included in conventional approaches. More work is not often welcome when you have a planning method in place that seems to work. Yet it is staff in the organisation who will implement the plan and who are the ones conventional approaches will assume will implement whatever the plan says. Including staff in more authentic ways and involving them in crafting the organisation's future will result in more effective implementation – because they will be able to see themselves in that future.

Developing processes that provide opportunities for staff to be involved in strategic thinking processes is a positive sign of an organisation being serious about using people focused foresight approaches. Some ways to facilitate the use of those approaches across an organisation are:

- provide all staff with opportunities to hear about changes affecting the organisation and provide information about those change – on a continuing basis,
- provide all staff with opportunities to share their views about the future given that organisational change – on a continuing basis,
- schedule regular 'thinking workshops' during the year for people to come together to talk and change and the future – thinking is work too,
- look for patterns, gaps and trends in the views of staff and senior managers about the organisation's future – there will be commonalities as well as differences, and
- involve people in strategy workshops at the level of the organisation most relevant to their roles and expertise – move beyond the conventional off site, once a year planning workshop to continually seeking input.

These are only a few ideas. How you bring people into strategy development will depend on how your organisation operates and its current culture will be a major determinant of how you design these processes.

But, strategy developed with this sort of open input *will* be stronger than if strategy is viewed as the province of senior managers only. Remember that strategy without people is strategy without a future.

Foresight Infused Strategy

For strategy to be infused by foresight then, the current model of strategic planning needs to be reconceptualised into four separate, distinct but interdependent stages each with its own approach and methods as shown in Figure 2.



Figure 2: Four Level Strategy Development Process
(based on the Generic Foresight Process, Voros 2003)

How do you put this process into practice?

Environment scanning seeks information about change to provide input into the other stages. The quality of that input is directly related to the quality of outputs, so scanning is a critical step in the foresight process. Organisations may think they are ‘doing’ environmental scanning and casting their net widely, but unless that scanning is embedded in a foresight framework, the activity is usually focused on what is known about the past and the present and perhaps, what you know you don’t know. Many people talk about reading newspapers as a scanning exercise and it is, but it presents a very narrow and very filtered view of the world. The aim of scanning is to broaden and open up the process to identify a wider range of information about change.

Strategic thinking is about developing a deeper understanding of change to inform identifying, imagining and understanding possible future operating environments for your organisation, so you can use that knowledge to expand your thinking about your potential strategic options in order to make better informed decisions about action to take today.

Strategic thinking requires time to be set aside on a regular basis to think and talk collaboratively about what is coming over the horizon, how it might affect your organisation, what your possible responses are, and when you might need to take action. This stage is about identifying the widest range of possible and plausible strategic options rather than replicating today’s strategic options. It’s the divergent thinking stage of strategy development and is the time for strategic conversations.

It’s also the step that is often forgotten or done quickly because people are time poor, because thinking happens in our heads, and conventional approaches don’t often provide ways to share that thinking. To share thinking you need structured processes to allow people to share their views, hopes and fears about the future. In a data driven, metric obsessed world however, this type of activity can’t produce immediate quantifiable outcomes and so is often not viewed as a useful way to spend time.

Yet, if you don’t spend time thinking about change and how it might change the way you do business in the future your strategy will be flawed from the beginning and you will spend a lot of time reacting to change rather than being proactive. Table 2 shows the difference between dealing with change in reactive and proactive thinking modes.

Table 2: Reactive and Proactive Strategic Thinking Modes

Reactive Strategic Thinking Mode	Proactive Strategic Thinking Mode
What just happened?	What is happening?
What caused it to happen?	What is driving the change that we see happening?
	What alternative futures might emerge for us?
How will we respond?	What ought we do today?
	What would be the long term consequences of our actions today?
What will we do?	What will we do?

The reactive strategic thinking mode will probably be familiar to most people in organisations today. Using foresight will move strategic thinking into the proactive domain because it starts with the future and possibilities and links thinking back to today’s decisions. Scenario planning/thinking/learning is a good tool for this stage since it moves you beyond the certainty of today’s business-as-usual approach to understanding the uncertainty and complexity of the future. It’s also well documented and well understood as a process so is a useful method to use when you are starting out with using foresight.

Defining a preferred future is still ultimately the realm of the Board or CEO who make the decision about strategic direction, ideally only after a defined and organisation wide open strategic thinking process has informed that decision.

Strategic planning is focused on documenting action, measures and accountability and ensuring that action is completed. This level of strategy should never be set in stone, as the external environment is always changing and changes to agreed actions will probably always be needed. Indeed, in some contexts, a plan in the conventional sense may not even be needed.

The focus at this level is not on producing a glossy, expensive publication which becomes an artifact rather than something that informs action today. Its focus is on ensuring people know what the preferred future is and how they can contribute, both as individuals and departments. I have a theory that the usefulness of a strategic plan is connected directly with the degree of gloss given to that plan – the higher the gloss, the lower the usefulness of the plan.

About Foresight Methods

The chapter uses the Generic Foresight Process shown in Figure 1 on page 6 to organise discussion about foresight methods. The Generic Foresight Process helps to identify and separate out the stages that precede decision making about possible strategic options and preferred futures – that is, the environmental scanning and strategic thinking phases of strategy development. There are four types of methods corresponding to each foresight stage:

- input methods - what is happening out there?,
- analytic methods – what patterns are emerging?
- interpretive methods - but...what's really happening?, and
- prospective methods – now, what might happen?.

Most conventional approaches will use input and analytical methods and some form of interpretive method. Most will also omit the prospective stage where alternative futures are explored. Only if each of these four types of methods are employed however, can we begin to say that we have considered the future in our strategy development. Using methods from each of the four stages on a regular basis is the way to infuse strategy development with foresight.

It is the combination of input, analysis, interpretation and prospection methods that enables organisations to craft futures ready strategy. Using one method on its own without a foresight framework in place may be useful in the short term. Many organisations do environmental scanning but the focus of the scanning is often mainstream sources rather than the periphery where emerging signals of change emerge. Likewise, I know many people who have picked up a book on scenario planning, followed the steps, and run what they consider a successful process. Using these methods in isolation will probably be interesting and somewhat challenging, but will contribute little to challenge assumptions about how the possible futures might emerge. Both the choice of method and the way it is applied is critical if meaningful outcomes are to be achieved.

Choosing a Futures Method

The choice of methods can be related to the personal preferences of a practitioner but the foresight maturity of the organisation is the primary determinant of method choice. Some methods are good for organisations starting out with foresight while others are suitable for people who have been exposed to foresight approaches for some time.

Foresight practitioners need to have a toolbox of methods that suit the context in which they are working, the purpose of the particular activity being undertaken and the desired outcomes. The methods described in this section are the ones I use most often. Figure 2 shows the Foresight Diamond (Popper 2008) which illustrates very clearly the wide range of methods available depending on the particular context and needs.

