

This Way to the Future

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ABSTRACT

While futures studies techniques have been around for decades, they are still not widely used by organizations to guide strategic decision making. This paper describes the benefits that futures studies methodologies offer the busy practising manager and presents him or her with an overview of the field, examples of successful applications of futures studies techniques, as well as references to online resources that can be used to develop greater understanding of the field and some of its most commonly used tools and methodologies. It also highlights some of the limitations involved in typical futures analyses and suggests a conceptual framework that practitioners might employ for ensuring that their futures analyses avoid these limitations.

KEYWORDS:

Futures studies; futures tools and resources; scenarios; decision impact matrix.

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What can futures methodologies offer the busy manager working under demanding short-term performance targets and budgets? They can help managers “look over the horizon” earlier and further than their competitors and gain first mover advantage in securing positions of competitive advantage. They can also help to identify more accurately the likely social, environmental, political and economic risks associated with today’s business decisions and practices.

Futures methodologies such as environmental scanning, Delphi, scenarios, backcasting, visioning, trend impact analysis, causal layered analysis, are designed to help people “think about their thinking” about the future. Insert 1 gives a brief description of these methodologies, all of which help either in the formulation of alternative views of the future (e.g. probable, possible, preferred) or in evaluating the impact of choices *in the present* on the likelihood that a particular future state of affairs will eventuate.

How Futures Studies Have Changed History

It is often been reported how futures methodologies helped the Shell oil company anticipate the rise of OPEC and the 1973 oil price shock (e.g. Davis-Floyd 1996). Positioning itself accordingly, Shell rose from fourteenth to second place among the oil multinationals during the mid-1980s as prices fell and its competitors found that they had become heavily over-invested and were losing billions.

While it is often reported as a success for futures studies, Shell can also be seen as a failure of futures thinking because it did not avoid the problems in which it became embroiled in Nigeria. Shell’s performance here could have been improved by including a wider diversity of stakeholder input as well as an ethical dimension to its planning.

Less well known is the story of how the history of South Africa was transformed when, in 1991, a group of 22 prominent South Africans met with a team of scenario writers from Shell to explore the likely consequences of continuing down the path of apartheid and to actively consider new futures and the paths that might lead to them. The four scenarios developed by this group were widely published and discussed in South Africa and a thirty-minute video presenting the scenarios was also released. The team presented the scenarios to more than 50 influential groups throughout South Africa as well as to groups in several European capitals and to the World Bank.

President Nelson Mandela of South Africa, then the leader of the ANC, asked to see the video on several occasions as did then President De Klerk and his apartheid-supporting Cabinet, and other influential leaders.

However, the real success was that the scenarios became widely discussed in South Africa at all levels, including taxi drivers and talk radio shows. Seven years later, South Africa made a peaceful transition to representative government and many of the parties involved acknowledge that the scenarios played a catalytic role in moving the country to choose a future that was different from the one that their present course was leading them towards.

Other governments can learn a powerful lesson from South Africa. For example, it would greatly assist voters in many other countries to evaluate the “rightness” of political party policies if they were presented in an integrated scenario of the country’s future that the policies were intended to bring about. Politicians and the media encourage fractured decision making when they focus on micro-policies relating to interest rates, energy prices, levels of government subsidies, or different taxation regimes. These things are not the stuff from which most human beings construct their dreams of the future!

What Kind of Futures Thinker are You?

Around the world - in corporate boardrooms, political party offices, community groups, government agencies and also in family living rooms – we can recognise people peering into the future through several very different lenses. For many people (let’s call them the “White Water Rafters”), the world is changing so fast and furiously that all we can hope to do is grab opportunities as they come along and, in the meantime, try to keep our heads above water and survive another day. For “Rafters”, planning is a waste of time if it extends beyond a few months. All we can do is ride the white-water, wait for the future to emerge out of the chaos and try to make sure that we grab a place among the winners.

