

June 2011

Report 13

2058

StrategyNZ

Mapping our Future

Strategy Maps

From Te Papa to
the Legislative
Council Chamber

MCGUINNESS INSTITUTE

Project 2058: Report 13

June 2011

StrategyNZ: Mapping our Future Strategy Maps

From Te Papa to the Legislative Council Chamber

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Preface

Hon. Fran Wilde

The following strategy maps for the future direction of New Zealand were prepared during a two-day workshop. They are the result of learnings, conversations, expert knowledge and data-mining, guided by a strategic mapping process.

The maps are testament to the desire of many New Zealanders for our country to pursue, with clarity and purpose, a long-term direction for the benefit of us all, unhindered by reactive short-term thinking.

Over a very short timeframe of just two days, more than 100 people came together and created and mapped a strategy for our country. Regardless of what any future reader may think of the proposals, this exercise shows what is possible when people meet with a shared objective and are guided by an excellent process.

The purpose of creating and presenting these strategy maps is not only to provide insight into how New Zealand might look in the future, but also to show us how we can begin to think about strategies to pursue our preferred futures.

Those involved do not want the thinking or conversation to end here. The hope is that the presentation of the strategy maps to elected representatives and members of the public is just the beginning of a wider public engagement.

Through presenting, discussing and understanding

these strategy maps we continue the dialogue about meaningful strategic change, and the introduction of a new way to articulate and facilitate such change.

It was a very difficult task to choose just four strategy maps to be presented to our audience. However, I believe that the ones we selected invite a wider discussion about the way we as New Zealanders might want to strategically shape our future.

These maps collectively provide a vehicle for considering and engaging with New Zealand's long-term future, and they should be shared between people, organisations, businesses and government departments.

It has been an interesting, thought-provoking and exciting experience to be involved in, and my hope is that there is now a movement from talking and planning to action.



Hon. Fran Wilde

Hon. Fran Wilde is an accomplished politician, philanthropist and active community member in Wellington. She was the first female mayor of Wellington and has held positions as a Labour MP, Cabinet Minister and private sector company director, as well as spending six years as CEO of Trade New Zealand. Fran is currently Chair of the Greater Wellington Regional Council and a Chief Crown Negotiator for Treaty of Waitangi settlements.



Hon. Fran Wilde

Introduction

Wendy McGuinness

About Project 2058

The main work programme of the McGuinness Institute is *Project 2058*. The strategic aim of this project is to promote integrated long-term thinking, leadership and capacity building so that New Zealand can both effectively seek and create opportunities, and explore and manage risks over the next 50 years.

Project 2058 comprises a work programme divided into three parts – research, scenarios and strategy – all of which aim to inform the Institute’s National Sustainable Development Strategy (NSDS) for New Zealand. *StrategyNZ: Mapping our Future* forms a significant part of the ongoing work programme of *Project 2058*. The two reports related directly to *StrategyNZ: Mapping our Future* are:

1. *Report 12 – StrategyNZ: Mapping our Future Workbook: Exploring visions, foresight, strategies and their execution;* and
2. *Report 13 – StrategyNZ: Mapping our Future Strategy Maps: From Te Papa to the Legislative Council Chamber* (this report).

In addition to these reports the Institute has published *Working Paper 2011/16 – StrategyNZ: Mapping our Future: Exploring participant feedback*. The Institute has also collected contributions from *StrategyNZ: Mapping our Future* participants, these have been published in the e-book, *StrategyNZ: Mapping our Future: Reflections from participants of the workshop*. For further information on *Project 2058*, and earlier reports, see the Institute’s website.

About StrategyNZ: Mapping our Future

This report documents the inputs, processes and outputs of the Institute’s two-day workshop *StrategyNZ: Mapping our Future*. This publication provides participants and other interested parties with a resource that they can use to revisit and put in place the methods, ideas and strategies generated over the two days.

StrategyNZ: Mapping our Future endeavoured to provide a place and a process in which New Zealanders could map strategies for New Zealand’s long-term future. In order to achieve this, we pursued a diverse range of participants of different ages, professions and backgrounds. Our aim was to ‘put New Zealand in the room’ to gather a broad range of perspectives.

The workshop started at the Museum of New Zealand (Te Papa) and finished at the Legislative Council Chamber in Parliament.

Even before the two-day workshop began, a number of inputs were set in place. Dr Peter Bishop, director of the graduate programme in Futures Studies at the University of Houston, ran a two-day introductory course in future studies. Almost half the participants of the workshop attended his course where they were introduced to the basic concepts, context and application of future studies, see Rory Sarten’s paper to learn more about the course.

Other inputs, either given prior to, or made available at the workshop, included:

1. *Key findings on New Zealand's progress using a sustainable development approach: 2010*, published by Statistics New Zealand;
2. *The New Zealand Official Yearbook 2010*, published by Statistics New Zealand;
3. *Report 11 – A History of Future-thinking Initiatives in New Zealand 1936–2010: Learning from the past to build a better future*, published by the Sustainable Future Institute;
4. *Report 12 – StrategyNZ: Mapping our Future Workbook: Exploring visions, foresight, strategies and their execution: Working towards a national strategy for New Zealand*, published by the McGuinness Institute;
5. A draft of *Nation Dates: Significant events that have shaped the nation of New Zealand 1770–2011*, prepared by the McGuinness Institute; and
6. Further reports and think pieces published by the McGuinness Institute.

The structure of this report follows the six parts of the workshop programme.

Part 1 Setting the global context: 30 March 2011, Te Papa / Pages 5–12

StrategyNZ: Mapping our Future was opened by Sir Paul Callaghan, Kiwibank's 2011 New Zealander of the Year. He was followed by NASA Chief Scientist Dennis M. Bushnell, Dr Peter Bishop, and Aaron Maniam, the first head of the Singapore government's Centre for Strategic Futures. All contributed significant insights into the wider global context for future thinking and Sir Paul and Dr Bishop have provided contributing papers for this report. An insight into Aaron Maniam's presentation has also been provided by Alison Nevill's paper.

Part 2 Where New Zealand is today: 30 March 2011, Te Papa / Pages 13–30

In Part 2 of the workshop, eight New Zealanders put forward their observations, perceived obstacles and opportunities for the country's future. The speakers for this section included Sir Mason Durie, Dr Morgan Williams, Mai Chen, Jillian de Beer, Michael Moore-Jones, Rik Athorne, Sam Morgan and Tony Alexander. Part 2 of the report includes a concise description of each of their topics, a contributing paper from Tony Alexander, and an analysis of the Institute's 'Three Questions' survey, providing a picture of New Zealand's strategic uncertainties today.

Part 3 Preparing strategy maps: 30 and 31 March 2011, Te Papa and McGuinness Institute offices / Pages 31–49

Part 3, preparing the strategy maps, was hard work and many stayed through the night to complete this task. It was clear from early on in the organisation of *StrategyNZ: Mapping our Future* that one of the best ways to communicate the desired thinking space would be visually, with innovative design. We were very fortunate to have the assistance of Dr Mick Abbott, director of the Masters in Design programme at Otago University, who was instrumental in putting together a talented group of designers who were placed in the teams to participate and help communicate the resulting strategies. Consultants Dr Rick Boven, Dr Hamish Campbell, Roger Dennis, Sue Elliott, Mathieu Liminana and Dale Pearce were also invaluable in assisting participants in the development of their strategy maps.

Part 4 Presenting and judging strategy maps: 31 March 2011, Te Wharewaka o Pōneke / Pages 50–73

Part 4 began on Thursday at 10am, when all ten teams presented their outputs to the four judges: the Hon. Fran Wilde, Chair of the Greater Wellington Regional Council, who also acted as chair for the judging panel; Dale Pearce, Principal of Palladium Group and an expert in strategy mapping; James Palmer, Director of Strategy at the Ministry of Agriculture and Forestry; and Alex Fala, a senior executive at Trade Me. Four maps were selected by the judges as best fulfilling the criteria, as reflected on in James Palmer's contributing paper. The entire collection of outputs from all groups; the strategy maps, the *New Zealand Listener* covers and the Coat of Arms are reprinted in this section and Dr Robert Hickson gives his account of the common themes across the ten group presentations.

**Part 5 Three workstreams: 31 March 2011,
Te Wharewaka o Pōneke / Pages 74–77**

Participants not selected for the presentations at the Legislative Council Chamber could choose between two working lunches. These included a panel chaired by Dr Peter Bishop on International Futurists and a second panel on Integrated Reporting chaired by Jane Diplock of the Securities Commission. Part 5 contains a brief description of the ideas talked about by the speakers.

**Part 6 Presentations to Members of Parliament at
the Legislative Council Chamber: 31 March 2011 /
Pages 78–83**

Part 6 was the presentation of the four strategy maps selected by the judging panel. This took place at the Legislative Council Chamber in Wellington on the evening of March 31. Colin James also presented his contributing paper 'History is full of unpredicted futures' and final remarks by Charles Chauvel and Chris Auchinvole brought the workshop to a close.



Wendy McGuinness

StrategyNZ: Mapping our Future would not have worked without the enthusiasm, creativity and open-mindedness of our participants, who accepted the difficult and often avoided task of strategising for a country. Special thanks must go to our sponsors, without whose considerable assistance this event would never have happened, and to the judges and consultants who gave their time. We hope that those involved left with new ideas, skills and connections, along with the desire to actively implement their visions for New Zealand. A full list of the many people who made this workshop a success can be found on pages 86–90.

I would like to end by noting that this process has been an experiment. We wanted to put New Zealand's long-term future in the room and start exploring this unfamiliar yet crucially important territory. The outputs on pages 52–71 speak for themselves, and confirm that this is a truly exciting space to work in.

Wendy McGuinness
Chief Executive
McGuinness Institute

Wendy McGuinness is the founder and chief executive of the McGuinness Institute. As a Fellow Chartered Accountant (FCA) specialising in risk management, Wendy has worked in both the public and private sectors. She holds an NZCC, BCom and an MBA, and has also completed several environmental papers. In 2004 she established the McGuinness Institute as a way of contributing to New Zealand's long-term future. Wendy also sits on the boards of New Zealand Futures Trust and the Katherine Mansfield Birthplace, and has attended numerous international conferences on futures studies.

Part 1 | Setting the global context

Overview

As part of the wider global community, New Zealand is increasingly affected by how other countries manage themselves. Similarly, many of the challenges New Zealand faces in addressing a sustainable future are not unique to this country.

Four exceptional individuals provided the international context for *StrategyNZ: Mapping our Future*.

Sir Paul Callaghan was named Kiwibank's 2011 New Zealander of the Year for his service to science in the fields of nanotechnology and magnetic resonance. We were privileged to have him open the *StrategyNZ: Mapping our Future* workshop. Sir Paul challenged New Zealand to build a strategy around our emerging knowledge sector and potential for further success in technology niches. In his presentation he championed New Zealand as a 'place where talent wants to live', a theme that came through strongly in the output from groups during the event. Sir Paul's contributing paper is available overleaf.

NASA Chief Scientist Dennis M. Bushnell joined us via video conference and shared his observations of where technological advances are taking us. He put forward seven simultaneous existential societal issues, any one of which will change society as we know it. However, in his view, the impact of all seven, including potential synergisms, is approaching the unfathomable. They were

1. Climate change and energy
2. Massive debt (AKA 'The Great Correction')
3. Water and food shortages/environmental issues
4. Five simultaneous game-changing tech revolutions, tele-everything
5. Luddites/individual destructive power
6. Robotics/machine intelligence/employment
7. Humans merging with the machines

Dr Peter Bishop is an associate professor at the College of Technology and Director of the graduate programme in Futures Studies at the University of Houston, and specialises in long-term forecasting and planning. His contributing paper (p. 8) explores the paradoxes inherent in a set of categories around which future studies is organised. These six categories are

1. People
2. Habitat
3. Technologies
4. Economics
5. Governance
6. Culture

Aaron Maniam is the first head of the Singapore government's Centre for Strategic Futures – an initiative which has created a framework upon which to build an intelligent country. We were fortunate to learn of the experiences of Singapore as a potential model for New Zealand. On page 11 Alison Nevill, a process chair, offers an overview of Maniam's presentation outlining how Singapore has applied foresight in government.

Together, these four speakers informed, challenged and inspired participants about the future of the world.

Sustainable economic growth for New Zealand: An optimistic myth-busting perspective

Sir Paul Callaghan

Long-term vision is something we tend to avoid in New Zealand, with the possible exception of Māori, who have greater reason to focus on the development of their assets for future generations of mokopuna. But I will argue here that vision is essential to any strategy aimed at enhancing prosperity. It is my belief that we are poor because we choose to be poor, and that what holds us back are self-serving but dishonest myths.

The first myth is that we are an egalitarian society, a great place to bring up children. But in income disparity, child mortality, imprisonment rates and most other negative social indicators, we are among the worst in the OECD. The second myth is that we are clean and green. In truth, the reality is altogether different. Like other developed countries, we have despoiled our environment to eke out a measure of prosperity, and we therefore have no moral high ground from which to preach to others. Our valuable dairy industry severely impacts our rivers and lakes. Our pastoral industries are significant emitters of greenhouse gases. The third myth is that we, as New Zealanders, do not need prosperity, that we have 'lifestyle' instead. But we complain that our health system cannot afford to meet our needs and that our infrastructure is decrepit. Now we face significant economic stress following the Christchurch earthquake. Furthermore, the 'lifestyle' argument is hard to sustain, given New Zealanders are the second hardest working in the OECD. But when we look at how hard we work against how productive we are, in comparison to other OECD countries, we see that New Zealanders are amongst the least productive.

Fifty years ago more Australians migrated to New Zealand than vice versa and the New Zealand dollar was much stronger than Australia's. Now Australia is 35% richer than New Zealand, representing a \$40 billion per annum GDP shortfall for us. Let me illustrate that in a different way. There are 1.3 million full time equivalent of jobs in New Zealand. In order to maintain our current per capita GDP we need a revenue per job of \$125,000. In order to match Australia we need around \$170,000. Tourism brings in around \$80,000 per job, and while usefully employing unskilled New Zealanders, it cannot provide a route to

prosperity. By contrast the dairy industry brings in around \$350,000 a job. The problem with dairy is that environmental limitations prevent us from scaling it up at all, let alone by the factor of 5 or 6 we need to make up the \$40 billion per annum shortfall.

Interestingly, our largest export-earning sector is manufacturing (contradicting yet another New Zealand myth that everything is 'made in China'). At around \$250,000 a job on average, these businesses thrive by producing goods that have a high profit margin and a high ratio of value to weight. The key to this kind of manufacturing is knowledge content, and that in turn is driven by investment in research and development (R&D). The poster child of such business is Fisher and Paykel Healthcare, with \$500 million per annum of exports. If we had 100 such companies, our prosperity would be assured and in a manner which is entirely sustainable. Such businesses generate no greenhouse gases, do not require land or energy, and do not dump nitrates into our streams. Out in the larger global economies, there are even more startling examples of sustainable businesses which are highly productive. Apple Inc. earns around \$2,000,000 per job, while Google and Samsung earn around \$1,400,000.

The obvious and the politically fashionable products will undoubtedly be addressed by much bigger players than New Zealand in the world economy. Where we will be successful is in the technology niches. Because we are only 0.2% of the world's economy, we are subject to a 500 times multiplier which can make such niches highly profitable bases for businesses that are large on the New Zealand scale. Fisher and Paykel Healthcare dominate the world market for respiratory humidifiers. Rakon are world-class players in crystal-controlled oscillators. And if we can, as we do now, have ten such companies exporting between them nearly \$4 billion per annum, why not 100? Indeed, we have grown such companies despite a complete lack of awareness by the New Zealand public that we can do this sort of thing. These businesses are essentially invisible. They do not sell in New Zealand, but internationally. They do not sponsor the ballet or children's soccer. They make weird products that our kids and their parents do not understand.

But we have it in our power to change all that. We have an excellent education system, as good as the Danes or Swedes. If we care for our environment and create a just, equitable and creative society, a 'place where talent wants to live', then we can attract the best in the world, and provide an opportunity for our most talented Kiwis to see their future here. Imagine what we could achieve if we built a strategy around, and made central to our thinking, the existing success of our emerging knowledge sector, gearing our education system accordingly. One hundred inspired New Zealand entrepreneurs can turn this country around. That is the challenge for us all.

Sir Paul Callaghan (GNZM, FRS, FRSNZ) is Kiwibank's 2011 New Zealander of the Year for his service to science in the fields of nanotechnology and magnetic resonance. He holds a Doctor of Philosophy from the University of Oxford, was made Professor of Physics at Massey University in 1984, and was appointed Alan MacDiarmid Professor of Physical Sciences in 2001. Sir Paul is the founding director of both the multi-university MacDiarmid Institute for Advanced Materials and Nanotechnology and of Magritek. He is past president of the Academy Council of the Royal Society of New Zealand and the current president of the International Society of Magnetic Resonance. The distinctions he has received include: becoming a Fellow of the Royal Society of London, Ampere Prize, Rutherford Medal, Principal Companion of the New Zealand Order of Merit, KEA/NZTE World Class New Zealander Award, the Sir Peter Blake Medal, James Cook Research Fellowship, the Günther Laukien Prize for Magnetic Resonance and in 2010 he shared the New Zealand Prime Minister's Science Prize.



Sir Paul Callaghan

Understanding paradox through strategic foresight

Dr Peter Bishop

The conference began with a traditional Māori pōwhiri, where I was asked to say a few words. I have rarely been asked to stand up as a white person, as a member of my culture, and speak the truth as I knew it. In fact, I have only done it once before in my life. But it was a privilege to do so here. In that short invocation, I reminded myself and others that the Māori tradition of respect for our ancestors also requires us to take responsibility as the ancestors of future generations. So one way of defining a good life (perhaps even in the Māori tradition) is to strive to be the good ancestors whom future generations will happily respect.

In order to do that, we must first approach the future in an intelligent way. Thankfully, our innate human intelligence allows us to observe, interpret and manipulate complex phenomena. The result is that we humans now dominate the planet more than all other species, except perhaps for the lowly bacteria.

However, the way we interpret the world changes because our models of reality change. So we find ourselves in a powerful, yet dangerous position. We may think we know what we are doing when actually we do not. But when we are unsure, when we are confronted by uncertainty, we naturally try to ‘figure it out’, to discover the answer that will explain reality the way it is. That tendency, however, simply replaces one answer with another. That works sometimes, but I am concerned that it will not work in this case. Any new ‘answer’ will be subject to the same limitations of linearity and simplicity that are built into our fundamental ways of interpreting reality. The world in which our brains evolved was quite stable over long periods of time and comparatively simple compared to today. It consisted of fairly well-known physical and cultural relationships. But the world has grown beyond the African savannah, to say the least, so that our natural way of interpreting reality may no longer be adequate. On the contrary, it may actually be harmful because we may act with the confidence that we know what is going on when in fact we don’t.

So what is the answer? The answer is that there is no answer. The world today is complex and chaotic, which means much more than that it is simply complicated and stochastic (random). We

know how to deal with complicated and stochastic. We gather more information, apply better theories, make probability estimates. In short, we have used the tools to deal with complicated and stochastic systems for over a hundred years now.

No, complex and chaotic systems are not just complicated and stochastic. They signify a different type of phenomenon that is impenetrable by the standard methods of scientific research and analysis. Therefore, I propose that we give up the expectation that we will ever comprehend, in any classic sense, the realities we are in and the future that we are facing. After millennia of human progress in understanding the world, not the least of which occurred in the last 200 years, we need to stop believing that we can actually understand the current state of the world. Referring to Paul Cunningham’s reference to Lao-Tzu, ‘Truth lies in paradox’, our current situation may be the ultimate paradox: namely that our overwhelming intelligence has allowed us to create a world that we can no longer understand and, even less, control. The alternative is to throw ourselves into the arms of complexity and chaos and not try to understand or control the world in the classic sense.

Futurists divide that work into sectors, referred to as STEEP, which acts like a checklist so we don’t leave anything out. The acronym stands for Social, Technological, Economic, Environmental, and Political. These categories tell us that the world is a complex place. All these areas are changing simultaneously, and they all have an effect on one another. So there is no way of comprehending the whole; only parts of it and that for only a limited time.

The six STEEP categories I use are: **people**, in their habitat (the natural **environment**), use **technology** to manipulate that habitat (and each other!), within an **economic** system that decides which technologies get produced and used and who benefits from them, within a larger system of **governance** that makes collective decisions, and finally within an even larger **cultural** context of language, beliefs, values and norms that allow us to live and work with others in the world. Using STEEP as a starting point, I will try to demonstrate how paradox lies at the heart of the complexity and chaos in today’s society.

Starting with **people**, the first paradox is that the explosion of the world's population that has so threatened the planet over the last 60 years was the result of perhaps the greatest technological and humanitarian achievement of the last century, the eradication of disease through the widespread use of antibiotics. Those same antibiotics and other medical achievements have increased life expectancy in developed countries from the 50s to the late 70s; but in the process we have created societies that have fewer workers and more who are dependent on welfare and medical support from their governments, threatening not only the environment with their affluent lifestyles, but also their ability to sustain their economies.