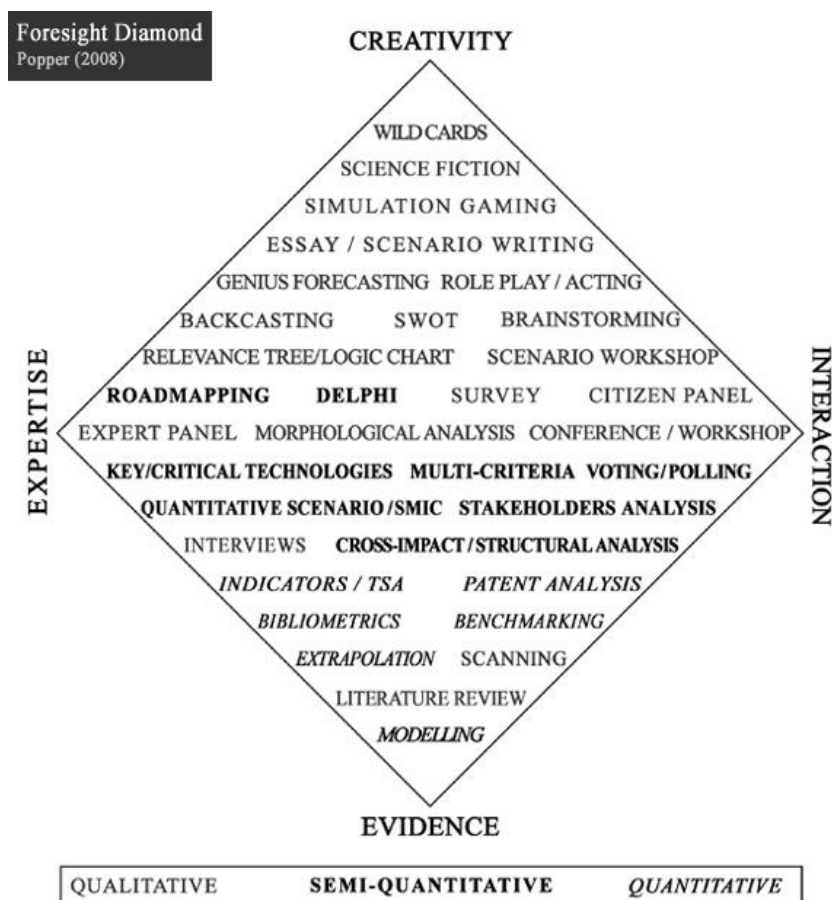


Figure 3: Foresight Diamond

Input Methods

Input methods focus on the collection of high quality information about change in the external environment likely to affect your organisation into the future. The question being asked here is ‘what’s going on out there?’ or ‘what’s happening?’

Delphi

Delphi is essentially the polling of experts, over a number of rounds, to generate consensus about a particular topic or issue. Delphi is useful where a high degree of credibility is required and where uncertainty is involved. The key question to ask here, as with all methods, is what image of the future is generated in this scanning output? And, whose voice is not being heard in this process?

Japan has been using a Delphi approach for many years, and produces quarterly reviews on science and technology trends. It is a well understood and familiar method. I would use Delphi in an organisation just starting out with foresight, or as an adjunct to environmental scanning.

Environmental Scanning

The best known input method is environmental or horizon scanning. Environmental scanning is the art of systematically exploring and interpreting the external environment to better understand the nature of trends and deep drivers of change and their likely future impact on your organisation. It is the foundation for high quality strategic thinking that informs the development of futures ready strategy for an organisation.

Understanding and interpreting the change occurring in your organisation's environment is the first step in building a strategic foresight capacity. Environmental scanning is the tool that lets you identify the change you need to pay attention to and gives you the information base you need to do meaningful strategic thinking.

Scanning is the core of successful strategy design. As the first step in your strategy processes it gives you the time to think not only about what change will be relevant for your organisation both today and into the future, it also informs thinking about how to develop and implement possible responses to that change before it become a reality.

Most organisations will be able to talk about their environmental scanning, although approaches vary between individuals and organisations. Even though it is a well-known activity, it is doubtful whether there is a common definition of just what environmental scanning is. Many people think that reading the newspaper is scanning, while others think that networking with colleagues at a conference is sufficient to say they have done an environmental scan.

Indeed, while these approaches gather information about the environmental external to the organisation, they yield very limited information which is not already in the mainstream, and its quality is limited to the quality of the source. In addition, the people doing the scanning need to be aware of the ways in which their own worldviews condition their scanning, and that they are likely to miss critical or otherwise useful pieces of information simply because their habitual ways of filtering information and cognitive biases do not allow them to 'see' that information.

During his time as a Strategic Foresight Analyst at Swinburne, Joseph Voros edited a number of scanning publications. The text below, reproduced with his permission, is extracted from an FAQ he prepared to explain the purposes of one particular publication, the Foresight Snippets (which are no longer published) and explains the value of scanning in strategy development.

By definition, strategic scanning involves looking for what are known, in the foresight profession, as “weak signals.” And because they are weak signals, they may seem to have little or no bearing on “here and now” and may therefore not seem useful (when seen from within the context of the hurly-burly of our day-to-day rush to do our daily work).

The judgement of “usefulness” arises as a result of the (mostly unconscious) filtering of the world which we all undertake most of the time we are awake. This filtering process is certainly very important –it stops us from becoming overwhelmed by detail and data. But this filtering process also creates what are known as “blind spots” in our view of the world. We each have different filters operating and therefore we each have different blind spots. In an organisational setting this collection of blind spots can have disastrous implications for strategic thinking and strategy-making – just read some of the optimistic business plans for companies which were making slide rules in the late 1950s, for example!

In essence, the job of strategic scanning is to interrupt our daily thinking, break us out of routine views of the world and how it may be changing, and, frankly, to smack up against some of the blind spots which we all possess.

Analytic Methods

Input methods generate a lot of information about change. Analytic methods are then used to make sense of that information for the organisation and its context. The question asked here is “what seems to be happening”. It is the stage of looking for patterns across often disparate information sources and presenting them in ways that work for your organisation.

Trend Analysis

Trend analysis is a well-known analytical tool and can be quantitative and/or qualitative. It should be always contextualised in the environment that has produced the trend. In foresight work, trends are not the end game, but one input into the development of what I call a change ecosystem that includes changes at a number of levels – personal, local, national and global.

Trends should be analysed whenever possible using both hindsight and foresight. Analyse the connections and trajectory of the trends you are exploring in the past for as long as you want to explore how they might play out into the future. If your future time horizon is 20 years, then explore the trends and predecessors for 20 years into the past. This will generally avoid the tendency to anchor your thinking about the future on your experience of the present and you might be able to spot some meta-historical patterns that have the potential to reoccur. Remember too that trends do not exist in isolation. They exist in an ecosystem with connections and influencers. Extrapolating a single trend into the future is rarely useful.

