Creating Futures

Creating Futures

Scenario Validation Workshops

Final Report prepared by

Susan Bates and Tim Barnard
Scion

August 2007

Introduction

Over the past eighteen months, some of the Waikato's foremost strategic thinkers — people drawn from government, business, not-for-profit organisations and the community — have been involved in the development of a set of scenarios about the future. Developed as part of the Choosing Regional Futures project, the scenarios tell stories about the future — how it might look and what it might mean at a global, national, regional and individual level. The four scenarios are intended to portray the key strategic issues that the region faces. The scenarios will be used by Choosing Regional Futures to help the region better plan for a sustainable future.

An important part of the scenario planning process is to test the logic of the scenarios. With this objective in mind, representatives from relevant stakeholder groups — people who were involved in the initial scenario development process — were invited to attend one of two validation workshops.

This report outlines the process used and the key findings. The report includes a series of recommendations about possible refinements to the scenarios.

The rationale for validation

As mentioned previously, the aim of the workshops was to test the logic of the four scenarios. Some highly experienced scenario planning practitioners assert that it is almost impossible to jump directly to proper decision (or second-generation) scenarios. The goal of exploratory first-generation scenarios is, therefore, not action but understanding of the system, the pre-determined elements, and the connections between the various forces and events driving the system (Wack, 1985). When scenarios are used for testing strategic projects, any inconsistencies emerge quickly and present a major obstacle to the effective use of the scenario. For this reason, the first set of scenarios needs to be checked for internal consistency. Van der Heijden (1996) suggests two alternative methods:

1. Quantification — this is often not required, but it can be useful if the scenarios are used to "windtunnel" strategies or project proposals. It will not work if the activities cannot be captured numerically.
2. Actor testing — this involves guessing at the logic of the various actors in the game. If a particular actor would find it difficult to live in a scenario without taking some action, which is not consistent (either with the scenario or with his or her own behavioural characteristics), then the scenario is invalid. Actor testing is a crucial part of all scenario-building exercises. The characters in scenarios tend to be either driving

forces or institutions (nations, companies and regional bodies). According to Peter Schwartz (1991), “individuals rarely shape the cultural shifts, political alliances, and technological evolution scenarios care about”. Leaders are usually an expression of the forces at work in society; these forces should be the basis for the scenario, rather than the leader’s personality.

The process of actor testing greatly enhances the collective understanding of the impacts of the scenarios and the roles of the key players. In practice, it is not always necessary to produce a revised set of second generation scenarios. Scenario planning practitioners at Scion have often found that the process of actor testing reveals sufficient insight to inform strategic decisions.

Workshop process

For the purpose of the validation exercise, a specially tailored process was devised to test the four scenarios in a manner compatible with the limited time and resources available. At the two workshops held in Hamilton on 15 June 2007, attendees were asked a series of questions in relation to each of the scenarios:

1. What issues or statements resonated?
   Resonance was taken to be statements that stood out as being highly relevant to the scenario.

2. What were the areas of dissonance?
   Dissonance was described as statements that jarred or were out of line with the rest of the scenario.

3. What three steps would you need to take to thrive in any particular scenario? This was seen as a useful means by which to establish (a) whether the various stakeholders would be required to behave in a manner that is not consistent with their prevailing ethos; and (b) what some likely adaptive strategies might be.

Findings

Crowded House

Resonance

Workshop participants as a "not unfamiliar" or "status quo" scenario described this. The following elements of the scenario were identified as being particularly relevant (in no particular order):

- the multicultural nature of society;
- social pressures, e.g., housing costs;
- increased economic hardship, probably accompanied by greater inequality in health outcomes;
- influx of refugees (could be broader than climate change);
- population increase coupled with lower income, fewer services, and higher cost of living;
- inevitability of climate change;
- increased disruption due to more frequent extreme weather events;
- lack of recognition of the need to change, especially consumption habits;
- focus on managing impacts of climate change rather than addressing the causes;
- degraded water bodies and the impact on recreational and drinking water;
- market access issues;
- focus on primary industry;
- change in organisation of agriculture;
- a reduction in government spending leading to increased pressure on funding from other sources; and,
- the importance of iwi in governance.

Dissonance

A number of questions were raised as to the validity of certain aspects of this scenario — the first of these was mentioned by the majority of participants:

- growing primary production with agriculture relatively unaffected — agriculture will hit the wall!
- inconsistent comments about agriculture — affected/relatively unaffected;
- cities may not be the favoured place to live (dominance of gangs);
- one big urban area within 50 years?
- compulsory 35-hour week seems unlikely during an economic decline;
- increased poverty will lead to greater social unrest; and,
- the move to a more service- and manufacturing-based economy.