The second STEEP category, our **environment**, Planet Earth, is the subject of great paradox itself. We have learned to extract its resources at a remarkable pace so that we are living in a time of unprecedented energy and material availability. The resources we are using, such as petroleum and coal, have specific energies – the amount of energy per unit of mass – higher than any other known source except hydrogen and radioactive minerals. We call these resources 'fossil', but we should call them 'ancient sunlight' because they are the product of our sun beaming down and supporting life on the Earth over billions of years. But we have extracted and used those resources in the span of only a few hundred years at a rate that is ten million times the rate at which they were created. We are proud of that achievement; we call that progress. The paradox is that we have been so ingenious in extracting these resources, to fuel the complex and wonderful society we have, but the resource is itself finite. We have built complicated lives and societies based on that resource, but soon we will need to sustain this high consumption society without the high density energy resource that brought it about. I imagine a vine that grows and prospers by drawing its energy and nutrients from the tree that it clings to. But trees do not live forever. Will the vine learn how to live without the tree?

In terms of **technology**, the paradox lies in the fact that we have created many labour-saving devices, yet we now work harder than ever before. We have created communication systems and technologies that free us from our offices and homes, but now our work can follow us everywhere. And biotechnology, most likely the next great wave, presents its own great paradox. Our advances may be so great that we may indeed invent ourselves out of existence. In 100 or 150 years, we may not even recognise whoever is here as human, not to mention the intelligent machines that many predict will

share the planet with us. Are we smart enough to take control of life itself, to increase the rate of change in the biosphere and in our own germ line by the same orders of magnitude that cultural change accelerated the stately pace of biological evolution? We are now the single largest influence on the physical condition of the planet. Do we want the same responsibility for its life forms as well?

The fourth category is our **economic** system. Every society through history and across cultures has had some form of economy. Of course, the one we operate under today, free market capitalism, is amazingly productive. We have created a world that is unbelievable and miraculous compared to society just 100 years ago, but the paradox is that we still want more. We should be able to relax by now, to kick back and enjoy the fact that we can provide all our needs and some of our wants with a fraction of the labour required in centuries past. But no, we can't relax. This market system requires growth in order to survive. We are like the shark that must keep swimming in order to breathe. We are on a train that has lost its brakes, and simply cannot slow down. We cannot coast. We cannot pause. We are in competition with others and with ourselves. Every year must be an improvement on the last.

The middle income countries are now entering the race. We do not want to deprive them of the affluence that we enjoy, but 'hey, it's a competitive world'. What they get, we don't get, or at least that's what many believe. So even though we have already won the race against hunger and disease and insecurity, we keep on running. We will continue to compete against them and all others because the economic system requires it. We still strive for more and more when we already have so much. Is that a paradox or what?

Finally, our **governance** system demonstrates the genius of democracy. The system uses our adversarial nature to control our tendency to dominate others – the famed balance of power. So politicians compete for our votes, and the branches of government compete with each other for power and respect. Power is separated and balanced, creating a situation where there is no one single person or body in charge. This system has served us well, but too much of a good thing can be a harmful thing. The paradox is that we have used the adversarial system to get us this far, but now it is all consuming. The most important thing in today's political system is not to govern, but simply to acquire power, to maintain power, to stay in office, but for what? Do they ever use the power they acquired for the common good?

It is difficult, even if our leaders wanted to, because the other side will not let them. They might get credit for doing good. ‘How awful! The voters may actually like someone else who does something good, and then we will lose power. So we must prevent them from doing good.’ Paradoxes abound!

The final category is **culture**, which includes language, beliefs, values and norms. As a first-time visitor to New Zealand, I have seen remarkable cultural success in the opportunity for cooperation between Māori and Pākehā. In comparison to the US, also a multicultural nation, but of a very different sort, you may have been helped by the relatively small land mass you occupy, the relatively large proportion of Māori in the population, and the singularity of the Māori way of life. Perhaps because the US is a larger and more heterogeneous country, it has not dealt with culture in the same focused way that New Zealand has. Making a land in which different cultures can live together may be one of New Zealand’s greatest achievements.

But is there a paradox in culture as well? In your case, it may actually be paradox transcended. The paradox of culture is the same as where I began – that only by putting aside our presuppositions can we see more clearly. Culture is the ultimate bundle of presuppositions. Every aspect is ‘obviously’ true, almost by definition, to those socialised into it. It is only when we realise that our original way of seeing and being in the world is not the right way but only one right way that we transcend the paradox of culture. So it is heartening to see a people like yourselves so far down that road. Not there yet, I am sure, but making great strides in that direction. So the ultimate paradox about approaching the future in our time is that we can never know for sure how we should proceed. Other societies in other times may have been

comprehensible to their inhabitants. I can say with assurance that today ours is not. We are now embroiled in a system of our making, one that is technically complex, not just complicated, and technically chaotic, not just stochastic. In this situation, we must speak in possibilities rather than actualities and act before we know exactly what we should do for sure. As a result, we need to approach the future tentatively and humbly – sensing, learning, discussing, and experimenting. While the bold may have carried the day in the past, it is those who recognise the inherent uncertainty and indeterminacy of the present that will survive.

Nevertheless, I have hope for our future because it is exactly the discussion, the deliberation, the advocacy, the conflict and the disagreement that you will engage in here that is the genius of our system. We should not try to come up with the answer, but rather a range of answers. Not the strategy, but multiple strategies that might work under different circumstances. The one thing we do need in this perilous time, however, is the commitment to work together on the way forward. Just as every success breeds its own failure, every challenge breeds its own success. We are not the victims of the forces around us. Instead we should be inspired to rise to the challenges they present, and ultimately aim to be good ancestors for the generations to come.

Dr Peter Bishop is an associate professor in the College of Technology and director of the graduate programme in Futures Studies at the University of Houston. He specialises in techniques for long-term forecasting and planning. He conducted a two-day seminar on future forecasting in Wellington on 28 and 29 March 2011, before the *StrategyNZ: Mapping our Future* workshop where he was a key keynote speaker.



Dr Peter Bishop receives a hongi from Christian Penny

The Singapore experience

Alison Nevill

Aaron Maniam heads the Centre for Strategic Futures that sits at the heart of the Singapore government's futures work. In his presentation he outlined the structure and processes that support Singapore's strategic planning and how they work together to support the country's future. He described how Singapore is building an 'ecosystem of futures thinkers and cross-fertilisation' to provide support for its strategic futures work, and showed how the evolution of the structure has drawn on and adapted the work of successful models, such as the model of scenario planning practised by Shell and the Global Business Network, and the disciplines of risk management, governance, communication and management.

A key enabler of the Singapore system is the Strategic Futures Network of Deputy Secretaries, a group that meets every two months to share foresight topics and scanning results in their areas. The network is chaired by the Head of the Civil Service.

Maniam described how the Centre now develops scenarios from two perspectives – at the national level, and on more focused topics like climate change and the new media – which had a broad impact on policy-making and, in part, led to the development of the New Media Unit and the National Climate Change Secretariat. The New Media Unit guides and supports new media communications by government ministries and their application to public policy and citizen communications. The National Climate Change Secretariat, which is part of the Prime Minister's office, also works across ministries as it deals with all aspects of climate change policy.

Maniam described the need to complement scenario planning in order to manage 'black swans' and recognise and monitor the weak signals that come to fruition as 'discontinuous shocks'. It was the need

to identify these risks that led to the establishment of the Risk Assessment and Horizon Scanning (RAHS) programme, which provides capabilities to monitor data, analyse and understand relationships, and anticipate and discover emerging issues that could have a strategic impact on Singapore. This unit also provides tools, methods and networks for effective scanning and analysis which are used by the environmental scanning and futures units that are developing in the wider public sector agencies.

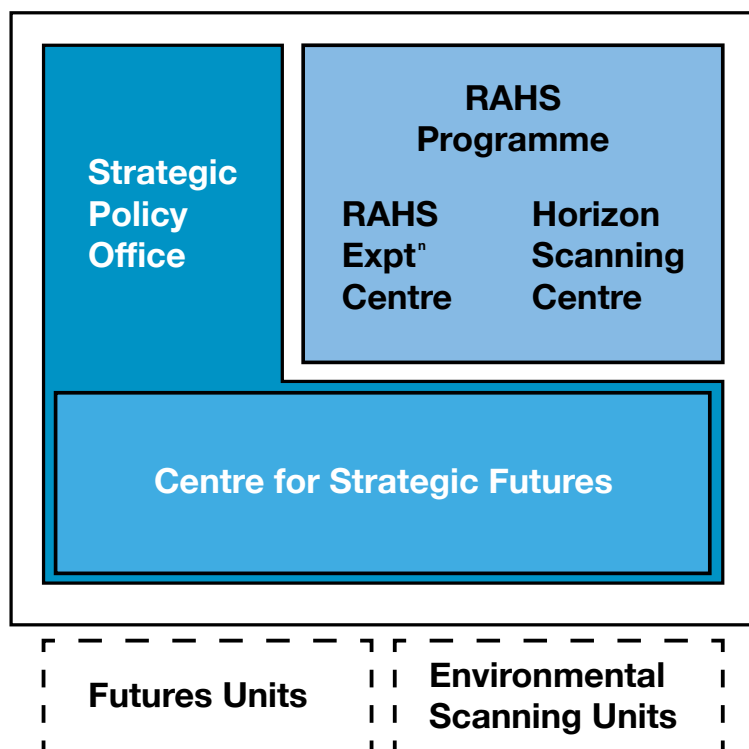
A cluster of governance, responsibilities, networks, structures, processes and tools facilitate future planning, change and risk management, and Maniam described how these are spreading across ministries as they deal with strategic issues like sustainability, resource management and food security. Active work is also going into spreading the networks to link with the private sector and international networks that focus on strategic futures.

In conclusion Maniam spoke of the growth of the community of future thinkers, the benefits of their ability to exchange best practices and cross-fertilise their ideas and learning, and the challenges of growing and nurturing this community of future thinkers both in and outside the government sector.

Aaron Maniam's presentation demonstrated how a government or agency can translate futures thinking into the execution of its strategic planning and analysis, explaining Singapore's 30-year focus on future development in a clear and cohesive way.

Alison Nevill has had a long association with information management and long-term strategies. Alison provided invaluable assistance and advice during the planning for *StrategyNZ: Mapping our Future* and attended the workshop as a group process chair.

Figure 1: The Futures Community in Singapore



Note 1: The Centre for Strategic Futures is the focal point of government futures work; this sits inside the Strategic Policy Office.

Note 2: The Risk Assessment and Horizon Scanning (RAHS) programme conducts trend analysis and environmental scanning.

Note 3: Futures units and environmental scanning units are developing across government departments in increasing numbers.



Aaron Maniam addresses StrategyNZ: Mapping our Future via video link

Part 2 | Where New Zealand is today

Overview

To spark participants' thinking for the strategy mapping task, speakers reflected on New Zealand's long-term future. Speakers presented an observation from their area of expertise that might shape an aspect of New Zealand's future. They also identified obstacles that might impede progress or make them feel frustrated, either due to a lack of resources or an emotional block. Finally, opportunities that result from observations and obstacles were recognised and speakers discussed how these might assist the country in moving toward a sustainable future.

Sir Mason Durie began by observing that we cannot look into the future without thinking about the past. He stressed that as New Zealand moves into the future, we must look for integrated solutions that recognise and respect distinctive cultural pathways. We must also consider how our constitutional needs may be very different in the future.

Mai Chen highlighted the indifference of New Zealanders concerning constitutional issues. She argued that because our constitution is not a singular written document, the public often fail to see the cause and effect relationship in New Zealand's constitutional arrangements. She also argued that a longer parliamentary term, preferably five years, is needed in New Zealand to give governments more time to develop and enact policy. This point became a strong theme throughout the workshop.

Dr Morgan Williams emphasised the importance of the biological interface between New Zealanders and our ecology. He stressed that the future of New Zealand will depend on its ecology, in particular how we manage our food and water. Looking forward, New Zealand needs to focus on three key areas: education that can adapt to the increasing rate of change; research, giving us the knowledge to navigate; and leadership, empowering the new navigators to be future makers, not future takers.

Jillian de Beer noted that the world exists in an increasingly borderless environment and it is important that New Zealanders actively engage in global conversations. To be effective global citizens we must be respectful, recognise talent and role models, and protect our uniqueness. It is also important that New Zealand learns how to tell its stories to the world.

Michael Moore-Jones highlighted one of the key obstacles for young people in New Zealand – a physical obstacle: the ocean. New Zealand's geographic isolation makes it difficult for young New Zealanders to engage and feel connected to the rest of the world. He notes, however, that there are many opportunities afforded by the Internet to allow students to engage with students elsewhere and to learn to think as citizens of the world.

Rik Athorne addressed creative teams, the future of design and what New Zealand looks and feels like from the outside in. More specifically, he explained how Weta was moving towards creating an increasingly immersive film experience that is as realistic as possible. As the technology develops, Weta is able to move closer and closer to this vision.

Sam Morgan discussed his involvement in the Pacific Fibre cable project and the economics of Internet business and connectivity. He further talked about his model for philanthropic work, which focuses on implementing change at a systemic level in a way that is cost effective and has measurable outputs. He stressed the need for New Zealand to recognise 'bright spots'. These are people with talent, people with models and people who have evidence of success. Sam stressed the need to encourage talent to want to live in New Zealand.

Tony Alexander gave an overview of New Zealand's economic history, noted the major challenges and historic events and reflected on how they have impacted on our current economic position. With these lessons in mind, he identified both the existing opportunities and the institutional and cultural factors that will require change for an improved future and more robust economy. His paper 'Sailing close to the precipice: Past, present and future' addresses these factors and is presented on page 14 overleaf.

In addition to the speakers' reflections on the long-term future of New Zealand, the Institute asked attendees and others to participate in a short survey prior to the workshop to canvass the concerns that were keeping New Zealanders awake at night. The 'Three Questions' survey asked about concerns people had regarding their business, Christchurch and New Zealand. The responses we received helped inform the workshop participants about the challenges that currently face New Zealanders. The results are presented on page 16 of this report.

Sailing close to the precipice: Past, present and future

Tony Alexander

How we got to this point

From the time of the arrival of Europeans in the late eighteenth century, New Zealand developed an economy built first on extractive activities such as whaling, sealing and kauri cutting, then wool farming, then, from 1882, sheepmeat farming, with dairy from the early 1890s. With an export base almost exclusively dependent on the primary sector and an economy dependent upon imports for manufactured goods, periods of economic weakness were invariably caused by weak export prices.

Such periods included the Long Depression of the 1890s and the Great Depression of the 1930s, and hand in hand with such periods went a reduced government ability to raise funds in London and net migration outflows.

A desire to insulate society against economic shocks and the economy against funding shortages when shocks arrived, led to the development of the welfare state from the 1930s and the imposition of import and exchange controls from 1938. Both areas of control slowly expanded during the generally good economic environment based on wool and food exports to the UK which prevailed from the late 1930s until 1967.

Then a 30% collapse in wool prices, the entry of the UK into the EEC, soaring oil prices, and fresh export price collapse produced major economic weakness. The government's response was threefold:

- Borrow and hope
- Encourage new industry with protection from imports
- Reduce dependence on imported energy

These policies were made possible by access to recycling OPEC oil dollars. But wasteful investments, policy flip-flops from fighting inflation to unemployment and back again, plus increasing controls produced structurally rising inflation, unemployment and business collapse, increasing rigidity in the economy and, ultimately, people flight. A net 156,000 people left New Zealand between 1976 and 1982.

The ratio of GDP per capita in New Zealand to the OECD average fell from 122% in 1974 to 99% come 1979 and then 82% come 1992, as the reforms of the

late 1980s and early 1990s revealed and led to the shedding of the country's major economic inefficiencies. The 1987 sharemarket and commercial property market crashes also contributed.

The 1930s–1970s policy responses to economic shocks became the prime obstacle to our growth.

The lesson of the 1970s to us and other countries was that shocks necessitate an economic structure that can adapt. Major deregulation from 1984–1992 stabilised the GDP per capita ratio against the OECD average – but since 2004 a new decline has set in and we are now at 80%. More changes are required.

In addition, the lesson of the past few years is that economic shocks are frequent and unpredictable and in our businesses and our economy we need to explicitly plan for other shocks that will inevitably arrive. Recent shocks include:

- Asian crisis, drought 1997/98
- Dot-com crash of the late 1990s
- Terrorist attacks 2001
- SARs, Iraq invasion, US deflation worries of 2003
- Global Financial Crisis 2008–09
- Earthquakes in Christchurch

How do we build a more robust economy?

From a purely economic standpoint, what we are after can be realistically summarised as follows:

- An economy that provides New Zealand citizens an income and material standard of living comparable with that enjoyed in other OECD economies on average.
- An economy and society able to adjust quickly to shocks.

Making no changes is not an option for the following reasons:

- Our GDP per capita ranking is already falling again against the OECD average and, in particular, against Australia, which forms part of the natural New Zealand labour market toward which Kiwis will increasingly flock.
- As a migratory people we leave when conditions are bad and net outflows aggravate problems.

- An aging population will generate fiscal strains that cannot be met by raising taxes.
- The primary sector in which we expect to gain due to rising global food demand and prices is not scalable using current production methods.
- Shocks come, on average, every three years. More will arrive.
- Over 40% of bank funding comes from offshore and the 2008 Lehman's collapse shows that there are times when renewing existing funding, let alone borrowing for additional lending, is not possible. Dependence on foreign financing must be reduced.

There is no shortage of things in need of change and opportunities that we can exploit. The challenge is deciding which to pursue and which to set aside. There are many identified factors associated with under performance of the New Zealand economy, some of which are causal, such as low savings; others of which are outcomes, such as low IT exports and lack of venture capital; and some like size and distance that cannot (realistically) be changed. The largely causal factors include the following:

- Inadequate infrastructure – roads, electricity, telecommunications.
- Low savings – limited expensive capital, over-reliance on and sensitivity to bank finance, high interest rates, and a high exchange rate.
- Low business R&D, especially by bigger companies and insufficient public/private technology cooperation.
- Burdensome tax compliance – largely GST & ACC.
- Weak management skills, especially HR and internationalisation.
- Inadequate childcare for lower socioeconomic groups and inadequate participation in education or training by 15- to 19-year-olds.
- Low agglomeration of economic activity.
- Weak internationalisation of New Zealand firms.

But while policy changes can heavily influence these elements of our institutional and regulatory framework, they cannot easily change the following cultural factors that perhaps more adequately explain why we are newly slipping against other OECD economies.

We are highly individualistic, like to keep control, distrust experts, focus on rules and contracts rather than relationships, assume customers overseas are the same as us and design accordingly, focus on the

short rather than long term, dislike giving and receiving feedback, take few risks, and use our inventiveness to drive down production costs rather than add new value. Essentially, we are good at making and using but not making and selling things.

Improving our future will require selecting some of these institutional and cultural factors for change. At the same time, we should consider selecting some of the many opportunities that present themselves. Here are some with an export focus:

- We are good at invention but not at implementation for a profit. As China grows, they will run out of other countries' products to copy and will need their own ideas, which, in a non-free society, are not fast in coming. Scope exists for blending our two strengths to offset our two weaknesses. Perhaps joint research/business institutes.
- Rising food prices traditionally led farmers to buy each other's farms, holiday homes etc. Now they are paying down debt. Once that is done an opportunity will exist to harness rising farmer capital into on-farm coproduction activities and off-farm investments, rather than over-pricing a shrinking farmland area and investing simply to lower the cost of producing a largely unchanging quantity of food.
- Australian exporters are being priced out of business by an Australian dollar hitting record post-float levels due to soaring mineral prices. Scope exists for relocation of such exporters to New Zealand.
- Migrants arriving in New Zealand tend to be specialised but work like the rest of us as generalists. A lot of expertise therefore remains untapped. Just as we often talk in terms of tapping into the network of 600,000 Kiwis offshore, so too can we better use the existing network of migrants here to help further our need for knowledge of markets overseas.

Tony Alexander graduated from Canterbury University in 1984 with a Master of Arts (Economics) degree with first class honours. After briefly working in Sydney for the Reserve Bank of Australia, he joined Westpac and, in mid-1987, transferred back to New Zealand. Following this, Tony joined the Bank of New Zealand and was appointed Chief Economist in 1994. He spends considerable time researching and writing about the New Zealand economy and speaking at numerous functions around the country advising businesses on what the future is likely to hold. Tony also gives his views on the economy to bank customers through various written commentaries and public speaking engagements, as well as weekly columns in three regional newspapers.

March 2011 Survey: What strategic uncertainties keep New Zealanders awake at night?

Wendy McGuinness

This paper presents an analysis of data drawn from the Institute's 'Three Questions' survey, which addressed strategic uncertainties in three areas that are key to the long-term future of New Zealand. Those canvassed included workshop attendees and other New Zealanders who were invited to complete the survey prior to *StrategyNZ: Mapping our Future*.

In his book *Seven Strategy Questions: A simple approach for better execution* (2010), Harvard Business School Professor Robert Simons argues that in order for a company to make the most of its competitive strategy it has to constantly ask the right questions. He proposes seven key questions that you should ask as part of this process in order to anticipate change and respond in a way that repositions yourself, your entity, your city or your country as competitive. The last of Simons' seven questions, 'What strategic uncertainties keep you awake at night?', resonated with me when I heard him present his findings late in 2010.

Answers to this question should not only provide insight into the challenges ahead – what is often called foresight – but indicate where time and effort should be focused in the future. As such, these answers can drive strategy. Those things that keep us awake at night are likely to be the strategic uncertainties that impact on our decision-making during the day. When applied to our country, the answer to this question is likely to influence the future shape of New Zealand, because it not only captures foresight, but indicates how that foresight is likely to be operationalised – what we have called the strategic response. Both foresight and our strategic response require careful monitoring.

Importantly, issues that keep us awake at night are more likely to be urgent in nature than the 'slow-burning' issues that continue to gain momentum and escalate over time, possibly having a greater impact in the long term. Because these slow-burning issues are often less obvious, we need to work hard to ensure that any list of strategic uncertainties is both accurate and comprehensive. Asking 'what *is* keeping New Zealanders awake at night?' is a great starting point for a more strategic discussion about 'what *should be* keeping New Zealanders awake at night?'