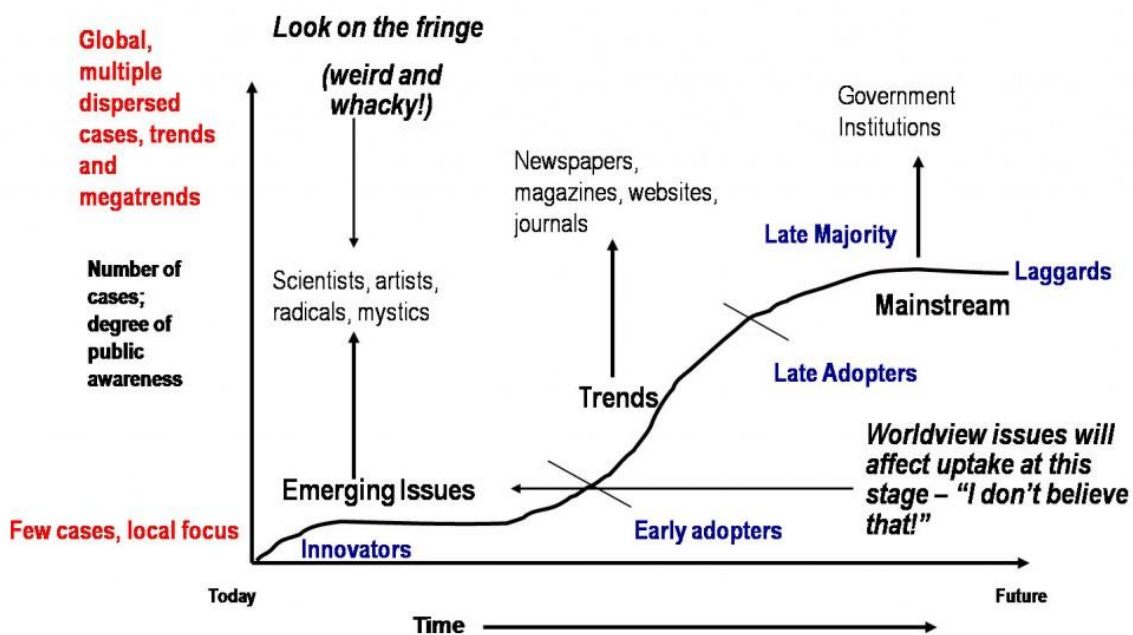
Trend analysis is big business. There are thousands of people and organisations that will sell you trend reports for a lot of money. These are useful as a starting point but have drawbacks because they are not customised for your organisation’s context and you need to trust the people or organisation doing the scanning. These reports provide general content about change in the external environment. How those trends matter for your organisation – their potential impact and your potential impact – can only be determined by you.

Emerging Issues Analysis

While trend analysis is looking for issues that are about to gain in strength, emerging issues analysis seeks to identify change at the periphery that have not yet emerged fully. Here, attention is paid to the weird and the wacky, to the seemingly ridiculous. Equally, issues that are disturbing or provocative should not be dismissed because they do not ‘fit’ with current management wisdom.

Emerging issues are identified through the environmental scanning process, which is why that process needs to focus not only on mainstream trends but also the periphery. Scanning frameworks need ways to identify and include the ‘blindspots’ of an organisation; scanners need to look for issues and trends that can transform current thinking and paradigms. You need to be looking at the work of scientists, artists, radicals, and even mystics – where you don’t normally look.

Many emerging issues will not become trends but if they do their potential impact on an organisation will need to be considered. So, how do you identify an emerging issue? When a particular issue or phenomenon appears on your scanning ‘radar’ three times, it’s probably worth adding it to the list of things you need to monitor for a while to see what comes of it. It’s important, therefore, that scanners have a good database in which they record their scanning ‘hits’.



Adapted from the work of Graham Molitor, Wendy Schultz and Everett Rogers

Figure 4: Life Cycle of a Trend

Figure 4 demonstrates the life cycle of a trend (based on the work of Graham Molitor, Everett Rogers and Wendy Schultz). It shows that all trends emerge at the periphery as an emerging issue. The point here is that scanning needs to focus on all three areas – emerging issues, trends and mainstream to achieve a more comprehensive coverage of change shaping the organisation’s future.

Forecasting

All analytic methods are to some degree forecasting methods. They can be both quantitative and qualitative in approach. As a quantitative approach it has little value beyond the short term future, particularly if the outputs are framed as predictions. A projection, on the other hand, suggests something that is possible rather than certain, although demographic projections are an example of a forecast that seems to hold true over the long term. Quantitative methods include extrapolation and econometric approaches, while megatrends are an example of qualitative forecasting. With any forecasting, there will always be blindspots, but there is danger with quantitative methods because they can be extrapolations of the past, rather than explorations of the future. Qualitative approaches are better able to take account of blindspots in their projections, particularly where entirely new paradigms emerge rapidly (eg in technology). And remember that forecasting is not about predictions.

Cross Impact Analysis

Cross impact analysis explicitly explores the impact of events and trends on each other. The events and trends being investigated should be those that have been identified as the ones that are expected to have the most impact on the futures being considered. This is primarily a quantitative technique, but can also be qualitative if done as a group task – rather than having a computer run the analysis, people in the group discuss probability and degree of dependencies. Cross impact analysis is frequently used in conjunction with the Delphi method, and is also used as part of scenario development to explore how future trends and issues might play out over time.

Interpretive Methods

Interpretive methods take analysis one step further. The question asked here is “what’s really happening?” The aim is to challenge the categories of analysis, to question and test the meaning of the data that has been analysed, to dig below the surface to begin to really understand what drives change and how your organisation might respond. Interpretation is first undertaken by individuals as a group so the cognitive biases, filters and lenses of the individuals doing the interpreting need to be overt in the Analysis process.

Part of the challenge of interpretation is to have an open mind and be alert to that natural tendency to dismiss things because they don’t ‘fit’ with how you see the world. If you are open to testing the validity of something that sounds like rubbish, you might just find out it isn’t rubbish and could indeed be an important factor in your strategy development. If you have a closed mind, you will miss this new factor altogether, either because you just won’t see it, or you will see it and dismiss it as rubbish. Interpretative methods are designed to move us beyond the immediate reaction to an issue or problem and to probe deeper into its real meaning.

Depth and Layers

A key concept at this stage is that of layers. For example, Richard Slaughter (2004) writes of four layers of futures work:

- pop,
- problem-oriented,
- critical, and
- epistemological.

Pop futures work is superficial and media friendly “eminently marketable, but largely bereft of theory or insight”. This is the realm of the ‘techno-wow’ we see in Sunday newspaper magazines. Problem-oriented futures work has a practical focus, addressing issues of immediate concern. Most futures work occurs here, probably because of the connection with the present, and this is the realm of much futures work for business. Critical and epistemological futures work looks at the deep assumptions underpinning action, moving beyond the obvious and superficial to look at the very foundations of social life.

Depth in the practitioner is also a factor in the quality of interpretation and of outcomes. Part of this depth involves practitioners understanding their own worldviews and their ability to see other perspectives and approaches as equally valid as their own, not dismissing them because they don’t fit with conventional wisdom. The ability to move between levels of depth is also important in ensuring choice of methodology appropriate to the particular context in which you are working – the concept of tuning your transmitter to that of the receiver.