Looking through another lens are people who believe that how we think about the future today has a significant effect on the kind of future we get tomorrow. For example, if we think that the future is unknowable and beyond our influence then our focus on short term expediency and selfish opportunism will bring about a future that we have, in large measure, helped to create. Or, if we think that the success of our business depends on government policy, Reserve Bank decisions on interest rates, or on the actions of the big players in our industry, then we will create a self-fulfilling prophecy. We will foster a corporate culture that is reactive, defensive and creative only in blaming and making excuses.

This second group (those willing to explore the future) may be further divided into two sub-groups. On the one hand are those who feel that tomorrow can be predicted by extrapolating from the present (let’s call them the “Trend Riders”). Typical assumptions made by “Trend Riders”, either explicitly or implicitly, are that the currently successful business models will continue to work; that the customers’ notions of “value” will not change; that today’s leadership skills will continue to lead to success; that disruptive technology will not emerge to change the cost/benefit structure of their industry; that new means of distribution will not be developed that enable competitors who are now beyond their line of sight to woo away their customers; and that the government will not change the rules in ways that threaten the after-tax, local currency returns from doing business.

The other sub-group of people willing to explore the future rejects the Newtonian, linear-logic view of the world held by “Trend Riders”. To them tomorrow will not be like today. They are likely to know about chaos theory and complexity theory and of the findings that living systems evolve in a series of evolutionary jumps (or discontinuities) interspersed by periods of relative stability. Let’s give this group Charles Handy’s (1999) suggested label: “The Alchemists”.

“Alchemists” are likely to have read Hamel and Prahalad’s (1994) groundbreaking book “Competing for the Future” and Hamel’s more recent “Leading the Revolution” (Hamel 2000) and know that great wealth can (sometimes) be created by anticipating, or even by creating, evolutionary jumps or surprises in their industry; e.g. by creating the photocopier rather than better carbon paper; by creating the digital watch rather than an improved analogue one; by creating Napster rather than better music stores. This contingent is

constantly exploring possibilities, debating options and consequences, experimenting, learning, starting again. It is via this messy process that these leaders move mindfully to create meaningful lives and creative, competitive organisations; i.e. meaningful journeys into a future they have consciously helped to shape.

What You See Depends on Where You Stand – or Why The Present and the Past are Not Always Reliable Guides to the Future

Last year, many dot.com executives and business analysts were proclaiming that their New Economy companies could not be evaluated by traditional methods of analysis. In pursuit of network effects, they argued that growing large subscriber bases (“number of eyeballs”) and growing revenues were the keys to future success. These arguments now appear flawed. Share prices are once again being determined by “visible” future profit streams. This may seem to give respite to companies that have been slow to come to grips with the Internet.

However, the growing knowledge economy (in which most of the workforce now works), and the Internet that is accelerating its growth, is changing some of the fundamentals for many businesses – and business leaders and analysts speaking at conferences around the world acknowledge that it will continue to do so.

The Internet is enabling banks, manufacturers, airlines, stockbrokers and many others to reduce transaction costs by over 30% (sometimes much more) by eliminating the costs – and the jobs - of shuffling paper between themselves, their suppliers and their customers. This is the real economic impact of the Internet, not its ability to enable things to be sold to consumers online.

As Philip Evans and Thomas Wurster (2000) point out in their book “Blown to Bits”, the Internet is also dramatically disconnecting the economy of information from the economy of things. A simple example: ten years ago, if you wished to find out (information) about different cars that you were considering purchasing, you had to go to where the cars (the things) were; i.e. to the car dealerships. You could perhaps have purchased a car magazine at a newsagent or contacted a motorists organization for technical reviews. However, today, you can access all this information wherever and whenever you choose via the Internet. Moreover, you can get ratings from current owners, check the activities of relevant car-owner clubs, and much more. New entrepreneurs are assembling rich information in new ways to create new businesses with new business models. In the midst of this deconstruction of traditional value chains organised around physical plant, equipment, and products the role of the salesperson in a car dealership must change.