Given that what keeps us awake at night is likely to drive our decisions during the day, it is useful to consider these strategic uncertainties as opportunities to drive change. A strategic uncertainty shared is more likely to help staff, communities and countries to better progress long-term outcomes. How we respond can transform strategic uncertainties into constructive opportunities, such as creating strategic knowledge, a national strategy and last, but most importantly, delivering a better and more robust society.

To add to information on New Zealand's long-term future, we surveyed New Zealanders in regard to the following three areas of strategic uncertainty: business (Figure 2), Christchurch following the recent earthquakes (Figure 3) and the nation as a whole (Figure 4). Many responses were very in-depth and well considered, as shown by one chief executive's response below:

Question 1: What strategic uncertainties keep you awake at night in regard to the future of your business?

- 1) The lack of certainty about the regulatory environment around Fibre to the Home, and whether there will be safeguards to prevent a Sky monopoly for content services in this arena. 2) The extent to which my key clients' marketing spend decisions are moving off shore, particularly to Australia, and therefore whether we need to establish a direct sales presence there.

Question 2: What strategic uncertainties keep you awake at night in regard to the future of Christchurch?

That we rush into the rebuild without thinking through a clear brand positioning for Christchurch as a place to live and do business in and be educated in. For example it could be the most eco friendly and designed city on the planet, given the extent of the rebuild, but that would require guts and firm regulation and probably some incentives to achieve.

Question 3: What strategic uncertainties keep you awake at night in regard to the future of New Zealand?

- 1) The lack of a clear national (country, not political party) strategy and multi-year plan of execution.

2) Will Auckland get it mostly right and be successful as a world class city of the likes of Melbourne, Sydney and Brisbane, or be also rained on a lack of vision and fragmented minority interests that we spend too much valuable energy trying to reconcile.

How did the Institute conduct the survey?

The survey was made available online and distributed through a number of organisations and social media outlets. The Institute published a newsletter focused on the survey, and it was also publicised by The Royal Society of New Zealand and distributed to The Hugo Group, Deloitte/*Management* magazine's Top 200 Companies in 2009 and Deloitte Fast 50 company executives. Respondents were asked to answer three survey questions and to supply some basic demographic information about themselves.

Who responded to the survey?

In total 165 responses to the survey were collected within the allocated survey response time. Based on the demographic information attained:

- The highest percentage of respondents (40.3%) came from the Wellington region. The remaining responses were divided among regions as follows: Auckland (18.9%), Queenstown (10.1%), Christchurch (9.4%), Dunedin (5.0%), Hamilton (5.0%), Nelson (3.1%), Napier/Hastings (2.5%), New Plymouth (1.9%), Tauranga (1.9%) and Whanganui (1.9%). There were no participants from other regions.
- The majority of respondents were male (62.9%).
- The majority of respondents were in the 40–59 age bracket (52.8%); the next most represented age bracket was 25–39 (23.3%), closely followed by the 60-plus age bracket (22.6%), with only a small portion of respondents below 25 years of age (1.3%).
- Respondents were asked to select one category that best represented their primary area of employment activity out of a possible 19 options. 'Professional, scientific and technical services' had the highest frequency of responses (20.8%), followed by 'education and training' (17.6%).
- The respondents identified their professional position in the following ways: employee (24.5%); senior management (22.6%); other (22.6%); chief executive (20.8%); retired (6.9%); and student (2.5%).
- Of those who identified themselves as a chief executive or senior management, the majority of respondents (71.0%) were from businesses with fewer than 100 staff. Most were from an organisation with an annual revenue of less than \$1 million (56.5%).

How were the results synthesised?

Our methodology for synthesising the survey is loosely based on the New Zealand Futures Trust methodology used to analyse the New Zealand Post Household Vision Survey (2001–2002). Reading through the responses multiple times, we identified key words and recurrent ideas and arranged these into thematic groupings for each of the three questions.

Given that many respondents had worded their strategic uncertainties in the form of questions, it was decided that a 'key questions' format was the best way to illustrate the themes that were identified. Where possible, words have been lifted directly from the responses, so as to optimise the respondents' voices.

How are the results presented?

The answers of many respondents were very detailed and raised multiple themes. The results for each question are displayed in a figure and supported by text. This means that the percentage shown for each theme reflects the number of respondents (out of 165) that shared a common theme and, as such, the total of all the percentages for each question will be well over 100. Please note that the size of the circles in the three figures (Figures 2–4) reflects the frequency with which a theme arose.

What do the results mean?

In summary, the responses to Question 1 were predominantly concerned about government decision-making, followed by global issues such as economic trends, human resources, peak oil and adapting business practice in an evolving society. Responses to Question 2 addressed the strategic uncertainties associated with the rebuilding of Christchurch and the need for responsible decision-making. Responses to Question 3 were largely concerned with the need for strategic planning for the country as a whole, with a focus on environmental, social and economic uncertainties. Interestingly, peak oil was a more commonly shared strategic issue than climate change or the brain-drain. The common theme across all three questions was strategic uncertainty over the quality of government decision-making – in particular the responses imply government should work harder to improve long-term planning and public consultation.

How to use these results?

These survey results can be used as a tool to inform strategic knowledge on some of the uncertainties facing New Zealand. The thematic groupings highlight the concerns that faced New Zealanders in March 2011.

Conclusion

What we anticipate and how we respond to strategic uncertainties shapes our strategic future. This research illustrates the nature of the strategic uncertainties that are likely to drive change in New Zealand over the coming months and years. The challenge lies in gaining clarity over these uncertainties and then applying our resources and skills in such a way that we not only reduce the uncertainties but also invite dialogue and implement constructive change so that New Zealand becomes a more robust and sustainable nation.

The idea for this survey evolved out of a discussion between Murray Gribben, Roger Dennis, Nick Marsh and Wendy McGuinness in the McGuinness Institute offices. Further, the hard work of Lucy Foster, Rory Sarten and Grace White made this analysis possible.

Results from Question 1: What strategic uncertainties keep you awake at night with regard to the future of your business?

Figure 2 below provides a snapshot of common themes and the frequency with which they were raised by respondents. On the following page is a

detailed break down of the responses, which provides a more in-depth understanding of the strategic uncertainties identified in the survey.

Figure 2: Themes that emerged in response to Question 1: What strategic uncertainties keep you awake at night in regard to the future of your business?



Survey participants' responses to Question 1

Theme 1: New Zealand's economy within the context of global economic trends (15%). Specific questions underpinning this theme include:

- What measures are being taken to safeguard against the impact of recession?
- How severely will our economy contract as a result of recession and how can I adapt?
- Considering that New Zealand is one of the only countries in the world that can sustain itself, why do we need to trade internationally?
- How can I expect my staff to survive on minimum wages?
- How can I cope with rising costs?
- How can we manage economic factors outside New Zealand (such as currency trading and international stock exchanges) to minimise the impact they have on our economy?
- How can New Zealand remain competitive as Asian economies grow?

Theme 2: Adapting business practice in an evolving society (8%). Specific questions underpinning this theme include:

- Can we move from good to great? How can this be achieved and what is the timeframe?
- What am I going to do now that my main source of work has dried up?
- Where will my customers be in the future, and what will they want from me?
- Should we expand into different lines of business, merge or close down?
- Do we need to develop radically different ways of working and work-sharing, and if so, what would these look like?
- How can I use technology, social media, and the global village to negate bureaucracy and give me a clearer 'line of sight' to my end consumer?

Theme 3: The expansion and survival of small businesses in New Zealand (8%). Specific questions underpinning this theme include:

- How can I break out of the evolving, young, small market economy of New Zealand and become a globally respected company and leader?
- How can my business thrive among interest rates and unreasonable, over-burdening legislation designed for big businesses?

- Is there a way to break through the sense of entitlement, hubris and naivety of mainstream business and politics?
- Will small New Zealand businesses continue to have access to an affordable supply of skilled staff, energy, and other resources, including water?

Theme 4: Retirement (3%). Specific questions underpinning this theme include:

- Who will drive my business forward when my energy flags?
- Why are 'the elderly' continually sidelined in normal decision-making processes?
- How can I continue to engage with society after I retire?
- How can I plan for succession in my business?
- Where will I find the right person for business succession?
- At my age, what is my intellectual capacity to keep working?

Theme 5: The farming of our resources (5%). Specific questions underpinning this theme include:

- How do we find a balance between the long-term sustainability of our resources and the need to develop land, which is required for increased productivity and economic growth?
- The continuing sale of New Zealand land to overseas investors is pushing land values beyond the purchasing ability of the average kiwi. What can we do about this?

Theme 6: Human resource issues (15%). Specific questions underpinning this theme include:

- How can we increase our ability to attract and retain the highly skilled people we need in New Zealand to better compete with the job certainty and remuneration packages offered in Australia?
- How do we find and keep good staff?
- How do we change the fact that New Zealand has an anti-intellectual bias and does not value learning and education nearly enough?
- How do we source appropriate expertise and recruit the right people to enable growth?

Theme 7: Peak oil (9%). Specific questions underpinning this theme include:

- What will peak oil mean for our living standards and for production costs in New Zealand?
- All diesel engines can be converted to biofuel-running cars, so why are we still handing money over to fuel companies when we could make our own?
- Why is there a lack of support for alternative energy sources like wind and solar power, the input prices of which keep going up?
- What will our business do if we have no way to transport goods from A to B as a result of not being able to afford or access fuel?
- What will the effect be on international tourist arrivals and the tourism industry when oil prices reach untenable levels?
- What will happen to our fossil-fuel farming systems given our dependence on the fuel tank, from the day-to-day operation of the farm to the transport of product to the markets?
- Why is it much easier to get funding to tackle the immediate issues rather than those which look further into the future?
- Why is there a lack of funding for carrying out forensic research in New Zealand?
- Will the public budget be able to continue to maintain public facilities?
- What can we do about the lack of availability of philanthropic funds?
- What will happen as New Zealanders have less time and energy to commit to voluntary work or to join voluntary societies?

Theme 8: Government decision-making (26%). Specific questions underpinning this theme include:

- Why do governments make knee-jerk policy or legislative reactions to crises?
- Why is there little or no consultation within the New Zealand government's decision-making process?
- Why do well-intentioned government interventions not work?
- What is the future of central government health, welfare and savings, in comparison with the private sector?
- How do we make politicians understand that the world has changed and we need different economic and social models?
- Why does my small business have a lack of support from the government?
- Does the government understand the severity of the threat that climate change poses?
- How does the government intend to respond to climate change and its effects?
- How are government priorities changing?
- Is New Zealand going to allow the introduction of genetically modified seeds and animals?
- Why do New Zealand Crown Research Institutes keep appropriating taxpayer dollars for risky genetic engineering experiments?
- How can science contribute solutions to population explosion, resource-depleting lifestyles and climate change (alongside peak oil, natural habitat loss, starvation, warfare, terrorism, etc.)?
- Are innovation and its downstream commercialisation effects receiving enough attention?
- What does it mean to be a researcher in the 21st century and how does the work of research act on the world to bring about positive change?
- Where are our future scientists going to come from?
- Will our government continue to under-invest in research, science and technology?

Theme 9: Funding (sources and use) (7%). Specific questions underpinning this theme include:

- Can the middle-class worker really sustain the taxes needed for the future needs of our welfare state?

Theme 10: The role of research, science and innovation in the future of New Zealand (6%). Specific questions underpinning this theme include:

- Is New Zealand going to allow the introduction of genetically modified seeds and animals?
- Why do New Zealand Crown Research Institutes keep appropriating taxpayer dollars for risky genetic engineering experiments?
- How can science contribute solutions to population explosion, resource-depleting lifestyles and climate change (alongside peak oil, natural habitat loss, starvation, warfare, terrorism, etc.)?
- Are innovation and its downstream commercialisation effects receiving enough attention?
- What does it mean to be a researcher in the 21st century and how does the work of research act on the world to bring about positive change?
- Where are our future scientists going to come from?
- Will our government continue to under-invest in research, science and technology?

Theme 11: Maintaining healthy local communities and making a social contribution (5%). Specific questions underpinning this theme include:

- How can I enable and support a community ethic within a business model?
- How can my university continue to make a useful contribution to a society where the need for good analysis and sophisticated understanding of global phenomena is critical, but not always appreciated?
- Will my city become an 'outpost' of Auckland?
- How can I create community cohesion and integrated participation?

Theme 12: Food security (5%). Specific questions underpinning this theme include:

- Will the government support the development of more organic food production nationwide?
- What will be the effect of changes in acts relating to food?
- Will something be done about food regulation and country of origin labelling?
- Why is there such a 'crazy emphasis' on high-energy farming at a national level to supply international food markets?
- Why is the government failing to implement strategies which are appropriate to the imminent collapse of the food supply?
- How is New Zealand going to remain competitive in agriculture?
- What will happen if we lose our image as clean and green?
- Why are we letting a lack of long-term government planning for sustainability create strategic uncertainties for our businesses?
- Why does the government have an 'on again, off again' approach to sustainability?
- Why are we not walking the talk?

Theme 13: Sustaining our clean green image and creating long-term planning for sustainability (3%). Specific questions underpinning this theme include:

- Will New Zealand businesses 'wake up' to the efficiencies, opportunities and potential for innovation that lie in having a more sustainable strategy or approach to business?
- Does the government realise we have a weakening national brand due to poor environmental performances in areas such as greenhouse gas emissions and intensive agriculture?
- Do people realise we are going to lose our clean green tourism image unless we make efforts to maintain it?

Theme 14: Outlying questions that did not fit into other themes (5%) include:

- Is there organised crime within my industry?
- Why is New Zealand continuously undermined by misinformation fed to a gullible public?
- Is New Zealand the place to be in the long-term?
- Why do we have to deal with the hegemony of the US and the attitude that they know best?

Theme 15: Not applicable (7%). Some respondents regarded this question as not applicable to them, either for unexplained reasons or because they did not own a business or were retired.

Theme 16: No strategic uncertainties (4%). Reasons for not being concerned include:

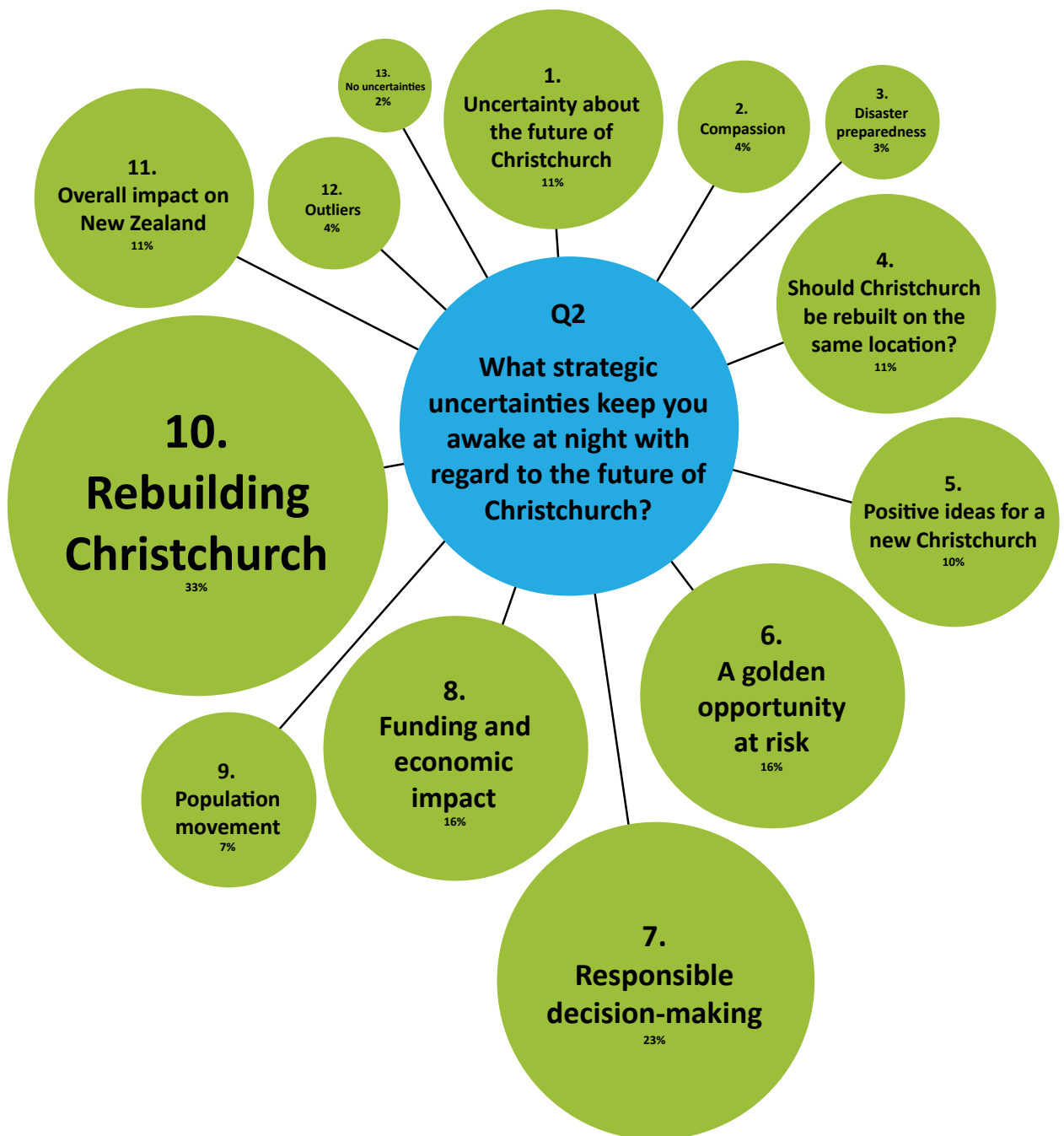
- I no longer have any control or influence over my business.
- I am not worrying about my job but instead worrying for other people who are losing jobs around me.
- I am not concerned because there is plenty of available work in my field of expertise.

Results from Question 2: What strategic uncertainties keep you awake at night with regard to the future of Christchurch?

Figure 3 below provides a snapshot of common themes and the frequency with which they were raised by respondents. On the following page is a

detailed break down of the responses, which provides a more in-depth understanding of the strategic uncertainties identified in the survey.

Figure 3: Themes identified in response to Question 2: What strategic uncertainties keep you awake at night in regard to the future of Christchurch?



Survey participants' responses to Question 2

Theme 1: General uncertainties about the future of Christchurch (11%). Specific questions underpinning this theme include:

- Where to start, what to do?
- How long will it take for Christchurch to stop shaking enough to be rebuilt?
- How many more earthquakes and for how long?
- Is there any certainty that Christchurch remains a safe place to live, work or study?
- When will it happen again?
- Can the city recover, or will it become a hollowed-out shell of a city?
- Will the central city get up and running again?
- Should Christchurch be rebuilt?
- How do we rebuild confidence?
- Who are we now?
- What about the many other New Zealand cities built in quake-prone areas?
- Why do we build where we do?
- Have New Zealanders realised that anywhere in the country could be affected seriously by an earthquake and potential tsunami?
- What happens to a big city when there is fundamental change in the very land it is built on?
- Thinking about the future of Christchurch must include Wellington – how do we prepare the capital for the worst?
- Will we learn and apply everything possible from the lessons of Christchurch?
- What are we doing to prepare for a huge earthquake in Wellington or a volcanic eruption in Auckland?

Theme 2: Compassion for the on-going realities the victims must face (4%). Specific questions underpinning this theme include:

- Are the people getting what they need right now?
- Can we look after the homeless people and those with broken homes before winter?
- Why are we letting the media milk people's tragedies like this?
- What are the psychological, physical and financial consequences for the people living in Christchurch?
- Will the people of Christchurch get a fair deal and choices about whether they rebuild their lives in Christchurch or elsewhere?
- Will we take the time to grieve for what has been lost so that we make choices based on a heartfelt response rather than reactivity?
- Why is there such a lack of understanding around the demolition process?

Theme 3: A new era of disaster-preparedness for New Zealand (3%). Specific questions underpinning this theme include:

- What has been learned from this earthquake?
- What is being done in the rest of the country to ensure our towns and communities are not so dependent on vulnerable infrastructure in case of disaster?

Theme 4: Should Christchurch be rebuilt on the same location? (11%). Specific questions underpinning this theme include:

- Is rebuilding on the present location a wise idea?
- Where will the central business district be built?
- Do you move the central business district or opt for low-rise buildings?
- How do we plan for liquefaction?
- Why would we rebuild on such swampy land?
- Is it reasonable to rebuild the CBD where it is currently located, now knowing what the earthquake risks are?
- Could we develop Ashburton or Timaru instead?

Theme 5: Positive ideas for a new Christchurch (10%). Specific questions underpinning this theme include:

- How can New Zealand turn the rejuvenation into an asset with a positive drive for the future?
- How can we make Christchurch a fantastic new 'small' city of 200,000 with many parks and cycle-ways?
- How do we grab hold of this huge opportunity for Christchurch to be built as a sustainable city?
- How can we redesign it as a transition town, with communities and workplaces together with community gardens to reduce the carbon footprint of travellers?

- Could Christchurch become the digital capital of New Zealand as well as the eco-city of the South Pacific?
- Will Christchurch be redeveloped around public transport and integrated home and work functions in the same buildings and areas?
- Will emotion drive the rebuild rather than strategy?
- How do we balance this with the fact that people urgently need housing?