Sleeping In

Resonance

The fact that a crisis causes a belated response lends credibility and realism to this scenario. The following elements of the scenario were identified as being especially relevant (in no particular order):

- apathy: governments remain in action stalemate, with the inability to agree restricting the global response;
- decreasing biodiversity, followed by the re-emergence of environmentalism;
- increasing cost of living;
- changing land use forces a re-focus of industries, e.g., a move from agriculture to energy production (particularly biofuels);
- New Zealand's isolation on the world stage;
- skills migration — moving to the highest bidder;
- economic slowdown;
- inevitability of flood;
- increasing gap between rich and poor, middle- and low-income households being the hardest hit; and,
- New Zealand demonstrates a lack of capacity and capability to respond to extreme events.

Dissonance

Both workshop groups queried whether this scenario is sufficiently different from Crowded House to offer valuable new information and discussion points. The following more specific issues were considered to be unrealistic and/or unlikely to occur:

- crop-for-fuel development (more bioenergy in the Waikato);
- re-emergence of the environmental movement[1];
- is the emergence of environmental movements consistent with pervasive apathy?
- it is pre-determined[2] that extreme weather events will happen more frequently — this is not something that should vary from one scenario to another;
- climate refugees will also be a fact of life;
- similarly, the narrowing of the ecological base is also pre-determined[3];

[1] The argument here is that New Zealand is heading towards Third World status in this scenario and conventional wisdom dictates that environmental issues would become less important than other concerns.
[2] Pre-determined elements are driving forces that are firmly established along a particular trajectory and are completely outside our control. They are the same in all scenarios.
[3] On closer examination it became apparent that the intention was to emphasise how inaction can exacerbate these pre-determined elements, i.e., extreme weather events, climate refugees, and the narrowing ecological base. Logically, each scenario should be constructed around a critical uncertainty. Critical uncertainties are the trends and drivers that are the most important and the most uncertain in terms of the focal question, which in this case is to illuminate the strategic issues that the

- industrialised agriculture (this is very energy intensive);
- easy worldwide movement of production and skills — fuel costs?
- scale, location and longevity of impact of major flood event — a crisis in Auckland would have a greater impact and what is the effect on lifelines?
- would a flood in the Waikato have a major impact on the global response to climate change?
- is a flood the most realistic/thought-provoking crisis?
- GDP measures activity and a flood would generate a lot of activity, so an economic decline is not inevitable; and,
- reduced working week.

Nature Counts

Resonance

Workshop participants endorsed the following elements of this scenario:

- backlash against the focus on environmental spending;
- international progress on resource management remains fragmented and uncoordinated;
- natural resources are being depleted in terms of quantity and quality[4];
- impacts of climate change still felt, despite mitigating measures;
- focus on biological sciences and manufacturing processes;
- threats to commonly held views about agriculture;
- higher density and more energy efficient buildings, with accompanying changes to transport delivery and construction techniques;
- eroding of government safety nets;
- more participatory democracy and local decision making; and,
- increased community self-sufficiency but fragmented and inconsistent.

Dissonance

The first two points listed here were the subject of considerable debate; the rest are in no particular order:

- the phasing-out of schools[5];

Waikato will face in the future. Introducing variations to the pre-determined elements might detract from the underlying message.

[4] One could argue that this is a pre-determined element.

[5] Workshop participants argued that: basic literacy and numeracy is a survival skill; special skills are required to develop and implement new technologies; and, whilst more diversity of educational settings is likely, too many other social and cultural issues are linked to schools to warrant changing the system entirely.

- New Zealand at the forefront of global sustainability[6] — New Zealand is well placed to deliver sustainability but is not at the forefront;
- is the value change from economic freedom to social/environmental responsibility achievable?
- unclear how New Zealand would make a living?

Science Society

Resonance

This scenario was described by workshop participants as "generally credible". More specifically, the following points were endorsed (in no particular order):

- the rate of change leaves some behind;
- technology backlash;
- increased terrorism (whilst this is a given in all scenarios, the emphasis here is on bioterrorism);
- implied erosion of Environment Waikato's role[7]; and,
- autocratic "Big Brother" society.

Dissonance

Areas of dissonance included:

- dominance of technology — risk of backlash;
- technology provides solutions and creates problems, e.g., technology will leave people behind and many people will have less access than now;
- will scientists ever have prestige and power?
- this is the only scenario that appears to have wealth attached to it — is this realistic? Are there other ways to create and measure wealth? And,
- social inequality will thrive in this scenario, leading to discontent.