Indeed the role of the car dealership itself may change significantly if car hire companies (for example) re-invent themselves as points of contact for potential car buyers. Or, increasingly likely, as communities of interest congregate on the net, the community of current, satisfied owners of a manufacturer’s models may be “recruited” by the manufacturer and offered incentives to act as points of contact for potential new buyers.

In a world where information becomes disconnected from things, businesses that relied on attracting customers because they controlled information may find new competitors arising to take the information side of their business (and its value-added) away from them leaving them with only the “thing” side of the business. Inefficiencies in this side of the business will then be exposed and, even worse, the “thing making” or “thing selling” business that is left may only be able to command much smaller, commodity-business margins.

One more example of why the present is a bad place to stand when you are making decisions about the future: Professor Clayton Christensen (from Harvard Business School) in his book “The Innovator’s Dilemma” (Christensen 1997) and in his recent conference in Sydney has given examples drawn from industries as diverse as the computer industry, steel making, health care and executive education of a phenomenon that leads good managers to make strategic decisions that are “sensible” when viewed from the perspective of the present but which are highly likely to lead their firms to fail when viewed from the perspective of the future.

Professor Christensen reminds us of how new competitors with disruptive technologies and disruptive business models are initially often seen by the leaders in their industries as peddlers of “low end”, low margin products or services. The executives at the head of industry leaders, when making resource allocation decisions for their companies, seem always to have a “no brainer” decision to make when presented with the option of: (a) investing in taking their businesses further up high margin growth paths that build on current technology, skills, processes and product/service offerings; or (b) changing direction to embrace a fledgling, disruptive technology and products/services that offer lower margins and which cannot (yet) satisfy the needs of most of their customers.

For example, it made no sense to Digital’s executives in the mid 1980s to go into the business of selling PCs which then had low functionality and low profit margins. It did make sense to invest in moving “upmarket” to make and sell more sophisticated minicomputers for US\$150,000 each which had 60% profit margins.

However, within the space of a few years some of the disruptive technology upstarts had developed the functionality of their offerings and steadily moved up-market to take more and more of the profit cake away from the old leaders who found themselves backed into small, no-growth sectors of their industries which they had previously seen as the high quality, high margin sectors.

In the computer industry this is the story of IBM and Digital vs the PC; in the steel industry this is the story of the big integrated players such as BHP vs the mini-mills of Smorgons; in the health care industry this is (and will increasingly be) the story of the big, “high tech” public hospitals vs small, “high touch” community hospitals and local health centres; in executive education, this is (and will be) the story of the University based business schools vs the rapidly growing corporate “universities” with their cheaper, more flexible, just-in-time learning modules.

Futures Studies: An Emerging Field

All futures methodologies (see examples in Insert 1 below) have in common the fact that they help us to explore alternatives, assumptions, choices and consequences. These are the building blocks of futures analysis. Futures techniques help to reveal the assumptions, biases and dreams that shape our actions and choices in the present so that we can consider whether or not we want them to be the travel planners for our journey into the future.

Futures studies tools and methodologies can also assist someone seeking ways of challenging the views of colleagues (or superiors) who feel comfortable in their assumptions about the world and the future or who feel that planning is a waste of time and that “fire, ready aim” is the most appropriate management protocol today. However, futures studies methodologies do not give psychic powers to see into the future, something that often disappoints the clients of professional futurists.