Theme 6: A golden opportunity at risk (16%).

Specific questions underpinning this theme include:

- Will decisions be too rushed, causing the opportunity to build a city that provides the best of the past and the future to be missed?
- What if a knee-jerk reaction to rebuilding leaves us with a mediocre city?
- Will it just get rebuilt with more of the same-old assumptions and models?
- Will we use or squander the opportunity to really innovate?
- Because paradigms are so rooted in business-as-usual and culture-as-usual, is the opportunity to do something very different in Christchurch almost not there?

Theme 7: Responsible decision-making (23%).

Specific questions underpinning this theme include:

- Are the right people making the decisions?
- What will the nature and role of the leadership which is required to rebuild our city look like?
- Is there any possibility for external input in the council's decision-making around the future of Christchurch?
- How can we render the city fit to live in, but most importantly, engage the various communities involved in this process in a meaningful way?
- Will decisions about rebuilding be based on a long-term vision, or short-term expediency?
- Will decision-making achieve the optimum balance between participation and decisiveness?
- Could the institute or body that plans the future of Christchurch be kept at arm's length from the city council?

Theme 8: Funding and economic impact (16%).

Specific questions underpinning this theme include:

- How will the government pay for the rebuild?
- Will New Zealand get the inflow of insurance funds needed to rebuild Christchurch?
- How well and quickly will the local economy rebound?
- Will the money required to rebuild Christchurch send the rest of the country into third-world status economically?
- What will this mean for New Zealand when combined with the recession?
- What is the financial future for businesses affected by the earthquake?
- Will funding be redirected away from other parts of the country?
- Will overseas investment provide the capital for rebuilding?
- Would this leave us with immense debt to be paid or profits here going straight overseas?
- What will the future funding of the Earthquake Commission look like, and what will the wider implications be for domestic and business insurance?

Theme 9: Population movement (7%).

Specific questions underpinning this theme include:

- Will Christchurch suffer permanent population loss, preventing it from recovering its economic and social strength?
- Are the people of Christchurch willing to stay while their shattered city is rebuilt?
- Will there be mass-migration to Auckland, turning the south into a 'backwater'?
- Will the population rebuild itself? If not then where are they going to go?
- Is the infrastructure sufficient in other areas of New Zealand to support such population movement?

Theme 10: Rebuilding Christchurch (33%).

Specific questions underpinning this theme include:

- Will money be squandered on restoring poncy buildings instead of practical buildings?
- How will we deal with reticulated sewerage in earthquake-prone areas?

- Could new infrastructure include alternative sources of energy such as solar, tesla or hydro energy production?
- Will valuable resources be wasted by the government trying to protect heritage buildings?
- Are we going to waste money trying to keep the Rugby World Cup in Christchurch?
- Should the first priority be to clean up Christchurch and make it safe?

Theme 11: Overall impact on New Zealand (11%). Specific questions underpinning this theme include:

- What is the willingness of the nation as a whole to share the cost of construction?
- If Christchurch people scatter around the country, will this increase local pressure on jobs and housing, driving prices up and wages down?
- Will this distract government from dealing with long-term issues?
- Can the South Island recover from this

significant setback?

- Will rebuilding Christchurch take all building resources from other parts of New Zealand?

Theme 12: Outliers (4%). Outlying questions that did not fit into other themes include:

- Why are we continuing to allow our clean water to be squandered by over-intensive dairy farmers?
- What will happen now that the international spotlight has moved to Japan's disaster?
- Will the government use this disaster as an excuse to implement their own personal agenda?

Theme 13: No strategic uncertainties (2%). Reasons for not being concerned include:

- I am not concerned because I feel New Zealanders have a unique, strong and compassionate psyche that will get us through.
- I am not concerned because eventually Christchurch will bounce back better off.

Results from Question 3: What strategic uncertainties keep you awake at night with regard to the future of New Zealand?

Figure 4 below provides a snapshot of common themes and the frequency with which they were raised by respondents. On the following page is a

detailed break down of the responses, which provides a more in-depth understanding of the strategic uncertainties identified in the survey.

Figure 4: Themes that emerged in response to Question 3: What strategic uncertainties keep you awake at night in regard to the future New Zealand?



Survey participants' responses to Question 3

Theme 1: Government strategy and forward planning (27%). Specific questions underpinning this theme include:

- Will New Zealand as a whole ever get out of the short-term thinking that is prevalent?
- Why is our government's approach to the future reactive rather than visionary?
- Why do major political parties seem unwilling to address major issues that will have a big impact on the country in the future?
- How do we change our focus from short-term results to long-term improvement?
- Is a three-year political cycle long enough to address long-term strategic questions?
- Why do we lack a clear, national, multi-year plan of execution?
- What exactly are we trying to do and how are we going about it?

Theme 2: Talk but no action, missing out on opportunities (4%). Specific questions underpinning this theme include:

- There are so many opportunities within this country, so why do we not see ourselves as capable of being world-leaders at anything?
- We may be a small country, but why are we not taking the opportunity to be a leader?
- Why are we missing opportunities to position New Zealand as a leader in environmental/ climate change solutions?
- Why are we thinking about things and talking about costs rather than taking any action?
- This country is well-known for being a laboratory for many things, so why are we continuing to plod along now without using these opportunities?
- Why is the government reluctant to take risks in order to deal with the 'tough' issues?
- Why is a large chunk of our population happy to accept their 'lot' rather than for us to be competitive in a world sense?

Theme 3: Implementing sustainable practices (14%). Specific questions underpinning this theme include:

- We need natural and sustainable models in all sectors: why is New Zealand not leading the world in developing and implementing ecological practices, from waste management to power,

organic localised food production, alternative housing and more?

- Can New Zealand overall recognise the benefits (economic, social and environmental) of becoming a country with sustainability as a key agenda?

Theme 4: New Zealand's global identity (14%). Specific questions underpinning this theme include:

- How do we maintain our clean, green, 'pure' persona, while still maintaining a high quality of life for all New Zealanders?
- Will we sell out to overseas predators rather than looking after our own people?
- How will New Zealand maintain its great overseas connection as being pure and natural?
- How can we get back to the middle of the OECD?
- How can New Zealand keep pace with other growing economies given the fact that it is one of the youngest first-world countries?
- Why is New Zealand falling behind the ranks of other developed nations?
- We should be embracing organic agriculture, chemical-free living and low-input lifestyles, in line with our clean green image, so why aren't we?
- How can we retain our Kiwi lifestyle?

Theme 5: Brain-drain (4%). Specific questions underpinning this theme include:

- Why is New Zealand training so many young bright students only to find there is no hope of work in their field in New Zealand so we lose them overseas?
- Are New Zealanders overqualified? Will graduating students be able to find work after finishing their degrees?
- Is New Zealand being used as a stepping stone to Australia?
- Why are we letting our low-salary economy lead to the brain-drain?

Theme 6: Economic uncertainties (23%). Specific questions underpinning this theme include:

- What can New Zealand do to change local banking policies and practices to facilitate strategic and desirable economic growth and fairly earned and distributed social wealth?
- How can we build a more resilient economy with a broader base?

- Will we see our savings rate improve enough or will we spend too much money on consumables and housing and be swamped by overseas debt?
- Will the loss of jobs in Christchurch hit the overall economy?
- What mechanisms are being used or should be used to solve economic issues?
- Agriculture is an extremely important part of our economy but how do we develop other skills and technologies that are less reliant on limited resources such as land?
- How can we change the fact that our small economy is so reliant on exports of our produce rather than exports of ideas and knowledge?
- When are we going to make the transition from primary production to adding value before we export?
- What would New Zealand do without tourism?
- When the shortage of oil starts to take effect in terms of global travel and trade, will New Zealand be able to sustain itself?
- With the threat of peak oil, what is our plan for New Zealand's energy supply?
- Are New Zealanders willing to take action to respond to the magnitude of the peak oil crisis?
- What international conflicts and issues could result from the peak oil crisis?

Theme 7: Our population, our society, our people (26%). Specific questions underpinning this theme include:

- When are the people of Aotearoa, as we are all tangata whenua, going to come first and not last?
- Why are we catering to minority interests at the expense of the greater good?
- When are we going to build communities that enable people to be healthy, and encourage workplaces to support healthy lifestyles?
- Will inequality and social disparity in New Zealand continue to increase?
- What is going to happen to superannuation with our increasing population?
- What can be done about violence in society?
- What strategies are in place to support our Māori population?
- Why is a growing proportion of the Māori population over-represented in 'negative' statistics?
- Are we managing our multi-cultural population well?
- What is being done to prepare for population growth?

Theme 8: Peak oil (12%). Specific questions underpinning this theme include:

- How can we survive the death of oil?
- How will New Zealand cope with peak oil and the inability to export food?

Theme 9: Infrastructure (5%). Specific questions underpinning this theme include:

- Why are we not moving our transport from road to rail?
- How do we wean our transport sector off oil, and why is our government's transport policy not responding to the threat of peak oil?
- Why do we lack sensible, functional town-planning, and create urban sprawl instead?
- Why are we not prioritising hydro-energy generation?

Theme 10: Climate change (6%). Specific questions underpinning this theme include:

- Why are we part of the climate change problem rather than the solution?
- Who is thinking about (and going to bear) the cost of climate change, including the burden of the emissions trading scheme?
- What about the cost-effectiveness of the emissions trading scheme?

Theme 11: Our environment and the responsible management of our resources (27%). Specific questions underpinning this theme include:

- How are we going to address the impact of agricultural production on New Zealand's environment?
- How do we engage with and support Papatuanuku/our environment so that Papatuanuku continues to provide for us?
- Will Fonterra continue to grow and monopolise the growth in this country to such an extent that we will eventually have a ruined countryside where the waterways and substrate have all been spoiled by pollution caused by dairying?
- Why do we not have policies to ensure that New Zealand's environment and land will sustain us if necessary?

- How do we teach people not to foul our waterways?
- Why are we letting GE destroy our clean, green image?
- Why is the government continuing to dabble in risky and unethical genetic engineering experiments?

Theme 12: Outliers (9%). Outlying questions that did not fit into other themes include:

- What about the foreigners who want to get rich quickly and then leave New Zealand?
- What will happen if China invades New Zealand?
- When are we going to learn to naturally balance our manure budgets?

- Which countries should New Zealand partner with in order to achieve our goals for the future?
- Are we going to become another Australian state?

Theme 13: No strategic uncertainties (5%). Reasons for not being concerned include:

- I am not concerned, New Zealand is unique and we'll cope!
- I am not concerned because New Zealanders are starting to wake up and live from a heart-open and conscious place.
- I am not concerned because I'm very optimistic about the future of New Zealand.

Part 3 | Preparing strategy maps

Overview

A strategy map is a tool for long-term thinking that describes the way an organisation or country intends to deliver value for its stakeholders. The workshop created a place and process for New Zealanders to design and communicate a range of strategy maps for New Zealand's long-term future.

In preparation for the workshop's strategic mapping task, Dr Peter Bishop conducted an introductory course on future studies that was attended by approximately half of all workshop participants. This optional course provided an entry-level introduction to the theory and techniques of future forecasting. Rory Sarten provides a participant's perspective of this course on pages 33 and 34.

Background

The methodology for creating strategy maps applied at the workshop was developed by Professor Robert S. Kaplan and David P. Norton of Harvard Business School. This methodology has been successfully applied to the context of strengthening economic development in Brazil; read more on pages 35 and 36.

Broadly speaking, Harvard Business School professors are 'anthropologists of business', in that they try to define what makes some businesses successful and others not. Over many years, and through the eyes of many researchers and practitioners, they have found a range of ways of thinking and acting that appear to consistently drive success. They have taken these observations and developed frameworks, written and lectured on them, and then tested and checked that these frameworks achieve what they set out to. The methodology developed by Kaplan and Norton enables us to apply a strategic mapping framework that creates tangible visions for New Zealand along with a strategy for the execution of those visions.

Although the strategy map is just one tool available in the development and polishing of a strategy, it is a powerful one in that it not only provides clarity, but also enables strategy to be discussed and communicated. This means that people buy into the strategy because they understand not just 'what', but 'why'. In other words, the link between cause and effect is easily apparent. Figure 5 shows

the distinction between developing the strategy (see centre box) and strategy execution (see six steps).

Groups

Participants were divided into ten groups. Groups were then invited to complete a group exercise that had three outputs: a strategy map for New Zealand in 2058; a cover for the *New Zealand Listener* magazine; and a New Zealand Coat of Arms to accompany their strategies. Each team was represented by a colour and participants received a T-shirt in the colour of their designated team on registration. Teams were seated together and members were encouraged to wear their T-shirts to foster a sense of belonging within the group. Participants also wore lanyards in their team colour, which had their name and place of employment or educational institution printed on them. Along with job titles, it was decided that titles such as 'Dr' would be left off name tags. This was done so as to position all participants on a level playing field.

The process of assigning registrants to teams was done away from the office over a long weekend. Registration forms were printed off and read through. After the first reading, registrants were given a high-level category such as 'high school student' or 'scientist'. Approximately ten categories emerged. Registrants were also given a second category relating to their city or region.

Each application was then read through a second time and assigned to a team. One of the objectives of the workshop was to bring together a diverse group of New Zealanders, representing different ages, ethnicities, regions, backgrounds and professions. It was important to capture this diversity in the makeup of the groups. While a disproportionate number of participants were from Wellington, all groups contained people from throughout the country. Further, each group contained at least one high school student and most also contained a tertiary student and an 'academic'. Where more than one applicant had a particular professional interest – such as 'entrepreneurship' – but were otherwise different from each other, they were placed in the same group. Where possible, high school students were teamed with at least one person who was working in a field they were interested in pursuing in the future.

Method

Roger Dennis helped introduce the group exercise, which is explored in detail on page 37. Groups were then led through the strategy mapping process by Dale Pearce, principal at the Palladium Group Asia Pacific; see pages 38 and 39. The groups used the mapping process to describe the results that the strategy would deliver and to identify how these results would be achieved. Mia Gaudin documents the process on pages 40–46.

Each group included a designer to aid in the communication of its vision. Dr Mick Abbott, Senior Lecturer, Environmental Designer and Director of the Masters in Design (MDes) programme at Otago University, organised a group of designers to attend the workshop. With the assistance of Lara Rapson from the Institute, Mick did an exceptional job of co-ordinating, guiding and supporting the designers in their role (see image overleaf). Gillian McCarthy, one of the designers, provides her reflections on page 47.

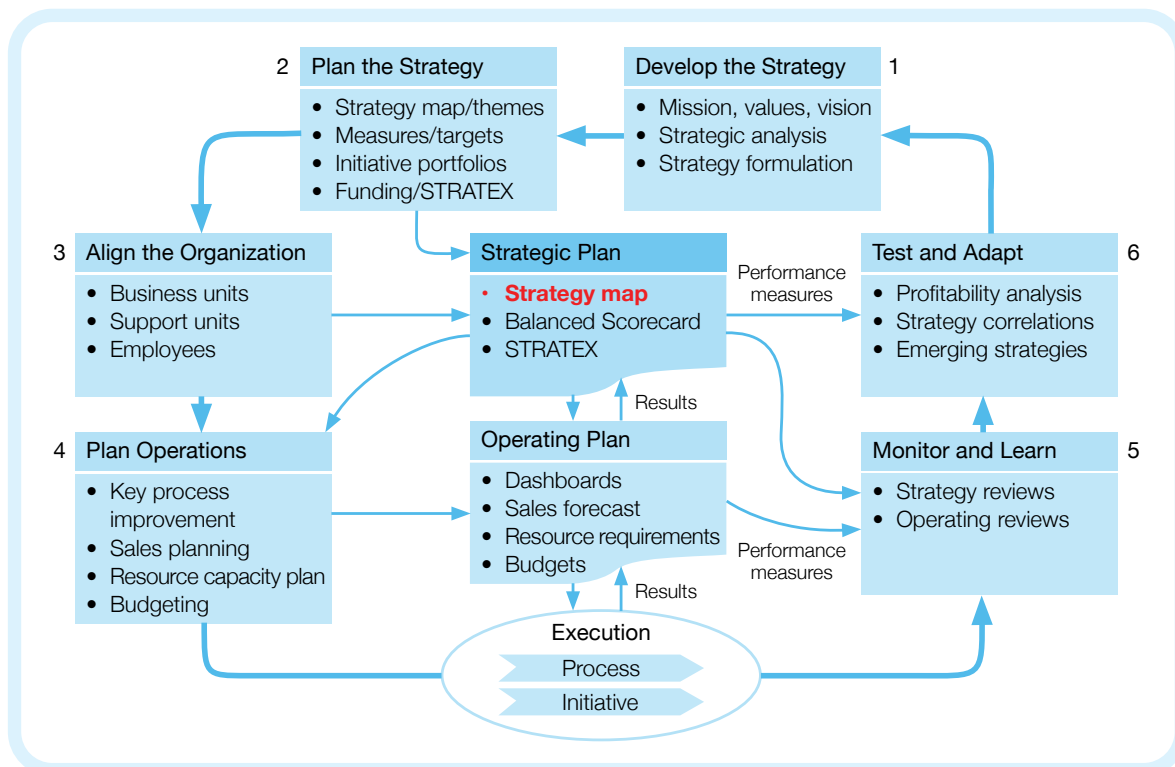
Four members of Kristin School's K-Force Robotics Team attended the workshop and displayed their robots in action at the Kiwi BBQ on Wednesday evening. Christian Silver, a member of the team, shares his thoughts on attending the workshop on page 49.



Lara Rapson and Dr Mick Abbott discussing the work programme for the design team

Figure 5 The management system: Develop the strategy

Source: Kaplan, R. S. & Norton, D. P. (2008). *The Execution Premium*, p. 8. © 2008 Harvard Business School [Harvard Business Publishing] used with permission.



A participant's experience of the future studies course

Rory Sarten

In the two days before the workshop began, a group of about 50 people, including myself, attended an introductory course on future studies. We were very fortunate to have Dr Peter Bishop come to New Zealand from Houston to contribute to the workshop and conduct this course. Over the two days Dr Bishop introduced the basic foundations of futurist methodology and had people work together to apply the ideas to develop scenarios and analyse events.

Day 1

On Monday 28 March Dr Bishop introduced us to the basic concepts of future studies and explained how these ideas are connected and how they can be used. He primarily encouraged us to think in a new way: *wider*, looking for a broader scope and big-picture context; *deeper*, the meaning, drivers and patterns behind the details; and *further*, looking forward to change and future implications. He also elaborated on the features that set future studies apart from its mirror discipline, history. History is characterised by strong physical evidence and strong assumptions, allowing historians to make higher quality inferences. Futurists, on the other hand, use largely intangible evidence with weak assumptions (such as whether trends will continue or goals will be achieved) resulting in lower quality inferences with multiple plausible outcomes.

Dr Bishop also introduced us to the STEEP method of analysis. STEEP involves looking at the social, technological, economic, environmental and political aspects of a given problem to form a well-rounded view. He further explained how the nature of social change is characterised by both continuous and discontinuous changes. Discontinuous change follows an S-curve form that begins and ends with relatively stable eras that feature incremental and continuous change. The transitions, periods of transformational and discontinuous change, radically alter society and represent a clear delineation between eras.

We were challenged to question the fundamental assumptions about reality from one era to another. Assumptions are important because they resolve uncertainties. On the other hand, assumptions can be dangerous because resolving uncertainty in this manner may not always be the right thing to do. We reviewed ten classical and contemporary theories of social change, each with its own set of critical assumptions: progress, development, technology, ideas, cycles, conflict, markets, power, evolution and

emergence. The critical assumptions associated with these theories are shaped by our understanding and explanation of change in society, and they can lead to narrow interpretations of events if we do not remain open to alternative explanations.

Dr Bishop finished the day by illustrating some different examples of systems thinking and how these can show the internal cause and effect relationships between the various components of a system. The fundamental insight is that 'a system's behaviour is a function of its structure'. In other words, contrary to our tendency to look for individuals or external events as the source of social change, we should instead look to the internal structure of the systems that produce the change. That change is usually a natural outcome of how the system is structured.

Day 2

The second day involved a more hands-on approach and was focused on encouraging participants to apply the techniques and tools from the previous day to develop scenarios. Participants wrote possible topics on a whiteboard, then came together in groups to explore topics of interest.

Dr Bishop's forecasting framework outlines a systematic process for developing alternative future scenarios. The first task was to frame the domain the group was addressing. Among the groups there was a range of topics, including land use, education, Treaty issues, sustainable housing and water resources. Once we had settled on the subject matter of the forecast, we identified the specific time horizon we were working in and identified the key questions and issues – the most important aspects of the domain that must be decided.

The second task was to assess the domain up to and including the present. This involved assessing four different elements: current conditions – how the domain is structured and operates, and any key characteristics; stakeholders – which involved identifying the interests, importance and actions of four key stakeholders involved in our domain; past events – recent discontinuities and defining elements of the current era; and constants – things that are not expected to change before the established time horizon. We were encouraged to use the STEEP analysis from Day 1 to help us adopt a broad perspective.

These elements were used to complete the third task, creating an expected scenario, known as a baseline forecast. The baseline shows what the future might look like if things continued along a strictly linear trajectory. The baseline represents the most likely future if existing constants, trends and plans all proceed as they have so far (see Figure 6). We were asked to identify what the implications of this baseline would be, i.e. what would be the major differences between the current situation and the future baseline situation?