Causal Layered Analysis

Causal Layered Analysis (CLA) was developed by Sohail Inayatullah (2004). He writes that CLA draws from poststructuralism, macrohistory and postcolonial multicultural theory. It is a method that aims to create spaces in which alternative futures can be explored by exploring the meanings we give to data and information, and its cultural ‘boundedness’. There are four CLA levels:

- litany,
- social causes,
- discourse/worldview, and
- metaphor or myth.

CLA starts with the most visible and obvious beliefs and assumptions about a problem or issue, and then probes beneath the surface to explore underlying causes, worldviews and myths. This allows alternative solutions to be identified in ways that might not have been possible if the litany had been the only level of discussion (eg if we based our planning around newspaper and media stories).

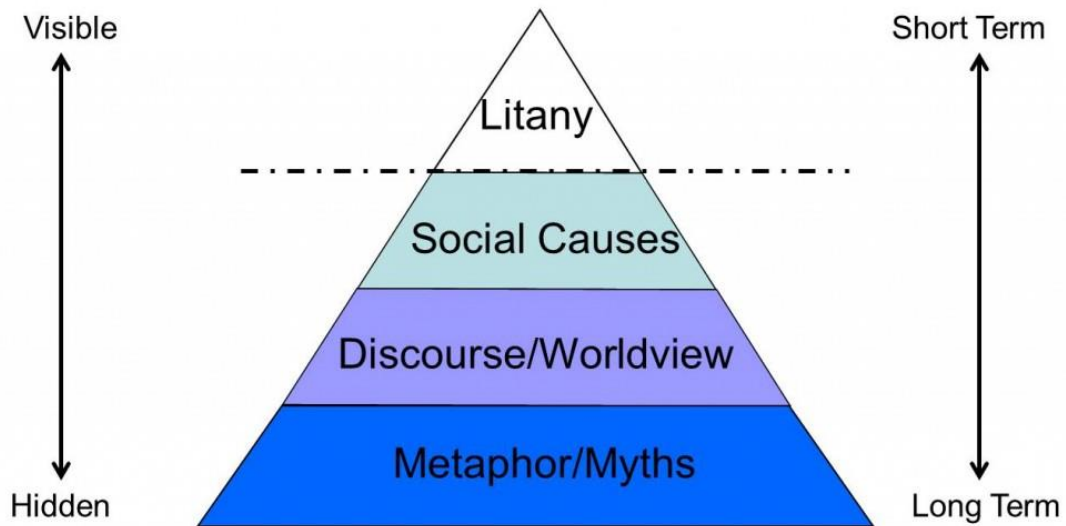


Figure 5: Causal Layered Analysis Levels

Figure 5 shows these four levels of CLA, and the move from short-term and visible factors to long-term and hidden underpinnings. The litany is the most visible – the tip of the iceberg. It is where most conventional management approaches ‘live’, and is the home of newspaper headlines and media reporting. Phenomena at this level require little analysis to understand and are often just accepted without question.

Beneath the litany are the social causes of the problem being explored, and may be documented through statistics, or quantitative analysis. Causes can be attributed to social, technological, economic, environmental or political factors. At this level, assumptions underpinning the analysis of the problem have not been questioned. This questioning takes place at the discourse/worldview level, where individuals’ belief systems and mental models underpinning meaning are surfaced. This is where multiple perspectives and potential multiple alternative solutions emerge. Metaphor/myth is the deepest level where work focuses on images and stories, and involves gut reactions to the worldviews being explored. It taps into myths that enable and constrain the future being discussed.

The value of CLA is that it takes us deeper into the assumptions and worldviews underpinning action and most empirical work. It challenges us to consider alternative perspectives and to explore how we might reconceive an issue or problem in ways that we had not seen previously. But the level at which you choose to work will depend on your comfort level, and the comfort level of your organisation.

Prospective Methods

Prospective methods are both a critical step in strategy development, and the most creative. Because we are exploring the future, the rules of the game as we know them today don’t apply, and we are able to create images of potential futures in which we can test our strategy, ask ‘what if’ questions, and take risks without having to live with the consequences. But... while it is lovely to play around in the future, the most important part of using prospective methods is using the output to strengthen our decision making today. Any prospective method that does not include a step that develops an action plan for the present should be treated with caution.

Visioning

Visioning is a well-known prospective technique, often used in community based futures work because it is a highly participatory approach. See, for example, work done by the MAPP – Mobilizing for Action through Planning and Partnerships – a community-wide strategic planning tool for improving community health. But, as Wendy Schultz (1996) writes:

Currently the term is in danger of becoming clichéd, hackneyed, and over-used to meaningless: in an age of transition, vision is desperately sought but seems so elusive that the seeking itself is often ridiculed.

Visioning can surface the hopes, fears and beliefs of individuals about the future. Visioning seeks to answer questions such as “what sort of future do we want”, whereas scenario planning/thinking/learning explores questions such as “what might happen in the future?” Visions can be very personal, and underpin preferable futures – this is the future I want to happen – whereas scenarios deal with probable futures. With both methods, linking the vision of the future to action today is a critical step.

In conventional planning terms, people often get vision and mission confused. A vision is where an organisation sees itself in the future; it is aspirational, and may never be achieved fully. It continues to provide a future point of reference that can be used to inform decisions about the mission, which is primarily about what an organisation does in the present or short term future. In planning exercises, people often sit around and brainstorm questions like ‘what is our vision?’ While this might come up with useful outcomes, like any exercise, it will probably come up with better outcomes if a structured and systematic approach is used.

Scenario Planning/Learning/Thinking

If you type ‘scenario planning’ into google, you get about more than 41,800,000 hits. But as with most things, quantity is not equivalent to quality. There are many consultants and companies out there which offer scenario planning services and the need to take care to ensure you get a practitioner who is committed to the method, rather than using it as a commercial tool.

Richard Slaughter (2004) has suggested that scenario development focuses too much on ‘out there’ (the tangible and empirical world) at the expense of ‘in here’ (the intangible and unobservable). This results in a focus on empirical elements at the expense of non-empirical factors, and the lack of a structured approach to critique current social reality since the assumptions underpinning that reality are not questioned. And, if not done carefully the exploration of alternative futures can be done in ways that bears little resemblance to reality, and can’t be linked back to the strategic decisions that need to be made today.

This linking back is a critical element of scenario work and one that is often neglected. One of the dangers of scenario work is that the scenarios themselves will be treated as the end product when they are, in fact, the beginning of the real work of strategy development. We risk ad hoc, second rate outcomes that cannot be used by an organisation if the process does not include this stage of overtly linking with strategic decision-making. And, we risk responses like “well, we’ve tried scenarios once, and they don’t work” – which is what one deputy vice-chancellor said to me when I indicated we were thinking about using scenario planning.