INSERT 1: Some Common Futures Methodologies

- *Environmental scanning* – collecting data from a variety of sources on social, technological, economic, environmental and political issues and trends (the STEEP factors). This may then be followed by...
- *Impact and cross-impact analysis* - examining the likely first, second and higher order impacts of identified trends and the likely interactions among different trends.
- *Delphi techniques* – posing focussed questions to a panel of experts and opinion leaders; summarising and reporting back their answers and repeating the questioning and feedback process until the answers stabilise around some common ideas about how the future may unfold.
- *Visioning* – creating a coherent picture of our preferred future.
- *Backcasting* – the technique of assuming that a particular scenario has occurred at some future date and then, from the perspective of being in that future, writing the “history” of how that future evolved.
- *Scenarios* – identification of the major drivers of change in the world (the STEEP factors); identification of the major dimensions of uncertainty around the future (e.g. the profit motive dominates vs environmental sustainability dominates; globalisation and free trade shapes markets vs national or regional market blocs dominate) and preparation of descriptions of possible and desirable futures for combinations of the main axes of uncertainty (e.g. a profit-motive focussed global world; profit motive focussed regional trading blocs; global markets with sustainable growth; etc)
- *Causal layered analysis* – as futurist Sohail Inayatullah (1998) explains, “this develops a depth dimension to the horizontal approach of scenarios”. At one layer, it focuses on the popular representations of the future (our hopes and fears); at the next layer it considers the level of policy analysis (“the think-tank trends dimension”); and ranges on to the level of underlying worldviews (of religion, economic systems, of the grander paradigms); and finally explores the myths and metaphors that support current social and personal structures (e.g. global village; level playing field; human life is the most important life form). Other related approaches acknowledge that we must balance our analyses of trends “out there” in the external world with analyses of the unfolding trends in the “inner world” of human knowing and meaning-making.

INSERT 2: Where to Find Example Scenarios and Futures Resources

Examples of futures methodologies, global scenarios and forecasts developed by the OECD, the Millennium Project and other futures bodies are available on their websites; e.g. www.oecd.org , www.wfs.org and <http://millennium-project.org>.

Detailed scenarios for Australia have been developed by organizations such as the Australian Business Foundation and are available at their website: www.abfoundation.com.au/ext/Frame.nsf/pages/Research

A detailed description of a successful futures process used in a bank is at: www.cio.com/archive/010100_stop.html

Tools for thinking and scenario-development on the future of education can be found at <http://horizon.unc.edu> . The site www.planet-tech.com/preferred_future contains teaching resources for engaging school children in developing future scenarios as well as simple scenarios developed by children (the site’s credo: “Children are living messages we send to the future”).

Another great futures resource is: www.manyworlds.com which contains a “history” of the period 1980-2020. The future of various technologies and their related industries is forecast at: www.howstuffworks.com

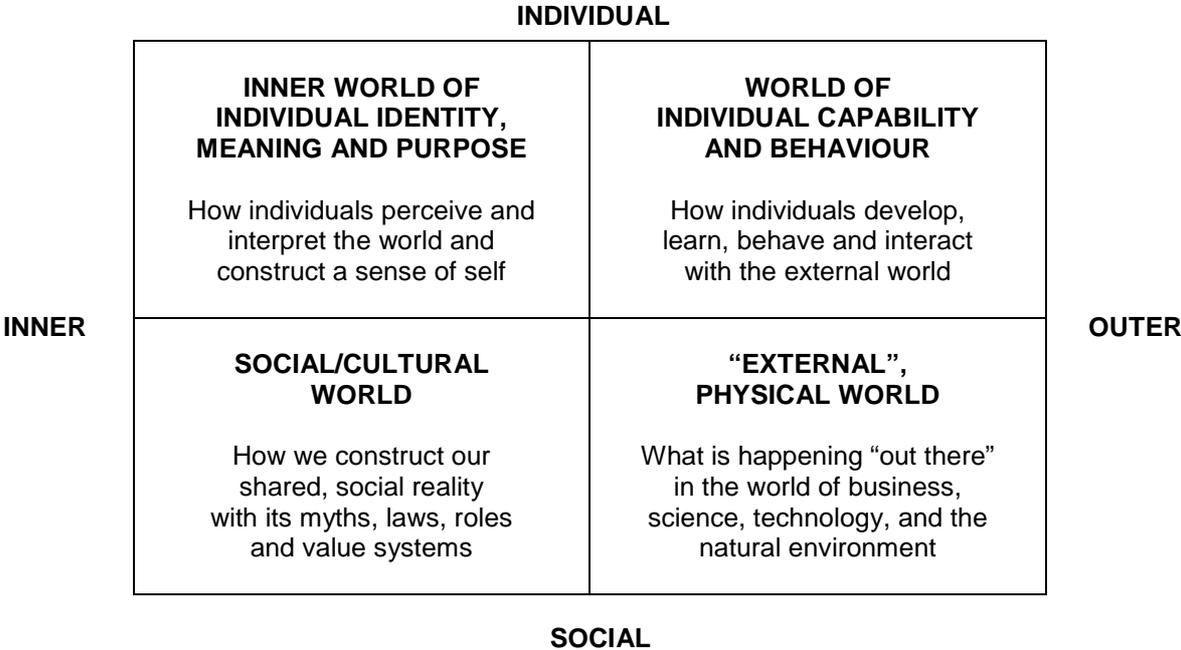
Some of the communities of individuals and organizations engaged in dialogue about creating new futures (in Australia and around the world) can be found at: www.worldfutures.org ; www.newciv.org ; www.bsr.org ; www.fastcompany.com/cof/visit.html ; www.slam.net.au ; www.conversations.com.au/c21c and www.futurists.net.au