The fourth task was to use this baseline to recognise possible high-impact uncertainties that could cause a deviation from the expected scenario. These uncertainties needed to be significant in nature and have a roughly 50% chance of occurring, creating a future that falls somewhere between the expected future and the limits of plausibility (see Figure 7). Dr Bishop then had us evaluate within our groups whether the uncertainty would be more or less likely to eventuate, and then develop scenarios for the most uncertain option. So, for example, if a group felt that a major energy crisis was more likely than not, they developed a scenario in which an energy crisis did not occur or was averted.

We were encouraged to focus on the differences between this scenario and the baseline forecast developed earlier. We also identified possible leading indicators that signal that a key uncertainty is being resolved or that a particular scenario was becoming increasingly likely. Creativity then took over as we constructed a scenario story that explained how these alternative futures might play out and what some of the interesting potential consequences might be. Then we each gave our scenario a brief, captivating title and told our story to the other groups.

The course was an amazing introduction to future studies. Dr Bishop covered the theoretical foundations and guided us in the application of these ideas through scenario development. It was a pleasure to have such a charismatic and knowledgeable teacher. There were also excellent questions and resulting discussions, and the engagement of the participants made it a tremendous learning experience.

Rory Sarten joined the McGuinness Institute in early 2010. He manages the Institute's information technology, and contributes to reports and other publications as a researcher and writer.

Figure 6: Strategic foresight projections

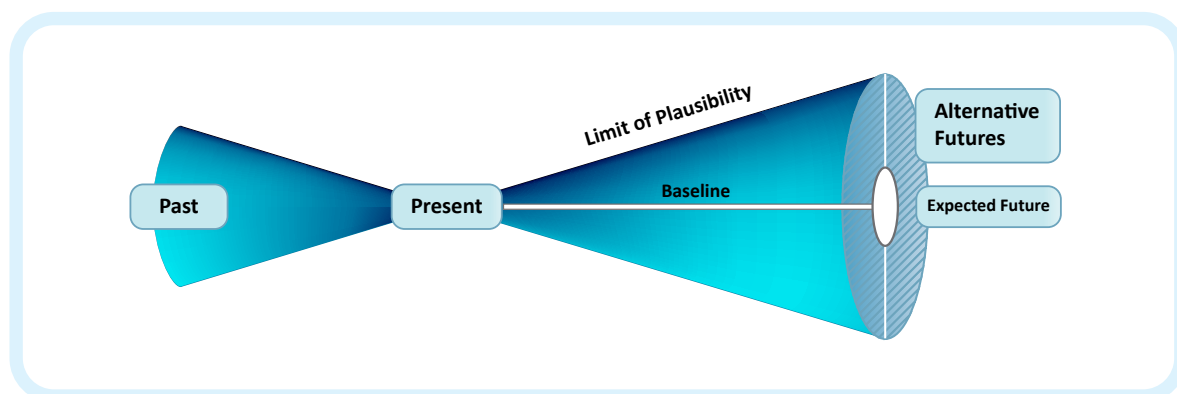
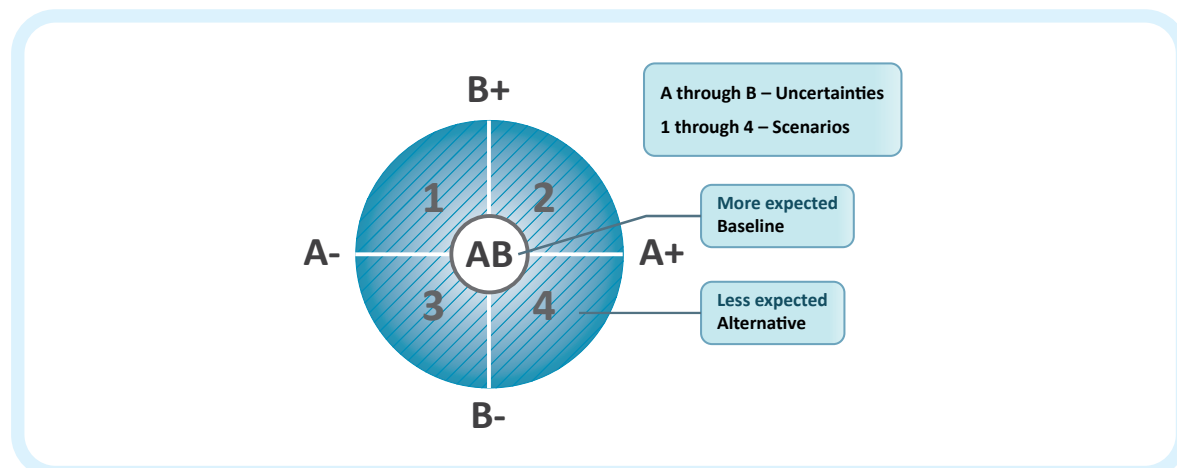


Figure 7: Developing alternative future scenarios



The Brazilian example

Wendy McGuinness

Brazil provides a well-known example of an effective strategy map for the sustainable economic development of a country. This example was provided for workshop participants in the *StrategyNZ: Mapping our Future Workbook* and is included here to provide a deeper understanding of how the strategy process can work. Clearly this level of depth was not achievable within the timeframe of the workshop. However, what was produced, as illustrated in pages 52–71 of this report, is proof of the strength of this process and of the commitment and vision of the participants. Furthermore, it has created a solid foundation for further discussion, development and, ideally, execution.

The Brazilian Confederation of National Industries (CNI) led one of the most well-known and complex applications of theme-based strategy maps. Initially, 50 business leaders designed a strategy map for Brazil's economic development. They then invited feedback which led to the strategy map shown in Figure 8. The map translates the vision into five tangible results, but does not by itself describe how the strategy is to be executed.

To do this Brazil added a further level of detail, as shown in Figure 9. This is a more detailed map for the innovation theme, which shows the patterns of cause and effect that are required to execute the innovation theme of the strategy.

Professor Robert S. Kaplan and David P. Norton are world leaders in establishing a comprehensive framework for developing and executing strategy. While this is a complex subject – the detail of which is beyond the scope of a two-day workshop – it is arguably possible to develop expertise in a small part of the process, the creation of strategy maps. In their book *The Execution Premium*, Kaplan and Norton note that a lack of strategy execution is a significant problem shared by many executives. They quote a 2006 survey of 143 performance management professionals in which 46% of respondents stated that they did not have a strategy execution system in place. Brazil provides an excellent example of how effective the strategy mapping process can be when applied to a country.

Figure 8: Sustainable economic development strategy for the country of Brazil

Source: Kaplan, R. S. & Norton, D. P. (2008). *The Execution Premium*, p. 81. © 2008 Harvard Business School [Harvard Business Publishing] used with permission.

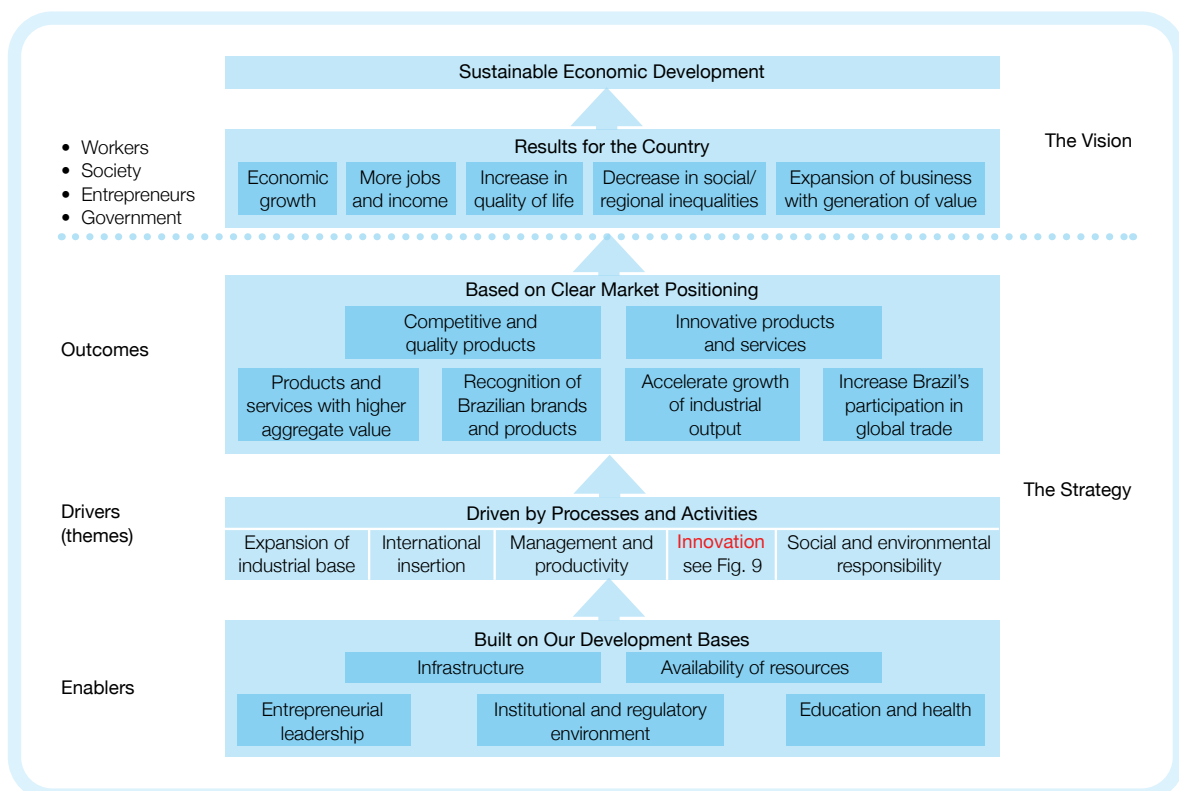
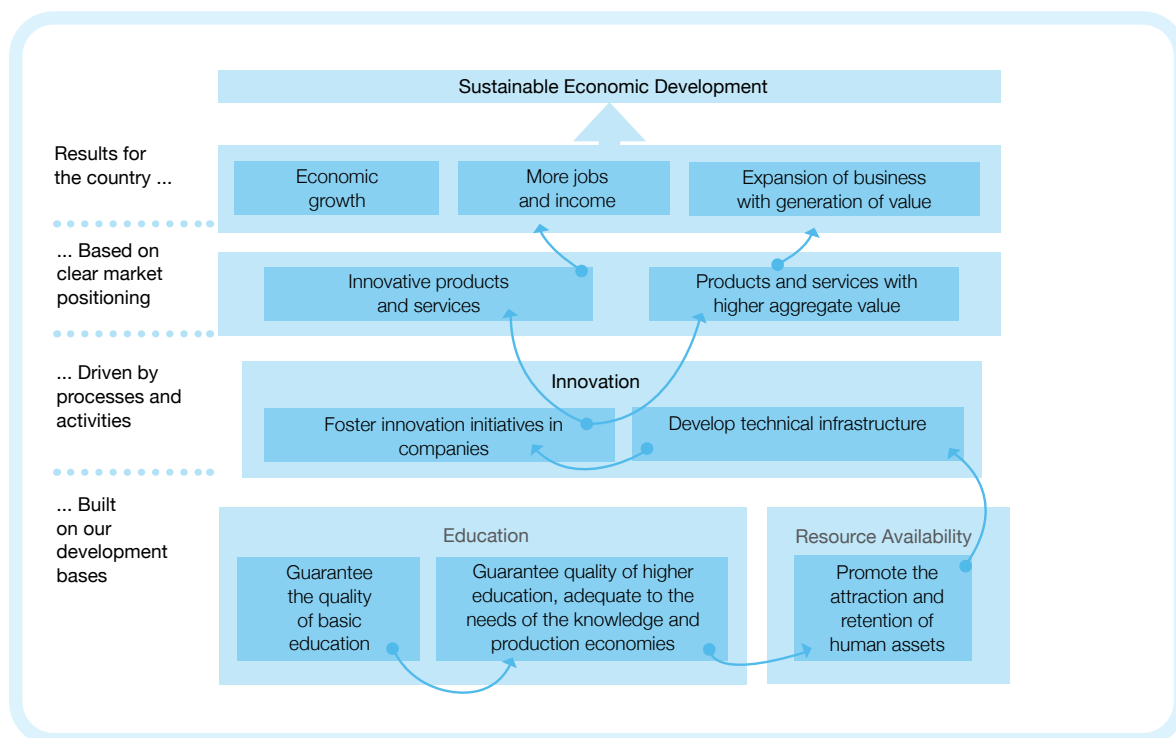


Figure 9: Cause-and-effect relations of Brazil's innovation driver (expanded from Figure 8)

Source: Kaplan, R. S. & Norton, D. P. (2008). *The Execution Premium*, p. 83. © 2008 Harvard Business School [Harvard Business Publishing] used with permission.



Explaining the group exercise

Roger Dennis

Each group was asked to create three outputs (illustrated in Figure 10 below) and present these to the judges in 10 minutes on Thursday morning. While the presentation format was left open, all three outputs had to be integrated into a compelling story that would resonate with the audience.

Each output aims to align with the VAS model shown on page 39 (Figure 12). The first output, a cover of the *New Zealand Listener* in 2058, was inspired by a Harvard Business School workshop held by Professor Robert G. Eccles. The second

output was derived from a competition held in 1908 in which New Zealanders were asked to design a new Coat of Arms. The most important output, the strategy map, applied the Harvard Business School strategy mapping process, which is explained in detail in the introduction.

Roger Dennis is an independent foresight and innovation consultant based in New Zealand. Roger provided considerable advice and support throughout the planning and execution of *StrategyNZ: Mapping our Future*.

Figure 10: Group output template for StrategyNZ: Mapping our Future

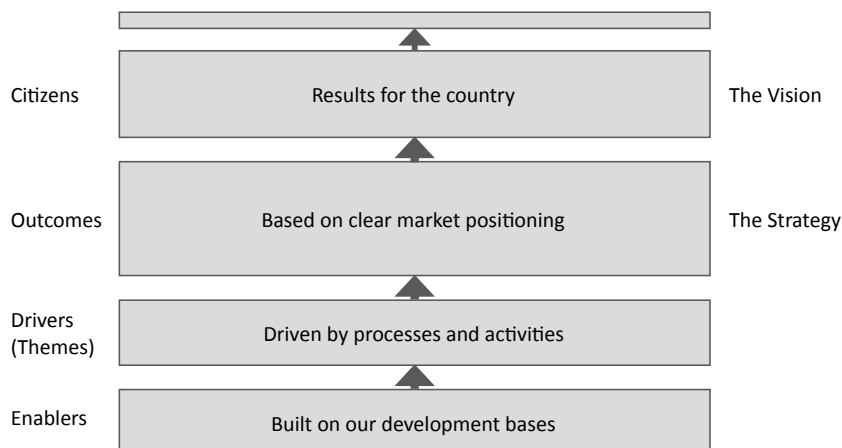


Output 1: Develop a vision and illustrate this through a cover for the *New Zealand Listener* in 2058 that delivers us the ends that the strategy is designed to achieve.



Output 2: Explore what New Zealand does differently, better or uniquely compared to others. Illustrate our advantage through the design of a Coat of Arms for 2058. With respect to this, think of the emblems or symbols you believe represent New Zealand and where you would position them in relation to each other.

Strategy Mapping for New Zealand



Output 3: Design a strategy map for New Zealand that shows the scope of what New Zealand should focus on or not, and what technologies and practices the country will employ.

Criteria for judging strategy maps

Dale Pearce

We have used strategy maps as part of the *StrategyNZ: Mapping our Future* workshop to help groups describe the vision for New Zealand in 2058 and the strategy for achieving it. Strategy describes what we will do and not do in the short and medium term to achieve the vision. Irrespective of the context, it is the execution of strategy that creates a significant challenge. Using the strategy mapping process, groups had to describe the results the strategy must deliver if the vision was to be achieved. They then had to identify how the results would be achieved. With an understanding of the ‘what’ and the ‘how’ they then identified the resources – tangible and intangible assets – required to deliver the strategy.

It has been hugely rewarding witnessing the creation of these strategy maps during the *StrategyNZ: Mapping our Future* workshop. While groups were under a lot of pressure and many worked late into the night to produce them, the strategy maps reflect what is achievable when passionate and diverse groups of people come together around a unified objective (the future of New Zealand). The process drove focused conversations amongst participants who were as young as 16 and those well past retirement age about how they see New Zealand’s future. Perhaps more noteworthy, these groups were able to develop these conversations into an actionable and compelling plan and story. It is a remarkable opportunity that participants were able to present

their maps at the Legislative Council Chamber and hopefully this momentum and energy will be carried into action.

The judging criteria can be broken down into three easy to apply planning stages: vision, scope, and advantage (see Figure 12). The vision is the ends the strategy is designed to achieve, containing a quantitative target and timeframe. Advantage is the means by which New Zealand will achieve its objective and what will be done differently, better or uniquely compared to others. Scope signifies the areas that will be focused on, what will not be done, and what technologies will be used.

I hope that all the participants at the workshop have been able to come away with strong methods for creating strategy maps that they can use in aspects of their personal, professional or community lives.

Dale Pearce is a Principal at the Palladium Group Asia Pacific. She led the New Zealand Affiliate for Palladium, Frameworks Limited. Frameworks was then invited to join the Palladium Group as a global affiliate. For more than 17 years Ms Pearce has advised national and international organisations as well as government agencies in strategy design, measurement, strategy implementation, and strategic change initiatives. She has also developed Balanced Scorecards and performance management frameworks for corporate, divisional, and business unit levels.

Figure 11: Criteria for judging strategy maps

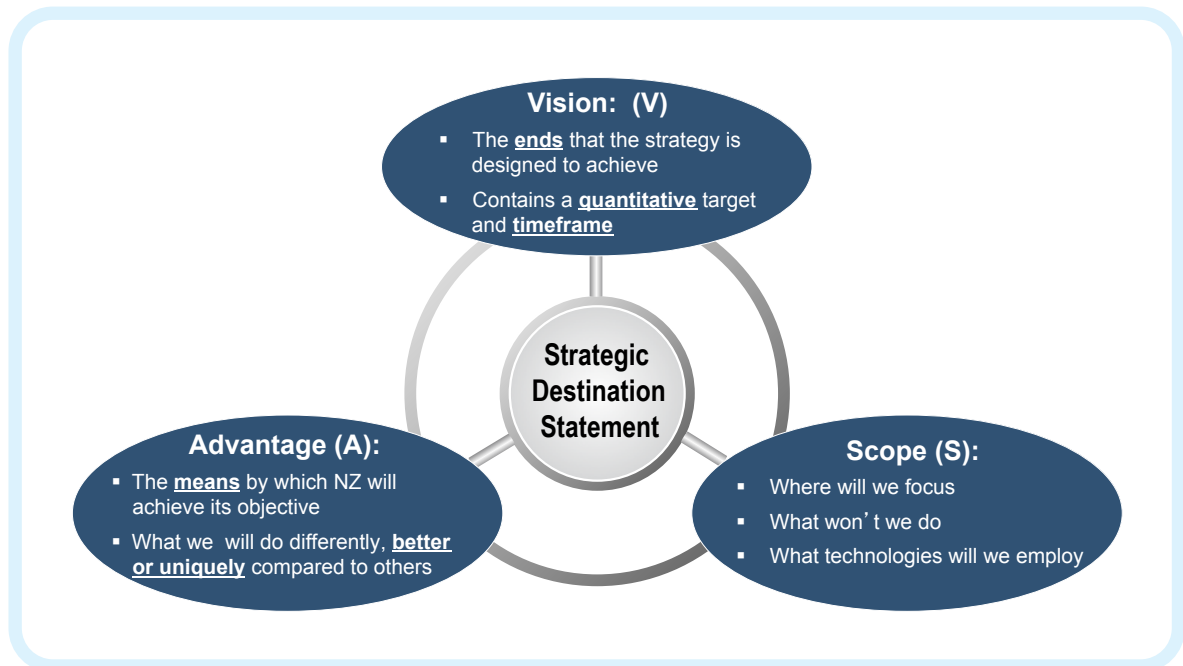
1. **A clear destination (vision)**
2. **Clarity of the strategy map**
 - a. Themes address different time horizons
 - b. Strategy priorities are identified
3. **Cause and effect**

Clear linkages between the ‘what we need to achieve’, the ‘how we need to do it’ and the ‘what it will take’
4. **A compelling story**

The strategy map and story are a clear call to action

Figure 12 Vision, advantage, scope model

Source: Rukstad, M. & Collis, D. (April 2008). 'What is your strategy?' *Harvard Business Review*.



Dale Pearce

Participant experience of completing the group exercise

Mia Gaudin

At the two-day event, *StrategyNZ: Mapping our Future*, on 30 and 31 March 2011, over 100 New Zealanders met in Wellington to discuss where we saw the future of New Zealand heading. As a member of the McGuinness Institute, I was designated to be a team member who would participate in the entire strategy mapping process. I was in the brown group and my task was to fully participate and then document the process. All other Institute staff were designated specific tasks behind the scenes and, as such, I was in the fortunate position to enjoy the workshop and focus on the outputs.

Parts 1 and 2 of the event allowed us to listen to ten amazing speakers, including international representatives from America and Singapore. At about 2pm, Part 3 of the workshop began. This was when teams started working on the group exercise of creating strategies for New Zealand. Wendy McGuinness and Roger Dennis introduced this part of the workshop. They set out the three outputs that groups were asked to produce and present the next morning: the front cover of the *New Zealand Listener* in 2058; the Coat of Arms for 2058; and a strategy map (see Figure 10 on page 37).



Roger Dennis

Wendy then introduced Dale Pearce, a New Zealander based in Wellington, from The Palladium Group. The Palladium Group is a Boston-based strategy execution organisation founded by Harvard professors Dr Robert Kaplan and Dr David Norton, co-creators of the Balanced Scorecard. Robert Kaplan recommended Dale to Wendy as an ideal facilitator. Dale brought along Mathieu Liminana from their Australian office, who stayed through the evening to support the groups.