Notwithstanding these warnings, scenarios done well are challenging and creative, they can expose participants to information and new ways of thinking about issues, identify blindspots and shift thinking beyond the conventional. But, the bottom line is, they are a tool, not an outcome.

Figure 6 shows the five basic steps involved in scenario planning.

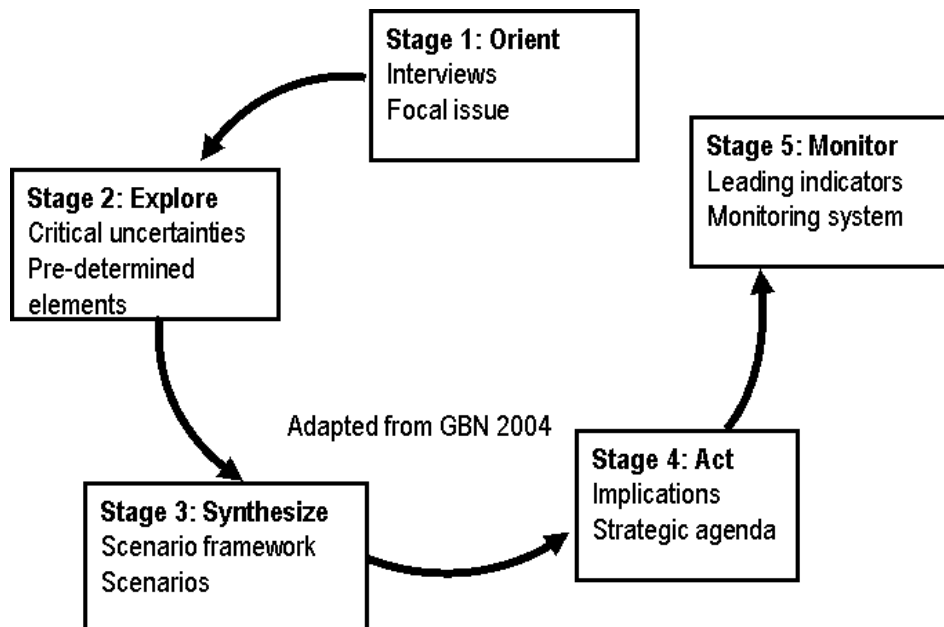


Figure 6: Basic scenario planning process (adapted from Searce and Fulton, Global Business Network, 2004)

While the exact detail will probably vary from practitioner to practitioner, the basic steps in a scenario planning exercise are:

- Stage 1: determine a focal issue or critical decision to ‘anchor’ the process,
- Stage 2: identify and analyse internal and external driving forces after the decision (these drivers are usually categorised into ‘predetermined elements’, those which we have a good idea about how they will play out over time – for example, demographics, and ‘critical uncertainties’, those which we have no real understanding of how they will develop into the future),
- Stage 3: build scenarios (using inductive or deductive approaches),
- Stage 4: identify robust potential strategic options and implications, and determine strategic options, and
- Stage 5: identify drivers and other issues that need to be monitored over time (these are often called ‘early warning signals’ – to see whether something identified in a scenario is ‘coming true’ or is less likely to happen). This last step is often neglected, but it is critical in terms of embedding strategic thinking in the organisation.

Figure 7 shows the different types of scenarios that can be developed. This classification is adapted from the work of Ged Davis (2002), then at the Shell Corporation.

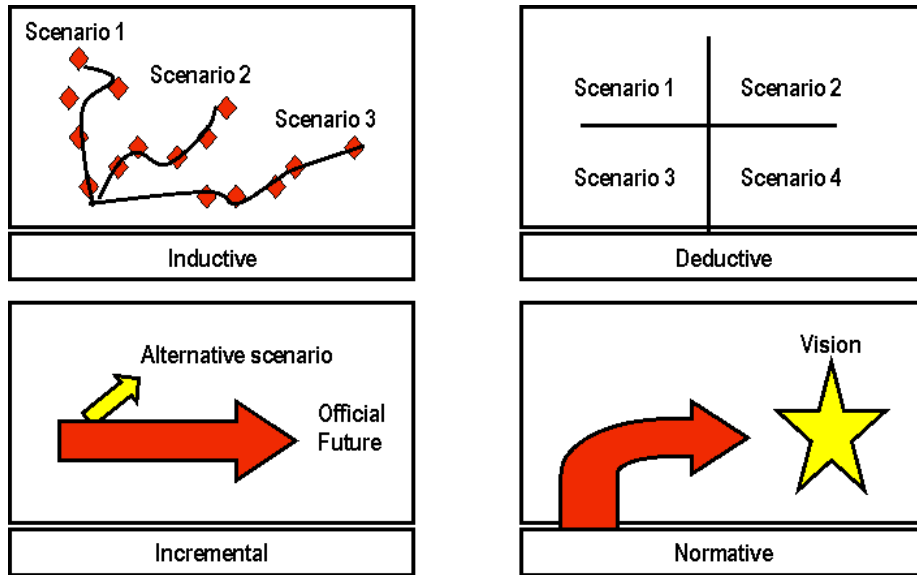


Figure 7: Types of Scenarios

Inductive scenarios emerge from discussion and exploration of drivers and trends, while deductive scenarios choose two or more of those drivers to structure scenario worlds. Incremental scenarios are similar to the official future – the one written in our strategic plans – but different enough to move the organisation in a different direction, while normative scenarios are the realm of visioning – these are the futures that we believe ‘should’ happen. All are valid depending on the context and outcomes that are needed.

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Using Foresight Approaches

A question I am often asked is: how do you actually go about implementing a foresight approach in your organisation? Answering this question has, over time, become the focus of my practice.

Moving Beyond Case Studies, Best Practice and Examples

Before exploring how to use foresight in practice, it is important to first consider that foresight approaches for your organisation will not be the same as those used in another organisation. Context matters. If your approach is exactly the same, then I believe you have a problem. Certainly there are a set of tools like scenario planning/thinking/learning that are available to everyone, but how they are tailored and applied should be unique for each organisation.

What usually happens when I am talking with people about using foresight in practice is that they ask for examples, case studies or best practice. I usually resist and they resist right back. There is a line of thought that seeing an example of how a particular concept is used in practice helps people learn. I don't believe that anymore. Show people a case study and you have a particular context at a particular point in time, a process fulfilling a particular need often relating to a very specific organisational challenge. You have thinking constrained by a particular set of parameters that can lock thinking into today. This is not what using foresight is all about.

Learning to use foresight needs application in practice. No doubt I believe that because it's how I learned about foresight, how to design processes that were effective, how to talk to people about it, how to communicate outcomes, how to present a case for the value of using foresight in strategic processes. Every organisation I've worked with has received a tailored approach to some degree; I don't think I've done the same exact foresight process ever. And I'm still learning – there's no best practice guidelines that can just be applied in every case.

It's not actually the foresight process that matters in the long run although the process must of course be well designed and executed. It's what people in the organisation do with it. It's how you design the process

to gain commitment to using it, to encourage many and deep strategic conversations, to challenge now unhelpful assumptions about work and organisations in the future, and to move strategy development beyond conventional to futures infused that matters. Only you can do that based on your knowledge of your organisation today. It's why external consultants come in and run a process and it doesn't work or doesn't have a lasting effect.