Insert 2 above gives links to follow to learn more about futures methodologies and how they have been used by groups around the world to “look over the horizon” and stimulate debate about the kinds of futures people wish to help create – and those they wish to avoid.

A Current Bias in Futures Studies – and a Suggested Tool for Minimising It

A limitation in much of the currently published futures material and in much of futures work that appears to be carried out in organizations is that it focuses on trends and events (and lenses for viewing them) in the “external” world of the physical and environmental sciences. However, as Professor Richard Slaughter (1999) has emphasised in his book “Futures for the Third Millennium” we should strive to develop views of the future that integrate thinking across the four “worlds” identified by Ken Wilber (1995) as shown in Figure 1 below:

FIGURE 1



A society’s world view may be undergoing fundamental change (for example, in America and in Australia there is widening interest in accounting for business “performance” using a “triple bottom line” – encompassing financial, social and environmental measures - rather than a single economic measure). This change may be picked up by analyses that focus on the bottom left hand “world” long before it is evident in the “out there” world of the bottom right hand quadrant in Figure 1. Similarly, if in exploring the “inner world” of Figure 1, we find significant numbers of individuals are starting to question the “self” they have created for themselves around their work and the things that they can buy with the money they earn from it then we may be stimulated to scan for and monitor different data in our “external world” analyses.

We may also apply Figure 1 in the context of an individual organization approaching futures studies. For example, if no examination is conducted of how people in the organization view themselves, their careers and their desired life trajectories then we may develop scenarios of the external world that threaten deep seated needs and identity stories of the people with their

hands on the levers of power in the organization. This may result in the scenarios never being explored in ways that permanently affect today’s decision making.

A potentially useful way of exposing potential clashes between the external/organisational and internal/individual futures is to prepare a Decision Impact Matrix which lists along one axis all the key decisions (perhaps associated with events derived from backcasting from a desired future) that leaders must make in order to bring about a future state of affairs; and on the other axis records an assessment of the likely willingness and ability of people currently in leadership positions to make each of the required decisions.