Each group had a 'process chair' who facilitated the strategy mapping process, as well as a designer from Otago University. Marty Donoghue was the process chair for our group and Scott Savage was the designer. There were also a number of specialist 'consultants' from various fields who floated between groups to offer greater insight and answer questions during the group exercise process.

A lot of emphasis was placed on putting New Zealand in the room, therefore the people involved were of various ages and educational and cultural backgrounds. The discussions we had were very enlightening and, at times, very challenging.

At 4pm the rest of the judges arrived and were introduced by Wendy. After the judges left, Wendy, Roger and the consultants continued to be available to the groups as we worked through the exercise. There were four steps in total, as outlined in Figure 11 on page 38.

Step 1: Establish a shared vision statement for New Zealand (40 minutes)

The vision statement outlined what the country wants to achieve, or how it wants the world in which it operates to be. It concentrates on the future and is designed to be a source of inspiration. This vision statement needed to be just one sentence long, and had to be a shared vision, bringing together the diverse views of the people in our group. We were asked to quantify where we would like to be in 2058 so that we could assess the gap between where we are today and the vision. The first worksheet for the shared vision statement is shown opposite in Figure 13.

Figure 13: Worksheet 1 – Vision

Team: _____

1- Vision

Step 1: Brainstorm in groups of 3-4 and capture candidate statements on Post-it Notes.
Stick the Post-it Notes below

Step 2: Have a group discussion to group ideas, flesh out key messages and extract the essence of the Vision (what we must achieve)

Stick Post-it Notes here:

Key elements for the Vision:

1- _____

2- _____

3- _____

4- _____

5- _____

6- _____

7- _____

Step 3: Structure the vision and write below the final Vision statement

A **Vision statement** outlines what the country wants to be, or how it wants the world in which it operates to be. It concentrates on the future. It is a source of inspiration.

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Expanding Strategy

Completing this step was a difficult task in a group of ten people and, given the time pressure, we decided that we would each write down our individual ideas of how we saw New Zealand in the future. We frantically wrote our ideas down on sticky notes, which we put all over the worksheet.

After five minutes of frantic writing and sticking, we took a break to look at what we had come up with.

Our process chair read out all the sticky notes, and we grouped them by categories: education, community, economy, health, culture and environment. From these categories we needed to reduce the collection of ideas in each category to just three or four words or objectives – which were called the key elements of the vision. To do this we had in-depth discussions about what each person meant by the ideas put forward. It was important

Figure 14: Worksheet 2 – Vision, advantage and scope

Team: _____

2- V.A.S.

Step 1: VISION Copy below your Vision Statement (output of previous exercise)

Step 2: ADVANTAGE Have a group discussion to determine the key drivers to achieve the Vision

Advantage (A):

The means by which NZ will achieve its vision

What we will do differently, better or uniquely compared to others


Step 3: SCOPE Have a group discussion to determine the key enablers to achieve the Vision

Scope (S):

Where will be focus

What won't we do

What technologies will we employ



at this point that everyone had the opportunity to clearly voice and share their ideas, rather than allowing others to presume what was meant by any particular statement. This open discussion allowed the group to see where the similarities and differences were in their approaches to each key element. While this step was difficult, I believe we managed to extract the essence of each element.

From the six key elements we had established, we then constructed a final vision statement, capturing the key aspects we wanted to cover. The vision statement for my group was: 'Aotearoa, New Zealand in 2058 will transcend geographic boundaries showcasing innovation, creativity and leadership to generate new models of cultural wellbeing and wealth.'

Step 2: Complete the Vision, Advantage and Scope (V.A.S) model (1 hour)

We started Step 2 by writing our vision statement on a clean sheet of paper. We then looked at what the key drivers were that we could use to achieve the vision. The key drivers are what we would do – the things that would give us our advantage over the status quo.

We then thought about scope – the key enablers – which placed clear boundaries around what we would and would not do to achieve the vision. The second worksheet was completed; a template of this can be seen in Figure 14.

Once completed, this information formed the basis for completing the three outputs of the group exercise.

- *New Zealand Listener* cover
- Coat of Arms
- Strategy map

Step 3: Themes and objectives (5 hours)

Because we were required to produce the three outputs in a very short time frame, it was important to ensure that discussions were always brought back to the vision statement. It was very important to make sure that everyone's voice was heard and that we understood each other, the language we used, and the goals that we were working towards. This was hard work but very rewarding.

(a) The *New Zealand Listener* cover (1 hour)

Designing the *New Zealand Listener* cover for 2058 was a way of expanding our story by looking at what might be in the media once we had reached the vision set out in our strategy maps. We considered our vision of New Zealand transcending physical boundaries and played on this idea to show how in 2058 there will be virtual tourists flocking to New Zealand.

(b) The Coat of Arms (1 hour)

The redesigning of the Coat of Arms provided a means for presenting our vision in an iconic way. The current New Zealand Coat of Arms resulted from a competition in 1908 that sought to create a unique iconographic image for New Zealand, so it seemed apt that at this future-thinking event we would redesign an image for New Zealand in 2058. Scott, our designer, was very important in developing this output, just as he was with the *New Zealand Listener* cover. Our Coat of Arms shows the coming together of Māori and Pākehā and stresses the importance of our natural environment.

(c) The strategy map (3 hours)

To create our strategy map we aimed to answer the first question 'What must the strategy achieve?' To answer this we leveraged the key elements of the Vision, Advantage and Scope developed earlier (see Figure 14). We eventually selected five strategic themes, which became the pillars of our map:

1. Technological culture
2. Connected community
3. Vibrant and sustainable economy
4. Smart education
5. Environmental well-being

The themes showed what the strategy must achieve.

Our aim was to convey our themes in punchy phrases that encapsulated many of the things we had discussed.

Now that we had established the five strategic themes, we had to flesh out our strategy map. This involved answering two further questions for each theme: 'How will we do it?' and 'What will it take?'

Figure 15: Linking cause and effect



Figure 16: Worksheet 3 – Themes and objectives


3- Themes and Objectives

Team: _____

Step 1: In the group, confirm the themes (3-5 max): use V.A.S. Statements (previous exercise)

Step 2: In the group, discuss for each theme (one after the other) the required objectives to answer the following questions

	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
<i>What must the Strategy achieve?</i>					
<i>How will we do it?</i>					
<i>What will it take?</i>					



Starting with ‘How will we do it?’, we had to establish certain measures that needed to be taken in order to reach our goal. For example, under the theme ‘smart education’, we decided that two ways in which this could be done would be to have ‘personalised and tailored education’ and ‘community-centred education’.

Following on from this, we needed to consider ‘What will it take?’. Under this section, we had to come up with measurable or quantifiable actions that would carry us to our ‘How will we do it?’. How will we achieve the strategy? For example, in the ‘smart education’ theme, our quantifiable actions were to ensure there was ‘proactive involvement’ of all stakeholders in the creation of education policy, and that there would be an

Figure 17: Worksheet 4 – Story

Team: _____

4-Story

Tell the “story” for each theme starting from the top (What must the Strategy achieve?) to the bottom (What will it take?). Be creative, Be inspirational!

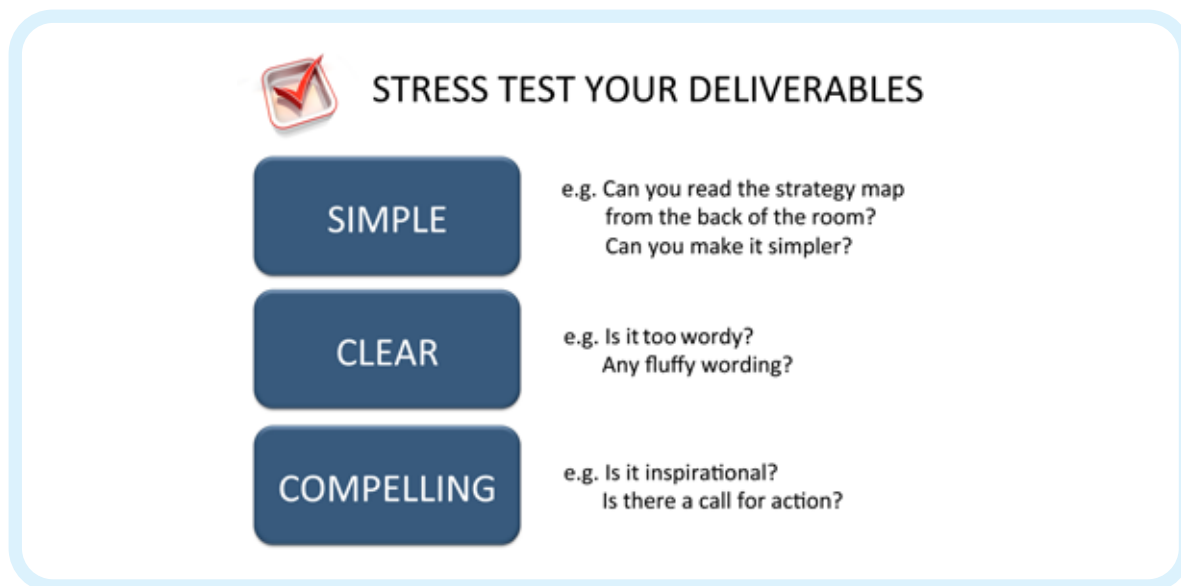
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Business Strategy

‘intersectional education strategy’ created, meaning that the education system would include input from business, community, government and family groups.

Putting these elements together, the ‘Smart education’ theme of our strategy map looked like Figure 15. The idea is that the ‘map’ can be followed by moving along the path laid out from left to right.

Once the path had been completed for one theme, we then needed to go through this process for the other four themes. One thing that we had to keep in mind was that in the mapping process, we needed to encapsulate a short piece of concise text. We then handed our strategy map over to our designer so that he could put it into a dynamic graphic format, showing the links between different stages and creating something that others could follow.

Figure 18: Handout – Stress testing deliverables

**Step 4: Presenting a compelling story (2 hours)**

An important final step in the mapping process was writing a story that tied together all of our ideas, included all three outputs and gave us a framework that we would use for our presentation (see Figure 17). We were given complete freedom to tell a compelling story provided we included our three outputs in the ten-minute presentation. We decided to present our story through a mock television announcement that introduced projected headlines of 2058 that were elaborated on throughout the presentation. Another group (the red group) used the method of framing their presentation as a press conference with the New Zealand prime minister in 2058. One particularly effective narrative used Māori storytelling to create a strong relationship with the audience through telling a story that intertwined myths of the past with strategies for the future (the emerald green group).

Many groups worked through the night at the offices of the Institute and Willis Bond and Co at 5 Cable St in Wellington. Early the next morning, we arrived to find a 'Stress Test' that Mathieu, with help from Wendy and Mick, had prepared to enable groups to check the quality of their story (see Figure 18).

All the groups presented their outputs at 10am on 31 March in the Hui room, Te Wharewaka o Poneke, Wellington. Dr Robert Hickson, another participant, explains the process and provides insights into Part 4 of the workshop (see page 72).

Mia Gaudin completed a Bachelor of Arts and Bachelor of Law (Hons). She worked for the McGuinness Institute for the first half of 2011 before moving to Rotorua to work as a Judges' Research Counsel.



Consultant Mathieu Liminana helps Gillian McCarthy complete the worksheet

A designer's insight

Gillian McCarthy

A unique aspect of the *StrategyNZ: Mapping our Future* workshop in March 2011 was the inclusion of a designer in each group of participants. The designers were honours and masters students, and graduates from the design studies programme at the University of Otago. They were accompanied by senior lecturer Dr Mick Abbott, who addressed the changing role of modern designers. A common misconception to be confronted by each group was of designers solely as form-givers. The Otago designers fulfilled this expected role, but also brought appropriate methodologies to the table, helping participants to organise and explore their thoughts, opinions and assumptions. They acted as facilitators within the multidisciplinary groups, encouraging each member to take on a design role when creating strategies for a preferred New Zealand future. As Herbert Simon has remarked, 'Everyone designs who devises courses of action aimed at changing existing situations into preferred ones.'

After an afternoon of conceptualising their strategy maps, many groups worked late into the evening to make refinements and to develop ideas for a new Coat of Arms and a *New Zealand Listener* cover. Once the groups had finalised their ideas, the

designers worked into the night (some as late as 7am) to make them tangible. The groups reconvened early the next morning to view the visualised outcomes of their ideas and to make any necessary refinements. Working with a designer from the beginning to the end of a project was a new and rewarding experience for many participants. Designers have historically been consulted only in the tail-end of projects, but perhaps this alternative approach of engaging designers throughout the entirety of a project displayed the larger role and value that design can offer. The designers were grateful for this opportunity provided by the McGuinness Institute to both work alongside a very compelling and diverse group of participants, and to share their design expertise to aid a worthy project.

Gillian McCarthy is an honours student in Design at the University of Otago. Gillian worked for the McGuinness Institute in the lead up to *StrategyNZ: Mapping our Future*, travelling to Wellington in the weekends to work on the workbook and other aspects of the event design. Gillian also participated in the workshop as a designer for one of the groups.



Dr Mick Abbott captures the designers at 2am on Thursday morning at the height of the design process

Groups at work



Each of the ten groups preparing their strategy maps: emerald green, navy blue, avocado, rust orange, red, purple, yellow, brown, plum and teal

A student's insight

Christian Silver

K-Force was invited to demonstrate our Vex robots at the *StrategyNZ: Mapping our Future* event in Wellington and, amazingly, we got to participate with incredible forward thinkers in New Zealand.

The workshop was organised by the McGuinness Institute to answer the question 'Where do we want New Zealand to go?' and aimed to form a miniature New Zealand inside a single room. Four members of the Kristin Robotics team, Stephanie Bickerstaff, Matt Sole, Hayden Wilson and I, were part of that miniature New Zealand.

We arrived at Te Papa after a very early start. That morning was dedicated to some very important people speaking on some very important topics. Among the speakers were Dennis Bushnell (Chief Scientist of NASA) and Rik Athorne (manager of Weta Workshop Design Studio). In the afternoon ten teams of people had to design strategy maps to envisage New Zealand in the year 2058.

Members of our robotics team were in and out of the strategy mapping process as we had to set up the robotics presentation. The process we did get to experience was extremely fast-paced and showed just how impressive the people we got to work with were. We listened to some great ideas and got to put forward some of our own.

Before and after the dinner at Te Wharewaka o Pōneke, we interacted with the delegates, encouraging everybody to have a play with our robots, while explaining what the Vex programme is and how it benefits New Zealand school students. The night ended well with a very Kiwi barbecue dinner.

On the second day of the event the teams had to present their strategy maps to a judging panel. They chose the four most impressive maps to then be presented at the Legislative Council Chamber at Parliament. Amazingly, Hayden Wilson and I were in two of the chosen teams! We got to present in the historic Legislative Chamber of Parliament. Unfortunately we couldn't stay and mingle afterwards as we had a plane to catch – which we nearly missed! It was an amazing couple of days where we had a chance to be part of something very special for our country.

This paper was prepared by Christian Silver for a report to Kristin School on *StrategyNZ: Mapping our Future*, and he has kindly let us reproduce his paper. He is a member of the K-Force Robotics Team that won the World Championship at the VEX Robotics Competition in Texas.



Stephanie Bickerstaff prepares a robot for presentation

Part 4 | Presenting and judging the strategy maps

Overview

Think tank groups presented their strategy maps, *New Zealand Listener* covers and Coats of Arms to the judges and fellow participants. This followed a very condensed session of group strategy development. What might normally take weeks or more had to be achieved within a matter of hours. In spite of the time constraints, all groups delivered their three outputs, which we present across pages 52–71. Supporting each of the strategy maps was a wealth of information describing the objectives, success factors, measures, targets, initiatives and more.

The commitment and passion of all the participants was evident in the work produced, and the judges faced a difficult task selecting just four of the ten groups to present their maps in the Legislative Council Chamber that evening. One of the judges, James Palmer, has provided an insight into the judging process in his contribution on page 51.

Groups were given ten minutes to present their outputs, another serious challenge given the complexity and detail of the strategy maps. We would like to commend the presenters for communicating the vision of their groups in such diverse and interesting ways. Dr Robert Hickson has provided an overview of the main themes on page 72.



The judges enjoying the presentations

Judging panel

Hon. Fran Wilde has held political roles including Member of Parliament, Cabinet Minister and Parliamentary Whip, and was the first female mayor of Wellington. She then spent six years as CEO of Trade New Zealand and has been a company director for listed, private, and state-owned companies. Fran runs her own consultancy company, is Chair of the Greater Wellington Regional Council and is a Chief Crown Negotiator for Treaty of Waitangi settlements.

Dale Pearce is a Principal at the Palladium Group Asia Pacific. She formerly led the New Zealand affiliate for Palladium, Frameworks Limited. Frameworks was then invited to join the Palladium Group as a global affiliate. For more than 17 years Dale has advised national and international organisations as well as government agencies in strategy design, measurement, strategy implementation, and strategic change initiatives. She has also developed Balanced Scorecards and performance management frameworks for corporate, divisional, and business unit levels.

James Palmer is the Director of Strategy at the Ministry of Agriculture and Forestry, where he is responsible for thought leadership in issues confronting New Zealand's land-based industries. James is currently involved in work on water allocation and quality, and water infrastructure; reform of the science system and the strategic direction of Crown Research Institutes; climate change policy and implementation of the emissions trading scheme; and the government's Primary Growth Partnership for innovation in the food and fibre sectors.

Alex Fala is a senior executive at Trade Me, working as the head of strategy and finance. He has been with Trade Me since 2008. Before this he was an associate at McKinsey and Company. Alex was a Rhodes Scholar and graduated from the University of Oxford in 2005 with a BA in Philosophy, Politics and Economics. He also has an honours degree in Accounting and Finance from the University of Auckland.

Judge's insight: Selecting the four presentations for the Legislative Council Chamber

James Palmer

For a strategy to be effective it must be clear, convincing, cogent and demonstrate a deeper thinking about how it will achieve its vision. Judging at *StrategyNZ: Mapping our Future* was a fascinating opportunity to reflect on the strategy development process and see what a diverse group of New Zealanders could deliver in the way of a strategy for our country in less than two days.

The first order of business when the judges convened was to make sure we had a common view of the criteria and knew, collectively, what we were looking for. There was some debate regarding the weight we should give to the compelling story element of the strategy against the in-depth detail of each strategy map. In the end our approach focused more on the quality and depth of the strategy maps as the blueprint for change.

Once the presentations had been given it was apparent that, by and large, all the groups had developed a sound vision and that, at the high level, they were fairly similar across the groups; they were generally 'green', multicultural, aspirational and very positive. Some groups had evidently run into enormous trouble trying to reach a consensus on a collective vision, while other groups had clearly decided to agree on certain principles and ignore those that they could not agree on. Groups that took the second approach tended to produce better strategy maps because they were able to spend more time developing their ideas. The other important early observation for the judges was that all the *New Zealand Listener* covers and Coats of Arms were impressive. They all displayed a solid connection with the group vision and looked great. Because of this, these two outputs did not play a major role in the judges' decision.

Ultimately it was the strategy map that trumped everything else. This was the output in which we were able to see the reasoning and cogency of the strategies. It was also the area in which the groups varied the most, both visually and in terms of content. Essentially the strategy map had to show a strong connection with the group's vision and be

able to answer for the judges: how were they going to get there? The strategy map had to demonstrate deeper thinking about the strategic choices the country could make to arrive at their vision and show an awareness of the barriers to getting there. Some groups had really good themes and gave highly engaging presentations, but offered little to convince the judges that their strategy could be implemented, or that it offered the necessary mechanisms to generate the change they proposed.

It was also important that the strategy maps showed evidence of innovative and novel ideas, rather than focusing on simple generic themes that do not have a supporting framework or require much thought or investigation. In this regard those groups that had more detailed strategy maps did better in the judging than those that did not. But content on its own was not enough; had the thinking been poor the strategy map would not have impressed the judges. The strategy map must specify cause and effect, linking outcomes with inputs through process.

The four teams that were selected to present at the Legislative Council Chamber all showed a great level of depth and process in their strategy maps. The recommendations were concrete and showed a compelling link across themes. It is fair to say that all the judges were highly impressed with the level of work created by the groups and, at times, were hard pushed to choose one over another. It was inspiring to see that such developed strategy could be put together by a group of New Zealanders in such a short space of time. How well New Zealanders think about strategy will have a major impact on how well we cope with challenges and capitalise on opportunities in the future. This is a timely conversation for New Zealanders to be having.

James Palmer is the Director of Strategy at the Ministry of Agriculture and Forestry, where he is responsible for thought leadership in issues confronting New Zealand's land-based industries.