Using foresight is about engaging with such uncertainty that it usually produces those wicked strategic problems that have no easy answers, arising from contexts that may never have happened before. There is no rule book for unique situations – what was reasonable before is no longer reasonable or useful when you are facing the unknown. I teach foresight processes and ask people with me in the room to think about how they can apply those processes in their organisational contexts. People seem not to like this though and think my job is to provide them with a template, a set of heuristics that they can use 'off the shelf'. But my job is to give you the tools to think about using foresight in practice, not follow a rule book.

Prerequisites for Successful Foresight

There are some essential pre-requisites to using foresight in your organisation. In this section, I am assuming you are working IN an organisation rather than acting as a practitioner.

First, there needs to be overt recognition and acceptance that systematically considering the future as part of strategy development will be a valuable thing to do. Without this recognition, you won't be able to infuse foresight work into existing planning processes which means that it will always be dependent on individual champions rather than just part of the 'way we do strategy around here'. This means that the CEO will need to be convinced of the value of futures work, and this is your first job if you are trying to implement an organisation-wide futures program.

How do you convince a CEO of the value of futures approaches? That depends on the individual – some just won't be interested; others will be willing to give it a go. You will be able to identify genuine interest pretty quickly and it may help to position an exercise as a pilot to test foresight readiness. If you can't get approval for an organisation-wide approach, then seek out 'friendly' departments that you can work with to build foresight credibility in the organisation.

Second, know why you are using foresight. What is your purpose? How will you integrate foresight activity into your existing processes and what you will do with outcomes. If you don't do this, you will end up with a process that isn't connected to your strategy development or that produces outcomes no one uses. Spend some time here to get it right.

Third, train the people who will be leading your foresight processes. This may be a formal course or a professional development program or even a mentoring arrangement where you get support with design/implementation when you need it. Foresight is not planning and it is critical to (i) understand the difference and (ii) embed foresight principles into their thinking to underpin their practice.

Fourth, design your foresight processes with people at the core and collaboration in all your activities. The first step is to recognise that there is a separate strategic thinking phase in strategy development, which is the organisational home of foresight approaches, and that it requires its own time and methods. Rather than designing a conventional process that is top down with strategic thinking occurring primarily at the top, design a process that assumes that everyone in the organisation can think strategically if given the opportunity and the information.

Invite people into the process rather than exclude them by virtue of their role in the organisation and get them collaborating – from the beginning to the end. You are looking for diversity of perspectives, to broaden and open your understanding of change to the possible, not what is. Seek out alternative views of the future from within and outside your organisation, from people who support you and people who are your critics. This is an opportunity to escape today's thinking and explore how to strengthen your organisation's future in ways that you can't do with strategic planning.

Fifth, select your processes. The Generic Foresight Process provides the broad framework for implementing a futures approach and is your starting point for deciding which methods to use at which stage of a foresight exercise:

- develop an environmental scanning function (input method) that suits your university or organisation, using a broad framework from within which to choose your sources,
- choose analytic methods to help you filter the information you gather in your environmental scanning, and determine how you are going to present the scanning outputs,
- build in time for your people to come together on a regular basis to consider the scanning outputs, and to interpret them for your particular context – sometimes, this will be a discussion, at other times, you may need to run a workshop using methods such as Causal Layered Analysis (interpretive method) to try and work out what the scanning information really means for your university or organisation; these conversations should continue over time,
- use the information on trends and drivers of change you have identified as important for your organisation in a prospective workshop or process (for example scenario planning/thinking/learning) to explore how those trends and drivers might play out over time,
- consider the implications of your prospective stage for your strategy today by asking questions such as:
 - if the events in the scenarios actually occurred, what strategic response would the university make?
 - are the organisation's current strategies the best 'fit' for its future operating environment?
 - what strategy can be decided today that would be robust enough to deal with any scenario eventuating?

Sixth, start small. Infusing foresight into an existing strategy process will challenge people. We made the mistake at Swinburne of starting BIG, launching foresight as the next best thing. People hated it. There was much resistance. We found that when we worked with individuals and departments, the response was

very positive. So start small – unless you have strong organisation wide commitment from all leaders and managers.

Environmental scanning is a good place to start and can be opened up to people in the organisation quickly. Use the scanning output as the input into a thinking workshop, where the idea is to have strategic conversations that demonstrate the value of opening up minds to the future and exploring beyond the linear, projected future. So consider small steps. Look for how to generate that small ripple that turns into a foresight tsunami.

Finally, communicate and communicate often. Using foresight needs to be a productive exercise. You need to let people know what is happening, invite participation, share output and outcomes, and be involved in review and decision making (for example, something as simple as rating the importance of scanning outcomes).

The Value of Foresight Approaches

Organisational planning processes usually focus on relevant industry sector and mainstream trends, both locally and globally, and develop strategy in response. This focus is essential. So what's different with foresight approaches? Where's the value?

- Foresight approaches consider a wider range of issues and trends beyond an industry, including emerging issues, and more general societal issues and trends. They take a big picture, systems approach to identifying and understanding change.
- Foresight approaches usually go beyond visible trends to look at the systemic drivers underpinning those trends. Some foresight work attempts to surface and challenge the assumptions underpinning how those trends are analysed and interpreted. Trends are not confined to a particular industry, and interactions, collisions and intersections between trends are explored in depth.
- Foresight approaches identify and use wider sources of information from the mainstream and the periphery, as well as seeking to source tacit information held by individuals.
- Foresight work uses a long term time frame. Futures work in a strategy sense is undertaken to inform decision making today. Thinking systematically about the future is not about trying to get the future right through prediction and forecasting, but aims to explore potential longer term impacts of decisions that may not be visible if the time frame used in strategy is only short term.
- Foresight work aims to surface and challenge assumptions that underpin current thinking and decision making. These assumptions are often grounded in deeply held beliefs that are hard to shift, even in the face of clear evidence that they are not true or no longer true. Surfacing assumptions is hard work, because it involves individuals recognising their blind spots and biases, and this is usually an uncomfortable state of being.

- Foresight approaches also allow strategy to be an inclusive process. Because foresight is an innate human capacity, let me repeat that everyone in an organisation is capable of thinking strategically if given the opportunity and the information. Using foresight provide opportunities for staff to be involved in an authentic way in the process of exploring options about the future for their organisation.