An extract from a hypothetical **Decision Impact Matrix** is shown below:

Key Decisions Required to Bring About Scenario ABC	Positions Affected and Nature of Critical Impacts	Possible Reactions	Possible Actions to Increase Likelihood of Decision Being Made and Implemented
Decision by CEO: Merge HR, Marketing, Supply and PR into a Stakeholder Relations Division	Internal Positions: CEO; HR, Marketing, Supply and PR Branch Heads. External Positions: Client contacts of above positions. Internal Impacts: (i) CEO may encounter resentment of functional heads who may suffer loss of position power and status. (ii) Requirement for closer coordination and integration across functions.	CEO may delay decision until after retirement of HR Director. Some functional heads may attempt to criticise the value of moving towards this future. Functions may still operate as separate “tribes” within the new structure.	Board approves attractive bonus for CEO contingent upon new structure being implemented effectively by end June 2001. CEO approves attractive retrenchment payouts for functional heads who choose not to work in the new structure. CEO approves bonuses to key parties in new structure contingent upon new structure being implemented effectively by end June 2001. CEO brings in teamwork facilitator to break down old alliances and build the new coherent Stakeholder Relations Division culture.
etc	etc	etc	etc

Learning to See Through New Lenses...

Where are the disruptive technology players in your industry? From the perspective of the present they may look like insignificant bit players, selling poor quality products and services who are operating in a market sector that your managers are saying you are better off being out of. But what is their future growth path – and what it yours? You have to stand inside a mindset and a set of assumptions (i.e. a future scenario) that is different from the present in order to see the potential threat - and the potential opportunity.

Two common scenarios that have emerged from research conducted for clients in Australia by the Futures Foundation (and which mirror scenarios that have been generated by other futures projects both in Australia and overseas) are:

Capitalist World – characterised by a preoccupation with materialistic values and competition; “he who dies with the most gold wins”; “survival of the fittest”; attempts to keep information secret; “I must provide for myself because no-one else will”; money is power and security; relationships are contractual and enforceable; work dictates lifestyle; etc.

Community World – characterised by a resurgence in community and environmental values; focus on local community and its resources and services; values and quality of relationships shape lifestyle; risks are shared; slower economic growth accepted by majority; increase in rules and regulations to protect the community; etc.

These and other more complex future scenarios have helped to stimulate management’s thinking about how their business might be affected if different future outcomes emerge. They can also help to identify the opportunities for their business in actively striving to create or align themselves and their products, services and marketing image with the people seeking to inhabit one world or another.

Once a scenario has been developed in carefully structured conversations involving professional futurists, representatives of an organisation’s staff, customers, and future customers (e.g. high school students), a market research study can help to determine the scenario that is most attractive to your current customers and to your targeted future market segments. A financial services organization, for example, might then come to the conclusion that continuing to target the Capitalist World puts them in a very crowded and increasingly competitive market environment; whereas targeting the Community World may enable them to create a dominant brand in a “world” to which something like 25% of Australians may aspire.

...And Multiple Time Frames

As three McKinsey consultants argue in their book “The Alchemy of Growth” (Baghai, Coley and White 2000), if managers wish to ensure that their organizations continue to evolve and prosper over time, then they should consciously manage three very different “horizons of growth”. Each horizon focuses on parts of the business portfolio that are at different stages of the business lifecycle:

Horizon 1: focused on extending and defending existing core businesses.

Horizon 2: focused on rapidly building the emerging star business units of the future; the ones that are attracting customers’ and investors’ attention.

Horizon 3: focused on finding and germinating the seeds of promising businesses that are likely to emerge in the more distant future.

Too often Horizons 2 and 3 are ignored because managers are fully occupied with the day-to-day challenges of Horizon 1. Consequently, when today’s core business is overtaken by a disruptive technology or a new business model there are no emerging businesses to underpin the next stage of growth or evolution of the corporate entity.

By specifically recognising the need to manage a constantly renewing mix of organisational units at each stage of development, senior executives can also help to ensure that each unit has the very different types of leadership, organisational, managerial and technological structures and processes that it needs in order to evolve to the next stage of the life (and death) cycle.

Helping leaders to shift mindset and perspective and see many futures spanning different time frames - each with its own threats and opportunities and implications for action in the present - is what “futures studies” as a discipline is all about.

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