Group 1: Emerald green

Selected for presentation at the Legislative Council Chamber

Vision: *Ka haere nga mokopuna ki te hi tuna! The grandchildren will fish the eels*

Participants: Alison Nevill (*Process chair*), Ben Guerin, Christian Silver, Don Christie, Ema Weepu, Grace Ridley-Smith, Joseph Stafford, Richard Randerson, Ruth McLennan, Simon Harvey, Sue Hanrahan, Katy Miller (*Designer*)

Output 1: *New Zealand Listener* cover in 2058

The objective (vision) the strategy is designed to achieve is that by 2058, Aotearoa will be recognised as the happiest nation on earth. Our vision is that our grandchildren will fish the eels (tuna). Tuna are our indicator species for the four wellbeing goals (pou and pukorero); their health demonstrates to us that the ecosystem is healthy. The story of the importance of the eel is shown on our *New Zealand Listener* cover.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective of healthy ecosystems, flexible and intelligent communities, improved living standards, and strong trade and peacekeeping relationships, draws on the values and knowledge of indigenous and pākehā communities, our commitment to our grandchildren's health and wellbeing, and the unique characteristics of our geographical and environmental place in the world. This is shown in our Coat of Arms, which brings together people, indigenous knowledge and our unique environment.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is that of recognising and acknowledging four aspects of wellbeing: Papatuanuku (restored environment), Kotahitanga (dynamic and capable communities), Manaakitanga (prosperous and developing economy) and Whakawhanaungatanga (global connectedness). Recognising and acknowledging the social, productive, spiritual and financial value of ecosystem services as the beginning point. Those who live in Aotearoa will be well educated and understand the role of government and civic processes.

We are looking to commercialise smart business ideas and commit to strategic relationships and humanitarian concerns. This means sharing industry and community collaboration, incentivising and regulating for transparent government, increased access to capital, and openness and transparency in cross cultural relationships (see Strategy Map opposite).

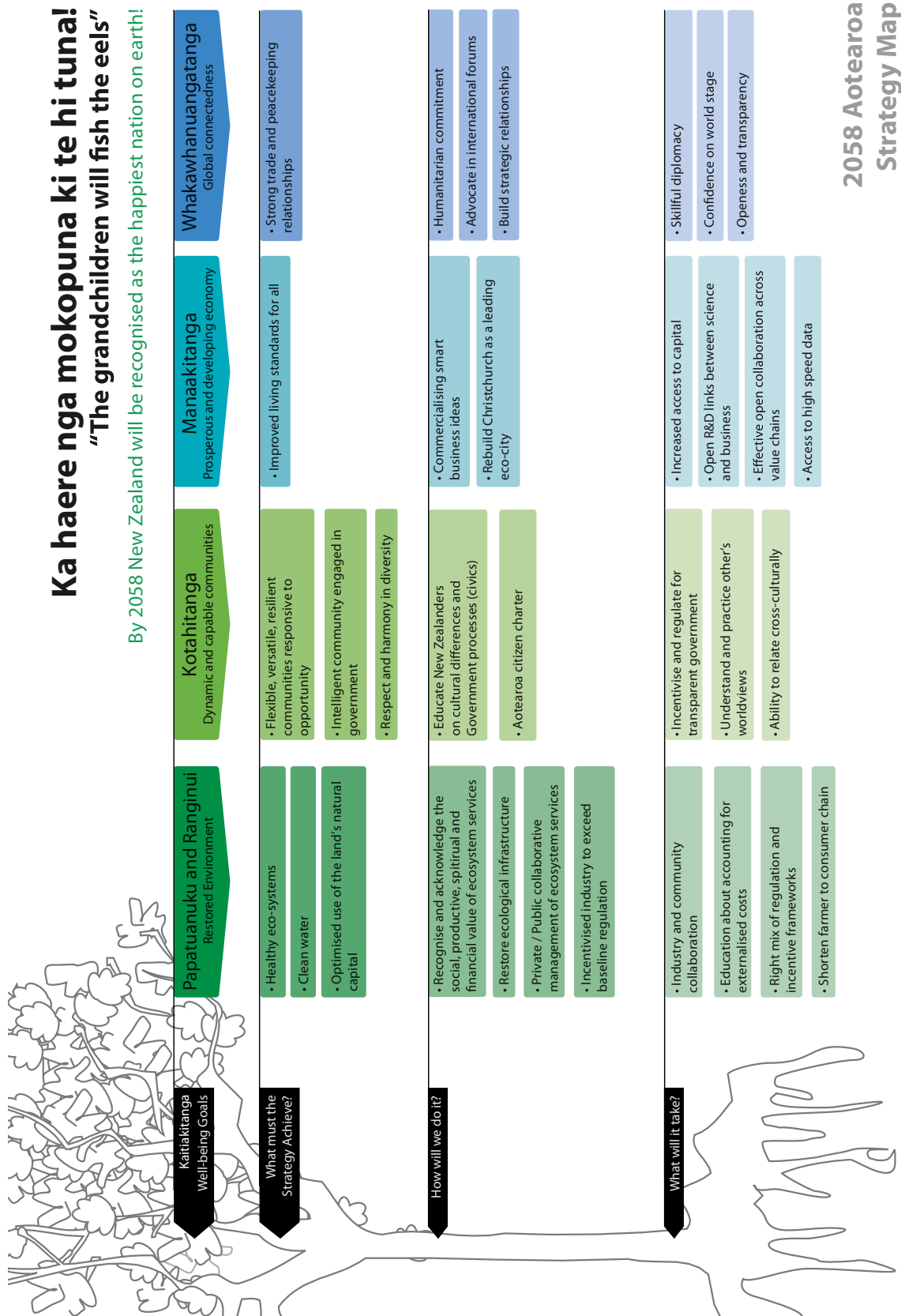
Output 1: *New Zealand Listener* cover in 2058



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 1



Group 2: Avocado

Selected for presentation at the Legislative Council Chamber

Vision: In 2058 Aotearoa will be a healthy, creative and prosperous country in which people will want to live

Participants: Jan Bieringa (*Process chair*), Anthony Cole, Caleb Jago-Ward, Geoff Hamilton, Grant Ryan, Hugh McDonald, Joanna Randerson, Mark Hargreaves, Raf Manji, Sue Peoples, Angus McBryde (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that by 2058 we want Aotearoa to be a healthy, prosperous and livable nation: an example to the rest of the world of how to build a self-sustaining society. Our *New Zealand Listener* cover illustrates our vision as it shows the end of hospitals and schools as we know them today – we have a vision that in 2058 there will be personalized education and healthcare distributed using e-delivery.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is through following our three core values: education, wellness and kaitiakitanga. These represent the timeless human values of knowledge, health and stewardship. Our focus will be our mokopuna, with major investment into our children from birth to adulthood. We will equip them for the opportunities that lie ahead. A new written constitution will provide the foundation for the journey ahead. Civics education will equip all for participating in the road ahead. Above all we will champion innovation and creativity as the drivers of our prosperity. Long-term thinking and foresight will become an embedded part of our policy process. These ideas are exemplified in our Coat of Arms which symbolises knowledge, health and environment, and shows the progression that New Zealand has made from the past and into the future.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is to direct investment to those areas with large payoffs: early childhood education and support; personalised nutrition and health management; person centered education strategies; research and development of at least 5% of GDP, the highest in the world; using e-delivery for governance, education and medicine; enviro-programmes in all schools; new ecosystem service markets alongside valuation of our natural capital; long-term investment in the use and stewardship of our natural resources; reform of our economic structures; taxing resources not creativity; creating a monetary framework that provides a stable and sound money base; empowering business to create: we will become a talent utopia. Above all, we will continue to be guided by our core vision and our values: education, wellness and kaitiakitanga.

Output 1: New Zealand Listener cover in 2058

Hospital image courtesy of Tagishsimon



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 2



Group 3: Purple

Selected for presentation at the Legislative Council Chamber

Vision: New Zealand: The place to be

Participants: Phil Tate (*Process chair*), Donald Clark, Hamish Gow, Hilary Sumpter, Hugh Norriss, Maria Ioannou, Michael Moore-Jones, Paul Atkins, Tim Clarke, Wayne Silver, Jeremy Star (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is to establish New Zealand as 'The Place to Be' by 2058 – by valuing our past, to actively create our future. We translated this vision into our *New Zealand Listener* cover design.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is by redefining healthy, wealthy and wise by rebalancing our values for the future world. Healthy New Zealanders will live in healthy communities and in a healthy environment. We will redefine wealth in New Zealand in greater than economic terms and by delivering a high quality of life in a low carbon world. Our economy will be underpinned by keeping New Zealand attractive to – and driven by – purposeful, passionate citizens. This is shown in our Coat of Arms which positions New Zealand at the top of the globe, highlights our environment and connects us to other communities across the world.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is establishing the courage and leadership to make bold choices – choices that build on New Zealand's legacy of pioneering decisions. This strategy is a journey. A journey as important and bold as the one our ancestors took from the Pacific Islands hundreds of years ago. To guide us on this journey we need to create a shared, national responsibility for the delivery of our vision. We need to take our first steps towards this now, which are: Develop a New Zealand constitution as a nation-building exercise; create a role for the Keeper of the Long View, a Parliamentary Commissioner for the Future; implement a five-year term for governments; and increase the domestic capital base by incentivising investment in productive assets and introducing compulsory superannuation savings. Our strategy map outlines how and what we need to do to achieve our goals (see Strategy Map opposite).

Output 1: New Zealand Listener cover in 2058

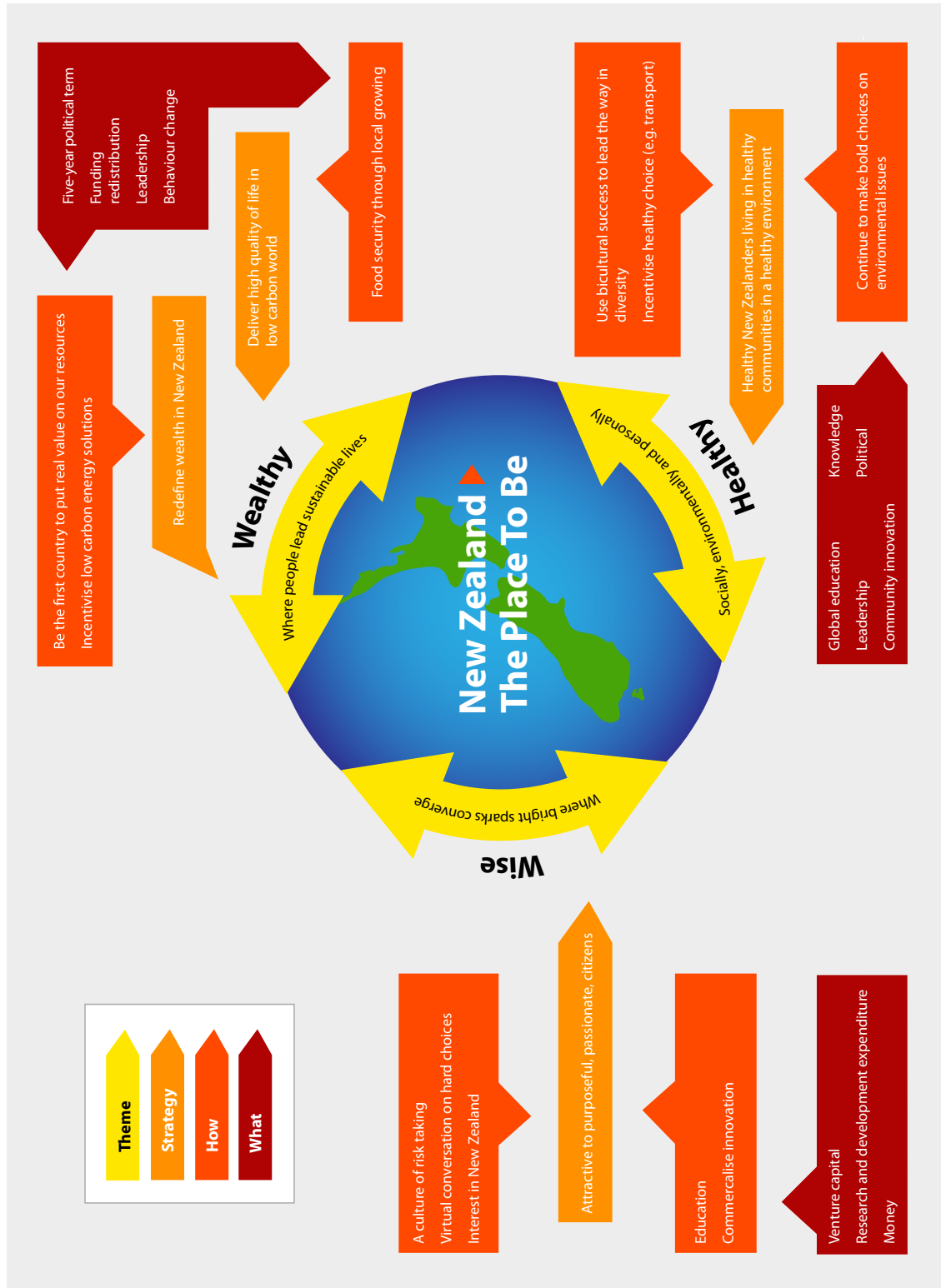
*This cover was altered for publishing purposes



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 3



Group 4: Yellow

Selected for presentation at the Legislative Council Chamber

Vision: By 2058, New Zealand will be the most desirable country to live in

Participants: Leanne Silver (*Process chair*), Carolyn Gullery, Hayden Wilson, Jill Bowman, Neville Henderson, Peter Furnish, Roger Tweedy, Scott Dalziell, Trish Franklin, Joshua Jeffery (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that New Zealand will be the most desirable place in 2058. World rankings will highlight New Zealand as a place of opportunity and strong community. Participative government will provide real empowerment and resilience to adapt to future events. This will lead to unprecedented interest in immigration to New Zealand and nobody wanting to leave. We captured these ideas in our *New Zealand Listener* cover which shows people flocking to New Zealand from all over the world.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is shown in the Coat of Arms, which was designed to portray the vision of the strategy created in 2011. It represents a multicultural, diverse demographic working together paddling a traditional waka in unity. The boat design harnesses innovation and creativity without forgetting the past. It is on a planned voyage which has been mapped out to follow the Southern Cross towards a bright and sustainable future that contains no boundaries – a true representation that was envisaged in the 2011 strategy map.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is by having the courage and leadership to position our vision statement at the core of the map. The five themes in our strategy map build a pragmatic path to a sustainable and inclusive society. The themes articulate the essential values and methods to achieve the vision, emphasising New Zealand's strengths and tackling the challenges we face. Desirability is achieved through quality of life, improved wellbeing, increased opportunity and active engagement with environmental and community issues. Incentivising investment in productive assets and introducing compulsory superannuation savings is also key (see Strategy Map opposite).

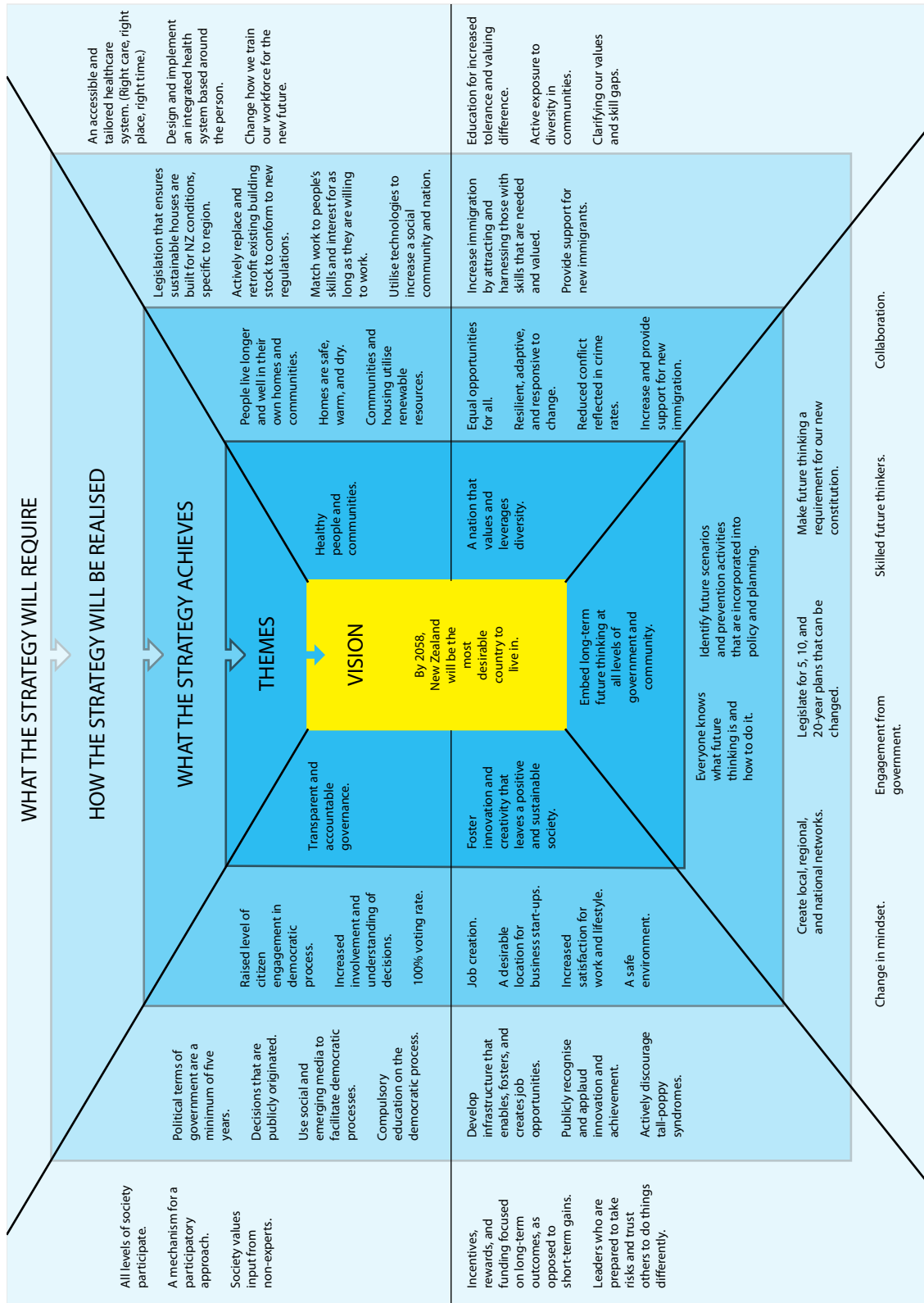
Output 1: New Zealand Listener cover in 2058



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 4



Group 5: Teal

Vision: Aotearoa – the most desirable place in the world

Participants: Murray Wu (*Process chair*), Andrea Frost, Ben Mason-Atoni, David McGuinness, Desmond Darby, John Tocker, Kat Thomas, Mick Abbott, Shona Albert-Thompson, Rodger Pringle, Machiko Niimi (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that Aotearoa (New Zealand) offers a quality of life unparalleled in the rest of the world. New Zealanders balance economic affluence with a rich natural environment and a society that values equity and fairness. This is shown in our *New Zealand Listener* cover which highlights our community, environmental and economic advances.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is by focusing on our special characteristics. As a new pioneering nation we have an ability to take the best ideas from around the world and mould them into innovative ways of living and working. The new Coat of Arms depicts these characteristics. While the figures retain the links to the founding of New Zealand, the shield incorporates modern images of nimbleness (the fantail), knowledge (the mauri), growth and development (the punga) and interconnectedness with the world (weaving).

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is focused on three core themes. Economic prosperity is generated by creating a vibrant export-driven economy supported by an innovative education system. A strong connection to the environment is developed by acknowledging both the economic uses of natural resources and the identity that all New Zealanders have with the forests, mountains, lakes and rivers. New Zealand's tradition of egalitarianism and social progressiveness is advanced by increasing participation in government and developing strong communities (see Strategy Map opposite).