- Foresight approaches provide an opportunity to recognise that sometimes the opinions we hold so dearly today may not be relevant or true in the future. Here are some quotes that demonstrate the folly of letting your opinions get the way of recognising the value of foresight.
 - *Inventions have long since reached their limit, and I see no hope for future development.* Roman engineer Sextus Julius Frontinus, 1st Century AD
 - *Louis Pasteur's theory of germs is ridiculous fiction.* Pierre Pachtet, Professor of Physiology, Toulouse, 1872.
 - *Heavier than air flying machines are not possible.* Lord Kelvin, President of the Royal Society, 1895
 - *The aeroplane will never fly.* Lord Haldane, British Minister of War, 1907.
 - *Space flight is hokum.* Astronomer Royal, 1956
 - *Stocks have reached what looks like a permanently high plateau.* Irving Fisher, Professor of Economics, Yale University, 1929
 - *We don't like their sound, and guitar music is on the way out.* Decca Recording Co, rejecting The Beatles, 1962
 - *I think there is a world market for maybe 5 computers.* Thomas Watson, Chairman of IBM, 1943
 - *But, what is it good for?* Attributed to an engineer at Advanced Systems Division at IBM, commenting on the first microchip.
 - *There is no reason anyone would want a computer in their home.* Ken Olson, founder of Digital Equipment, 1977
 - *640K [of RAM] ought to be enough for anybody.* Bill Gates, 1981

At the time these statements were made they were probably considered to be realistic and accurate in the current context and knowledge. It is only hindsight coupled with our knowledge of the present that allows us to recognise how short sighted these statements are. Yet, every time someone 'predicts' what's coming, they are at risk of making a statement equally as stupid as these.

Remember, all our knowledge is about the past, yet all our decisions are about the future. The future is characterised by uncertainty, and much that we simply do not know. More importantly, we do not know what we do not know. For anyone to claim absolute certainty about the future is, at best, misguided and, at worst, arrogant. We need to acknowledge uncertainty and seek to better understand it, not try to explain it away with predictions. Using foresight helps to do all this.

Characteristics of Foresighters

People who are interested in using foresight usually share some characteristics about how they see the world and their skills. Here's my list.

- I am open to new ideas, including to what others might call weird and whacky.
- I am curious – I want to know why it is so. I'm a good observer.
- I think outside the box I understand my industry but I'm interested in global change as well.
- I challenge assumptions about the future – mine and others.
- I value diversity – I understand the perspectives are neither right nor wrong but just are.
- I am resilient. I understand that the value of foresight to better understand the future may sometimes be difficult to communicate.
- I trust and value my expertise and knowledge to be able to identify observations relevant and important to my organisation's future.
- I am resilient. I understand that the value of foresight may sometimes be difficult to communicate.

The most critical of them in my experience is resilience – because foresight approaches challenge the value of conventional strategic planning and how people think about the future, there will be resistance and if you experience some of what I did, you will experience criticisms of your personal ability and competence. Resilience is important to allow you to keep going with foresight and to manage your own emotions and reactions to the responses of other people to foresight.

You may have some of these characteristics already, and if you use foresight regularly, you will develop all of them. I started doing foresight as just another task and it ended up changing how I see and interact with the world and it changed my career path. The changes in how I think are internal and it's difficult to articulate them in conversation – but you will know when you have changed how you think, and there is no going back!

Some Self Reflection Questions

To finish this chapter, I have included two tables that were developed for a client program. They offer some questions for you to use to think about the degree to which you are using your own foresight capacity, and the degree to which your organisation has integrated foresight into its strategy processes. The questions are designed as triggers for your thinking.

Table 3: Questions to ask about your organisation's foresight capacity

Does your organisation?
<ul style="list-style-type: none"> ▪ Take a long term view in its strategy development? If not, why not? And what can you do about it?
<ul style="list-style-type: none"> ▪ Explore possible future operating environments to discover new options and identify potential risks?
<ul style="list-style-type: none"> ▪ Have strategy processes that support strategic thinking? Do you hold thinking workshops?
<ul style="list-style-type: none"> ▪ Do you spend a lot of money and time producing a glossy plan? Do you spend the same amount of money to support thinking about what goes into that plan – across the organisation?
<ul style="list-style-type: none"> ▪ Does your organisation support big picture thinking (taking a forward view), or does it think in silos (status quo)?

Table 4: Questions to ask about your foresight capacity

Make sure you are busy with the right things?
Actively seek out alternative perspectives to test the validity of your perspectives on an issue? Do you question your assumptions, no matter how dear they are to you?
Take the future and future generations into account when you are thinking about strategy?
Think broadly, deeply and long term about change, and look beyond the mainstream?
Do you think big picture (take a forward view) or in silos (status quo)?

Lessons from the field

Helping people in organisations use foresight in their strategy development is both rewarding and challenging. As a novice foresighter in 1999, I quickly learned about the power of language to shape how people respond to the ‘newness’ and ‘difference’ of foresight, as well as seeing firsthand how people do change the way they think about the future after participating in a foresight exercise. I am still learning with every job. This chapter has my lessons from the field, what I’ve learned as I’ve worked with people in a wide range of tertiary education institutions, government departments, professional associations and non-profits.

Introducing Foresight

A trigger to force the introduction of foresight in organisations is useful – some sort of crisis is one example. When existing ways of making decisions or dealing with change fail, people are more open to thinking about new ways of doing things. Recognising the value of learning from the future usually emerges from the mind of one person though – and often not the CEO. The need for foresight is also unlikely to emerge from routine and embedded strategic planning processes where the status quo is being maintained implicitly.

Without a crises, the invitation to enter an organisation to help them use foresight usually comes because one person has recognised its value and has convinced the organisation to ‘give it a go’. This doesn’t mean that the organisation is ready for foresight and that there is support for its use. The door is open, however, and that is enough to get started.

As indicated in Chapter 5, support from the CEO is a prerequisite when introducing foresight. As a strategic activity, foresight needs to be positioned as something that will be done, not as an option. People are too busy with the day-to-day to change what they do unless it is a directive. Until people experience a foresight process they will tolerate it because they have to; acceptance will come with time and participation. This sounds like the wrong way to introduce foresight but there are too many opportunities for naysayers to undermine foresight initiatives without this clear directive.

The Vice-Chancellor who brought foresight to Swinburne ‘got it’. He understood the value of foresight and why Swinburne could benefit from its use. Whenever requested, he provided overt and strong support

for foresight activities and workshops. But he wasn't able to provide continuing support on a daily basis and did not stop his senior managers from undermining the implementation process. This lack of continuing support meant that foresight at Swinburne was never going to be embedded in the organisation. The arrival of a new Vice-Chancellor who did not believe in foresight was really just the 'kiss of death' and the beginning of the end of my time at Swinburne.

Start at Both Ends of the Organisation

Plans to introduce foresight into an organisation need to incorporate work with both the leaders and staff. Convincing senior managers that foresight is valuable is essential in terms of securing support from key decision makers, while demonstrating to staff how foresight approaches can enhance their thinking and help them deal with the busyness of their day to day work begins to develop a foundation upon which support for foresight can grow at the 'grass roots'. Only then is there the possibility for foresight to be embedded into the organisation's DNA.

Language

Language, as always, is critical. When I first started doing foresight work, I was the subject of jokes about the term 'foresight' – from some very smart and senior people who should really have known better. It took some time for the title of the Foresight Unit to be announced in public without laughter and giggling. There were two language issues here– one with the language of foresight itself that is futures focused and not about the concrete focus of today, and the second with presenting foresight in ways that make sense to people in the organisation. Take care with language – craft your writing for your organisation.