Survival tactics

The responses to the question "What three steps would you need to take to thrive in any particular scenario?" were essentially the same for each scenario. The following strategic responses were identified:

[6] More detail is required as to the mechanism by which this situation would occur. Concerns were expressed about the legitimacy of New Zealand's "clean, green" image and it was suggested that a more plausible argument would be to present New Zealand as a small but innovative supporter of the global sustainability movement. Sustainable agriculture was identified as a potential example for the rest of the world to follow.

- push for increased use of renewable energy sources (demand side management);
- improve energy efficiency;
- protect water supplies;
- attract, reward and nurture skilled staff — labour force issues need fleshing out (topic high on list of central and local government planning);
- local government will need to work harder on 'social fabric' issues;
- non-government funding agencies will need to find new ways to safeguard the funding base (a lot of the money comes from offshore) — there will be less government money available and higher energy and housing costs will increase the pressure;
- build capacity;
- emphasise health promotion[8] over tertiary care (i.e., health care in retrenchment mode);
- build resilience to major events — for example, how quickly could the power be reinstated in Auckland if it went off?
- emergency management;
- focus on community — build resilience by relying on support of extended family as there will be less support from governmental agencies;
- ensuring the community can feed itself (problem within New Zealand);
- be self sufficient in energy;
- build public transport infrastructure now;
- representative governments (new methods of democratisation and governance), alternative structures e.g., iwi management; and,
- strengthen urban planning (driven by population pressure).

Recurring themes

- Climate change impacts and their unpredictability.
- Terrorism — ever present in all scenarios but an increased threat of bio-terrorism in Science Society.
- Increasing gap between rich and poor — middle and low households the hardest hit
- Primary industry and agriculture:
  - agriculture will change in some way;
  - different crops will be developed;
  - different economic conditions;
  - different production techniques will be required;

[7] The question of how to thrive in this scenario is different. Perhaps the emphasis will shift to enforcement?
[8] Note: education is only one aspect of health promotion; structural issues are often overlooked.

- different regulations around land use;
- challenge to biofuel use.

– New Zealand in the forefront of sustainability?
  - agriculture could be a showcase;
  - the response of our agricultural sector is too slow or too minimal.

– The need for simplicity — we may be forced into leading more simple lives due to population pressure, for example, increased drive energy and water efficiency.

Conclusion and recommendations

It is useful to frame this discussion around two key questions:

1. Are the scenarios an effective learning tool?
2. Can they safely be used to inform decisions?

In terms of stimulating discussion and encouraging people to think strategically about the forces that will affect the Waikato's future, this scenario development exercise has already been a resounding success. Engaging a large number of people early in the process has been vitally important. People have learnt about and discussed issues and/or combinations of issues that may not have previously been considered.

This learning could be enhanced by including factual data pertaining to the key trends in the final report and by providing systems dynamics (cause and effect) diagrams with the scenarios.

Many of the questions that arose during the two validation workshops could be answered by referring to the complete scenario dossier. Whilst the task of producing succinct but fully informed summaries is not an enviable one, it would be worthwhile considering an alternative presentation of the summaries, either including more detail (making them longer) or changing the focus.

The overwhelming majority of workshop participants expressed concern at the lack of discussion in the scenarios of peak oil and end of cheap transport. This should be a priority for any re-write. In addition, it appears that there may only be three true scenarios in this particular set, as the distinction between 'Crowded House' and 'Sleeping In' is hazy. The areas of dissonance identified earlier in this report could also be addressed.

The question of how much, if at all, the scenarios need to be refined is a difficult one. The scenarios and the process by which they were developed are a necessary first step towards enhancing the collective understanding of the issues that will shape the future of the Waikato region. However, any successful scenario project is an ongoing process that involves a great deal of communication and learning. Perfecting the scenarios may not make a significant contribution in this regard.

The validation process has already generated a set of survival tactics and recurring themes that will be useful for the development of policy plans. These policies/plans will contribute to the testing of the SDSS and the alignment of the SDSS with community information requirements for participative decision making and dialogue processes.

Regardless of any flaws present in the scenarios, people have been able to see how their operating environment might change in the future and what steps they will need to take in order to thrive. Furthermore, these strategic responses are consistent across all of the scenarios — a sensible strategy is equally valid in any scenario; it would not be wise to adopt a strategy that will only work in one possible future.

References

Schwartz, P. 1991, The art of the long view (New York: Bantam Doubleday Dell).

Van der Heijden, K. 1996, Scenarios: the art of strategic conversation, (John Wiley & Sons Ltd, Chichester).

Wack, P. 1985, Scenarios: uncharted waters ahead. *Harvard Business Review September-October 1985. Pp. 73–89.*

Wack, P. 1985, Scenarios: shooting the rapids. *Harvard Business Review November-December 1985. Pp. 139–150.*