Goodwill

Personal goodwill helps, as does the perception of "political" neutrality and the ability to explain a concept that is different and unknown, and that sometimes sound a little weird. The 'power of one' was a surprise in terms of people being willing to give foresight a go, or to treat the whole thing in a neutral manner until its outcomes were more obvious. Selecting the right staff to "do" foresight is therefore important.

Contexts Matter

Contexts are important. As with language, an organisation's culture and how it operates will determine to some degree how you implement and use foresight. Building close partnerships with key staff in each area can be a critical part of your foresight implementation process. The influence of contexts also means that presentations about foresight must be tailored to the organisation and not be seen to be existing presentations from other organisations used unchanged without any consideration of unique language, structures or process. And ultimately, the future that emerges for your organisation will not be the same as the future that emerges for another organisation. Andy Hines (2003) reminds us of this when he writes that we need to recognise that:

what we need is different kinds of futures for different kinds of contexts, and that there isn't one right approach to doing futures work.

Implementation will take time

Implementation will take time – it is a long term activity and brownie points will not be won quickly. Care must be taken at each step to ensure that there is a tangible outcome which shows the benefits of the new approach and how it relates to what the organisation is doing today. Open communication of information and regularly seeking comment from your community is critical in this respect.

Challenging Status Quo Thinking

The need to think differently is included in most sections of the Guide. One of your biggest challenges will be to shift how people think about the future. It's a challenge because of our brains and how they work. Remember our brains are wonderful things, but they are habitual things as well. There are no future facts because the future is not predictable – it is full of 'new'. When confronted with uncertainty and the unknowable your minds tend to retreat to explanations based on what is already known. Cognitive biases kick in and usually these biases create assumption walls in your thinking.

Your brains use your benchmarks of what you know to be right and wrong, how things work, what is real and what is not. They shut down when something new doesn't match expected patterns. They miss things that might just be important, and make assumptions that often are just wrong. They fall into a certainty trap that does you no favours when dealing with the uncertainty of the future.

As a result, there *will* be resistance to using foresight – expect it. Work out how to respond ahead of time.

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Some final words

Little did I know in 1999 that the Vice-Chancellor's request to me to do foresight would change how I think about the future *and* my career. In 2007 after 28 years as a university manager, I moved out of working in universities to run my foresight practice. My learning journey about foresight has continued since. Both the lack of using foresight in strategy development and its ad hoc, once off use in most Australian organisations has made me more committed to (i) helping people use foresight to develop futures ready strategy, and (ii) working towards the long term goal of seeing pervasive use of foresight in organisational strategy.

This work takes persistence because it asks people to think in new ways about the future and to let go of deeply held and often sub-conscious beliefs about what will shape the future. It asks them to move beyond their comfort zones. I realised that I had let go of some of my assumptions about the future when someone asked me in the early 2000s why I was doing this work. I responded by saying that I see the world differently now, I think differently now. I couldn't have said how I thought differently or at what moment my thinking has moved to a new path, but I was on a new path. And once on that new path, I knew I couldn't go back.

Getting very busy people in organisations to spend the time needed to shift how they think about the future is unfortunately not always possible. You will never convince everyone about the value of foresight and trying to do that would be a waste of your time and energy, but ultimately human agency is at the core of foresight work. People create their futures collaboratively not a single senior executive or an external consultant which is why foresight processes must have people at their core. My advice is to focus your work with the people who either 'get foresight' or who are willing to give you a go, at least at the beginning. But some people will never 'get it' – looked for glazed eye syndrome - and you need to focus your energy where you can get good outcomes that make a difference.

Good luck with your foresight journey and get in touch at any time if you have any questions or need my help.

References and Resources

Davis, G. (2002) *Scenarios as a Tool for the 21st Century*, Shell International, downloaded from: http://www.pik-potsdam.de/news/public-events/archiv/alter-net/former-ss/2006/programme/31-08.2006/leemans/literature/davis_how_does_shell_do_scenarios.pdf

Hines, A. (2003) "An audit for organizational futurists: ten questions every organizational futurist should be able to answer", 5:1, pp. 20 – 33.

Horton, A. (1999), "A simple guide to successful foresight", *Foresight*, 1:1, pp. 5 – 9.

Inayatullah, S. (ed.) (2004) *The Causal Layered Analysis (CLA) Reader: Theory and Case Studies of an Integrative and Transformative Methodology*, Tapei: Tamkang University Press.

Keenan, M. (2007) *Combining Foresight Methods for Impact*, NISTEP 3rd International Conference on Foresight, Tokyo. Downloaded from: http://www.nistep.go.jp/IC/ic071119/pdf/3-3_Keenan.pdf.

Mintzberg, H. (1994) *The Rise and Fall of Strategy Planning*. London: Prentice Hall.

Molitor, G..T.T. (1977) S-Curve of Issues, SAM Advanced Management Journal, Summer, pp. 4-13.

Popper, R. (2008) "Foresight Methodology" in Georghiou, L., Cassingena, J. Keenan, M., Miles, I. and Popper, R. (eds.), *The Handbook of Technology Foresight*, Cheltenham: Edward Elgar, pp. 44-48.

Rogers, E. (1995), *Diffusion of Innovation*, New York: Free Press.

Scarce, D. and Fulton, K. (Global Business Network) *What if? The Art of Scenario Thinking for Non-Profits*. Downloaded from: http://www.gbn.com/articles/pdfs/GBN_What%20If.pdf.

Schultz, W. (1996) *Essential Visioning: Overview and Comparative Analysis of Visioning Techniques*. Downloaded from: <http://www.infinitefutures.com/essays/fs11.shtml>.

Schultz, W. (2003) *Environmental Scanning: A Holistic Approach to Identifying and Assessing Weak Signals of Change*. Downloaded from: <http://www.infinitefutures.com/essays/prez/holescan/index.htm>.

Schultz, W. (2006) "The cultural contradictions of managing change: using horizon scanning in an evidence-based policy context", *Foresight*, 8:4, pp. 3-12.

Slaughter, R. (2003) *Futures Beyond Dystopia*. London: Routledge.

Voros, J. (2003) 'A Generic Foresight Process Framework'. *Foresight*, 3 (1): 10-21.

Ian Wilson (n.d.) *From Scenario Thinking to Strategic Action*. Downloaded from: <http://horizon.unc.edu/projects/seminars/futurizing/action.asp>.

ABOUT MAREE CONWAY



Maree Conway is a strategic foresight practitioner and researcher based in Melbourne, Australia. She runs Thinking Futures to help people in organisations use foresight and think in new ways about the future to craft futures ready strategy.

Join Maree in the journey to make the use of foresight pervasive in organisational strategy. Engage with her at Thinking Futures (<http://thinkingfutures.net/engage>).

Email: maree.conway@thinkingfutures.net

Web: <http://thinkingfutures.net>