Output 1: New Zealand Listener cover in 2058

Images courtesy of Greg O'Beirne and 100photos.com

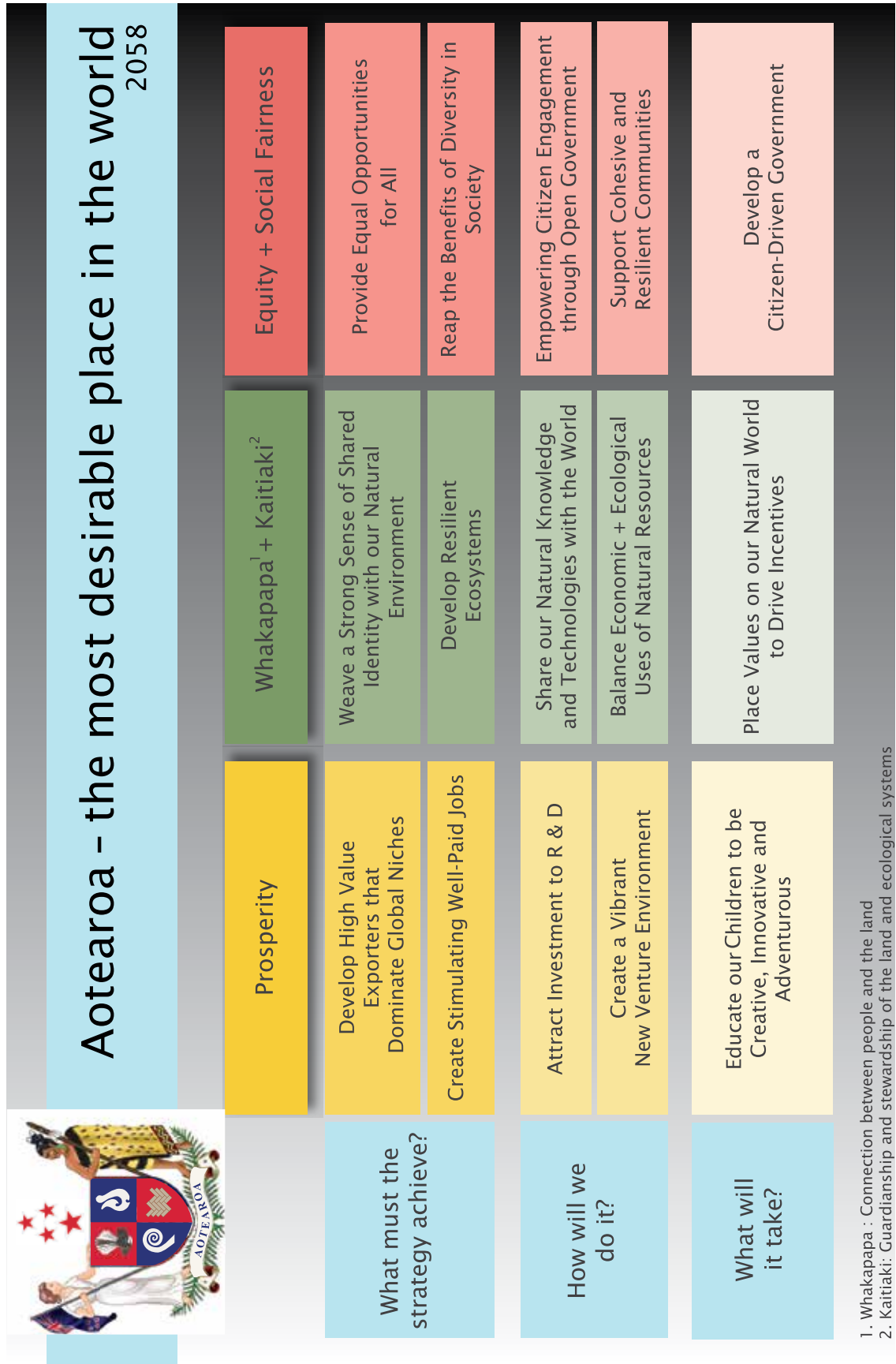
*This cover was altered for publishing purposes



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 5



Group 6: Navy blue

Vision: Borderless Aotearoa

Participants: Ged Lynch (*Process chair*), Heike Schiele, Kieran Meredith, Lance Beath, Matthew Sole, Onur Oktem, Richard Logan, Stuart Barson, Yvonne Curtis, Marina Battisti, Josie Lee Brough (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that Aotearoa will nurture and maximise its potential by connecting beyond our borders – both physical and intellectual. Success in this would mean that by 2058 Aotearoa's full potential would be maximised and we would consistently lead the Global National Happiness Index, as shown on our *New Zealand Listener* cover design.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is through he tangata, sharing and respecting the values of Aotearoa and participating in society through numerous connections beyond traditional boundaries.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is by focusing on three catalyst actions that future governments, businesses and communities should organise themselves around as a national call of action:

1. To have an investment-based economy that invests in people and businesses so that as a nation we are a net exporter of capital rather than a net importer. This will create long-term economic security.
2. We will have a sustainable competitive advantage by having high quality, networked knowledge. This means that as a nation all our important decisions are based on real evidence.
3. Ensure that local, regional and central government is participatory and high quality. Ensure regulations and governance do not erect barriers but allow and encourage businesses and communities to reach their potential.

Aotearoa's potential will be realised through:

He Tangata – its people. We will cultivate people not farms. We will celebrate and learn from diverse views and experiences that will enrich he tangata and create a smart and healthy population able and eager to participate in advancing Aotearoa's interests.

Zealandia – 96% of Aotearoa is water. We are the LAND and SEA. Research will enable us to expand our horizons and realise the full potential of Zealandia – in particular the 96% of Aotearoa that is below sea level.

Mauri – life force. The connectedness of 'people and place' he tanagata and Zealandia is our unique 'life force' (see Strategy Map opposite).

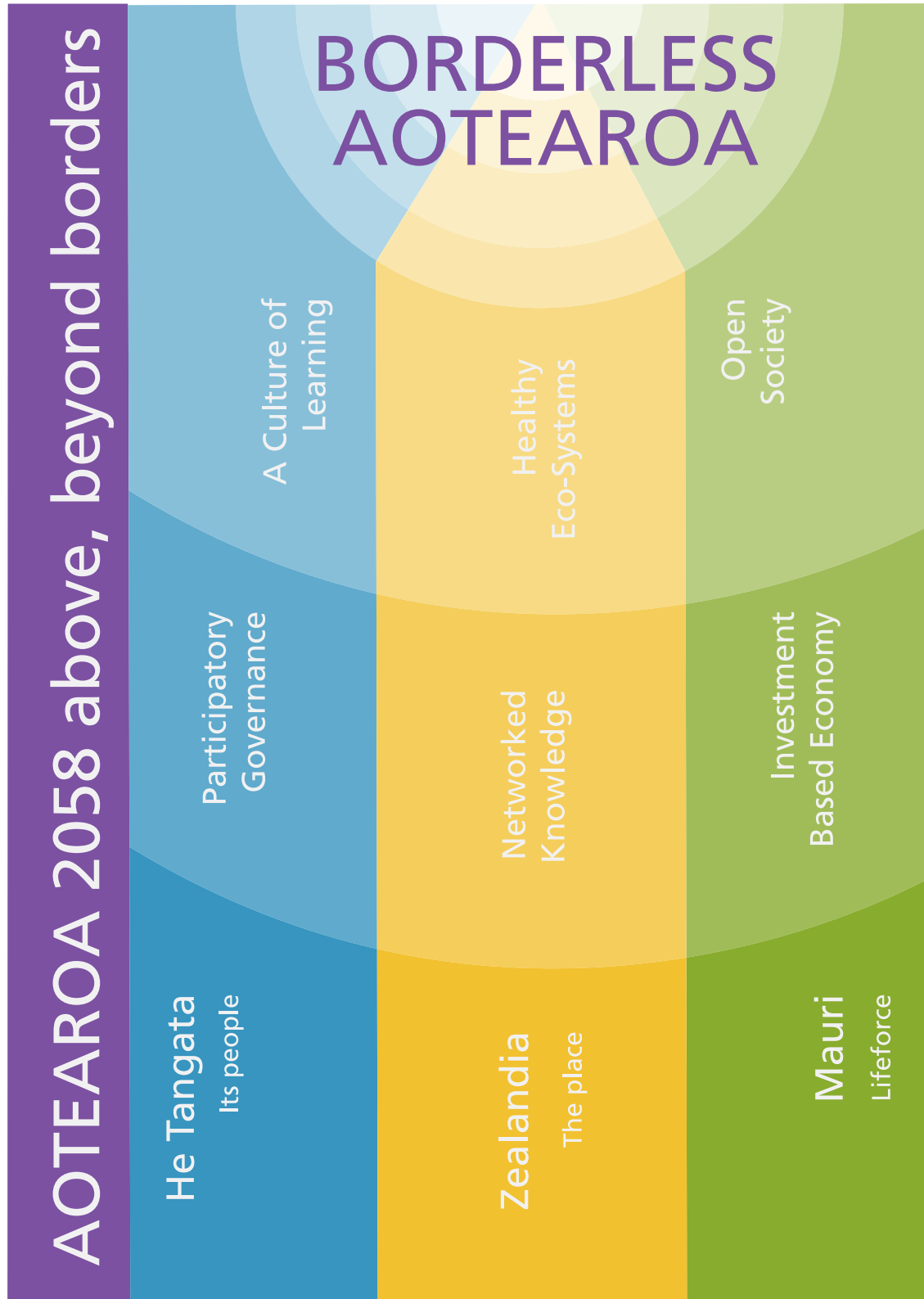
Output 1: New Zealand Listener cover in 2058



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 6



Group 7: Plum

Vision: Aotearoa is a place where talent belongs

Participants: Leanne Holdsworth (*Process chair*), Anake Goodall, Beat Huser, Krystal Gibbens, Marie Collin, Rebeka Whale, Stephen Hay, Vibhuti Chopra, Gillian McCarthy (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that in 2058 people will be queuing to enter New Zealand because there is a holistic valuing of talent. As a nation we will value a diverse range of skills and outlooks and people's contributions to society will be measured broadly. This is illustrated in our *New Zealand Listener* cover which shows talented New Zealanders engaging in a variety of different activities across the country.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective of a broadening and celebration of talent will be through creating an economy that serves society and the environment. This is seen in our Coat of Arms which is a symbol that represents unity and the importance of the environment.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is aligned along three planks: economic co-operation, societal leadership, and individual wellbeing. We need recreate the way we think about the economy, ensuring that it serves both social and environmental wellbeing and harnesses the full potential of our immigrants. Societal leadership will be encouraged through forward planning and disaster management and by establishing governance structures that support the economic goals of social and environmental wellbeing. A focus on individual wellbeing will result in empowered, connected contributors who want to stay in New Zealand.

Output 1: New Zealand Listener cover in 2058

*This cover was altered for publishing purposes



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 7

Aotearoa is a place where talent belongs



Group 8: Brown

Vision: Aotearoa will transcend boundaries to generate new models of cultural wellbeing and wealth

Participants: Marty Donoghue (*Process chair*), Damian Lawrence, Debbie Dawson, Gareth Moore-Jones, Mia Gaudin, Lauren Christie, Rachel Bolstad, Rodney Adank, Sascha van der Plas, Storm Adams-Lloyd, Te Ao Pritchard (Te Ao Hinengaro, Te Awhi Paa Trust & Te Runanga o Rauakawa), Scott Savage (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that by 2058 Aotearoa, New Zealand will have transcended geographic boundaries to the world through technological bridges, showcasing innovation, creativity and leadership and generating new models of cultural wellbeing and wealth for the nation. This has been expressed through our *New Zealand Listener* cover design that asserts Aotearoa as the digital World Expo host.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is through an abundant, expanding and regenerative environment, and being able to translate the development of our community wellbeing into innovative services for others. The representation of this is expressed through a new Coat of Arms that emphasizes the movement of culture, respect between Māori and pākehā, and recognizes the land, sea and sky as fundamental to our wellbeing.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is through developing:

- A technological culture built on an adaptive infrastructure that encourages early adoption, engendering a technology for life culture.
- Connected communities amongst a global village that recognises the Treaty of Waitangi and whose wellbeing will be used as a key performance indicator of success.
- A flourishing economy through focus on sustainable and incentivised new product and service development, building financial literacy and entrepreneurial leadership.
- Smart education personalised, tailored and community-centred, engendering a participatory democracy.
- A Bill of Rights for the Environment.

These ideas are laid out in our Strategy Map (see opposite), which indicates how we will reach our vision.

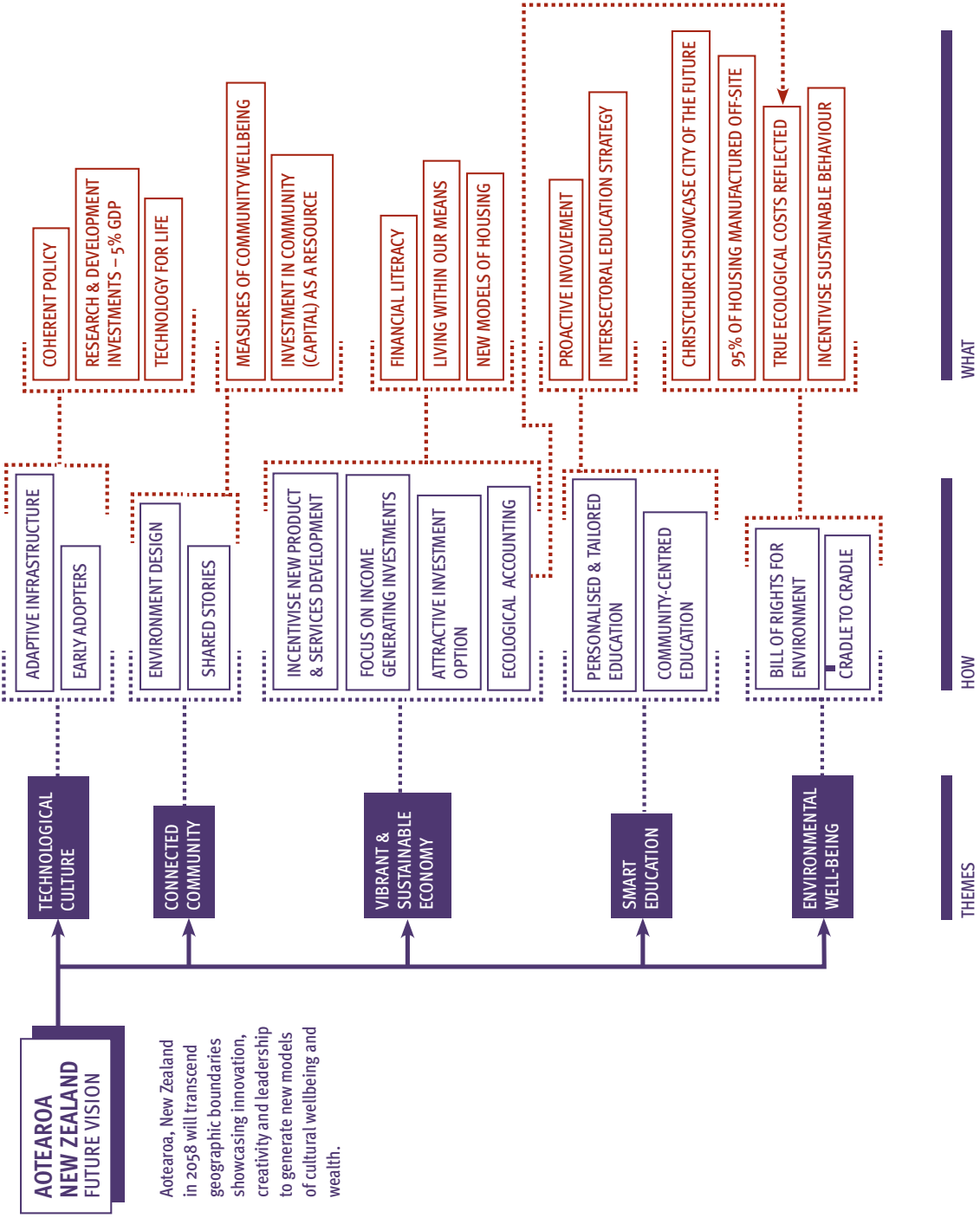
Output 1: New Zealand Listener cover in 2058



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 8



Group 9: Red

Vision: Aotearoa is the most fantastic place to live and work

Participants: Jonathan Routledge (*Process chair*), Sheryl Boxall, Amy Fletcher, Anna Jacobs, Beth Houston, Christian Williams, David Glover, Fred Staples, James Wall-Manning, Sarah Wakes, Susan Jones, Lara Rapson (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective (vision) the strategy is designed to achieve is that by 2058 Aotearoa is recognised (through benchmark OECD indicators) as the most fantastic place in which to live, work, learn and grow. Our *New Zealand Listener* cover exemplifies this, and includes the image of a waka carrying the citizens of Aotearoa forward together.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective is through ensuring that no Aotearoan will live in poverty and all citizens will have access to quality housing, health care and sustenance. Educational success will be a hallmark for the country and we will be sought out as a seat of learning, development and growth. In economic terms we will be a Pacific leader through innovative policies, practices and global co-operation; and, finally, Aotearoa will progress to a completely balanced, productive and sustainable environment. Our Coat of Arms reflects these ideas, as it shows prosperity, represented by the fish hook, and the unity of people and culture represented by the tui.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is that underpinning our entire effort and inter-weaved in everything we do will be our national culture and values. We will manage critical strategic change programmes through two cross-functional 'themes' of an 'inclusive society' and 'smart & sustainable wealth' – necessary to bind the nation, deliver the resources required to achieve the bold national objectives set out in the strategy and, importantly, ensuring that the ability of future generations to meet their own needs is not compromised. The start of the journey will be to deliver constitutional reform as the platform to launch the strategy. Internally, education will develop potential that will lead to innovation growth. At the same time, Aotearoa will be promoted as a safe, rewarding place to invest, Greenfield partnerships with overseas investors will be encouraged, and investments will be made to ensure our environmental prosperity. Our infrastructure will be innovative, durable and future-proofed and greenhouse gas emissions will be negligible (see Strategy Map opposite).

Output 1: New Zealand Listener cover in 2058

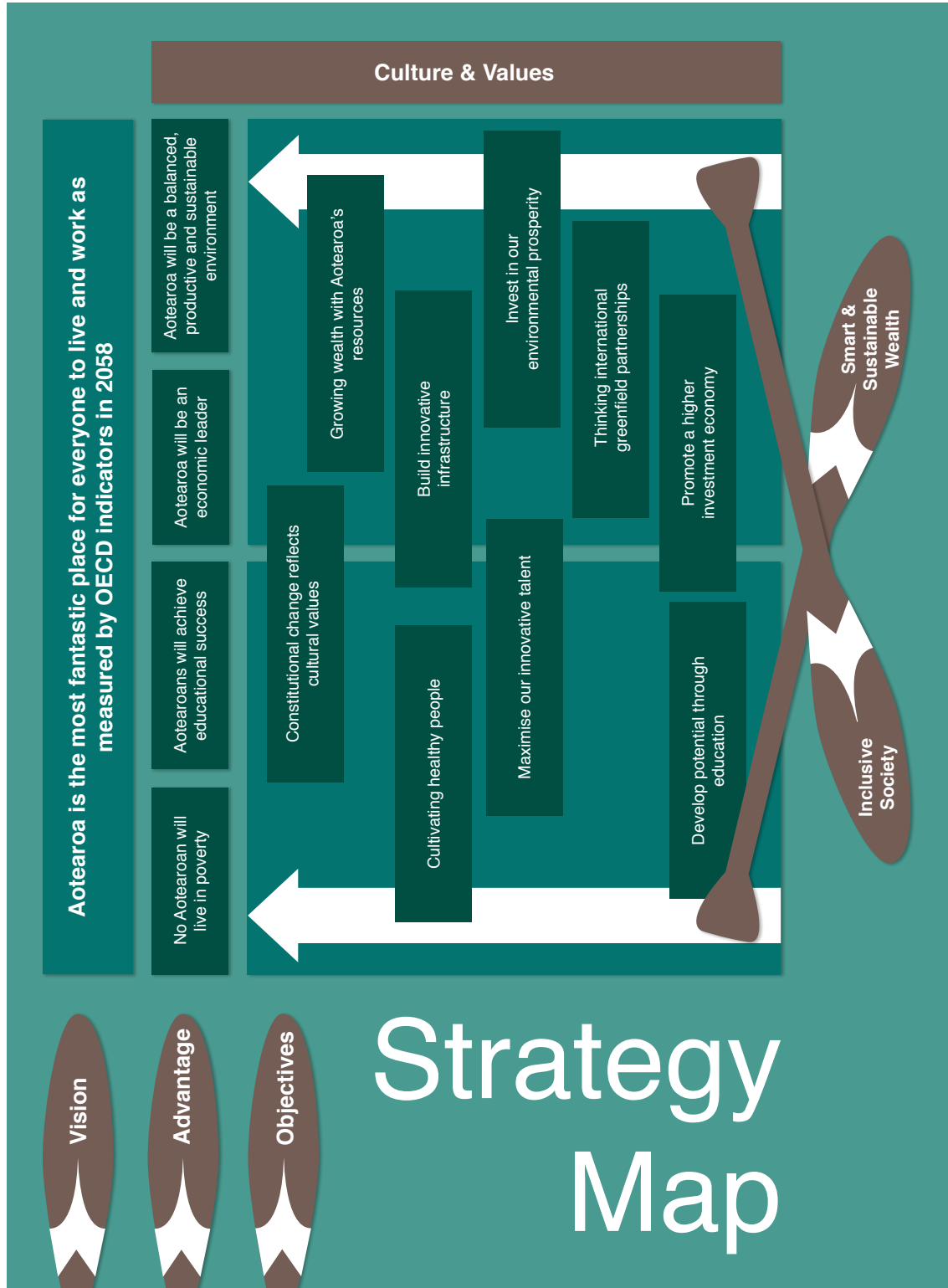
Images courtesy of Katclay and Phillip C



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 9



Group 10: Rust orange

Vision: The greatest living space on Earth

Participants: Ella Lawton (*Process chair*), Ashok Parbhu, Barbara Nicholas, Brian Penetaka Dickson, Kaila Colbin, Megan McMullan, Nina Harrap, Peter Rankin, Rhys Taylor, Rodney Scott, Sarah Ottrey, Stephanie Bickerstaff, Chris Lipscombe, Rob Cape (*Designer*)

Output 1: New Zealand Listener cover in 2058

The objective the strategy is designed to achieve is 'Kaitiakitanga – guardianship of our place and people'. Aotearoa New Zealand will lead the world in progressive stewardship, and countries from all over the planet will look to us as a shining example of economic and environmental innovation. Aotearoa New Zealand is a place where people will come for opportunities. Our *New Zealand Listener* cover illustrates why we are the 'greatest living space on Earth', through our strategy themes of 'lifestyle' and 'opportunity'. The cover also notes our vision of 'kaitiakitanga': that we will take care of our environment while investing in technology and innovation.

Output 2: The New Zealand Coat of Arms

The means (advantage) by which the country will achieve this objective will be through taking advantage of the natural resources and the benefits of our geographic isolation. We will have a robust government, education system, and social infrastructure. We will have people who believe in the greatness of New Zealand and who are willing to do the work to make it happen.

These ideas are shown in our Coat of Arms which illustrates the different modes of economic progress that we see New Zealand taking – through education, innovative new technologies, and industry.

Output 3: Strategy Map

The niche (scope) in which the country intends to operate is through creating a country of leaders who can act strategically to implement two core themes and bring about a country overflowing with lifestyle choices and opportunity. The key themes of lifestyle choice and opportunity mean creating a place of desirability, an outstanding living space, a space with social cohesion allowing for access to capital, and a focus on innovation and the interconnectedness necessary to bring the world closer. How we will achieve these key themes is outlined in our Strategy Map (see opposite).

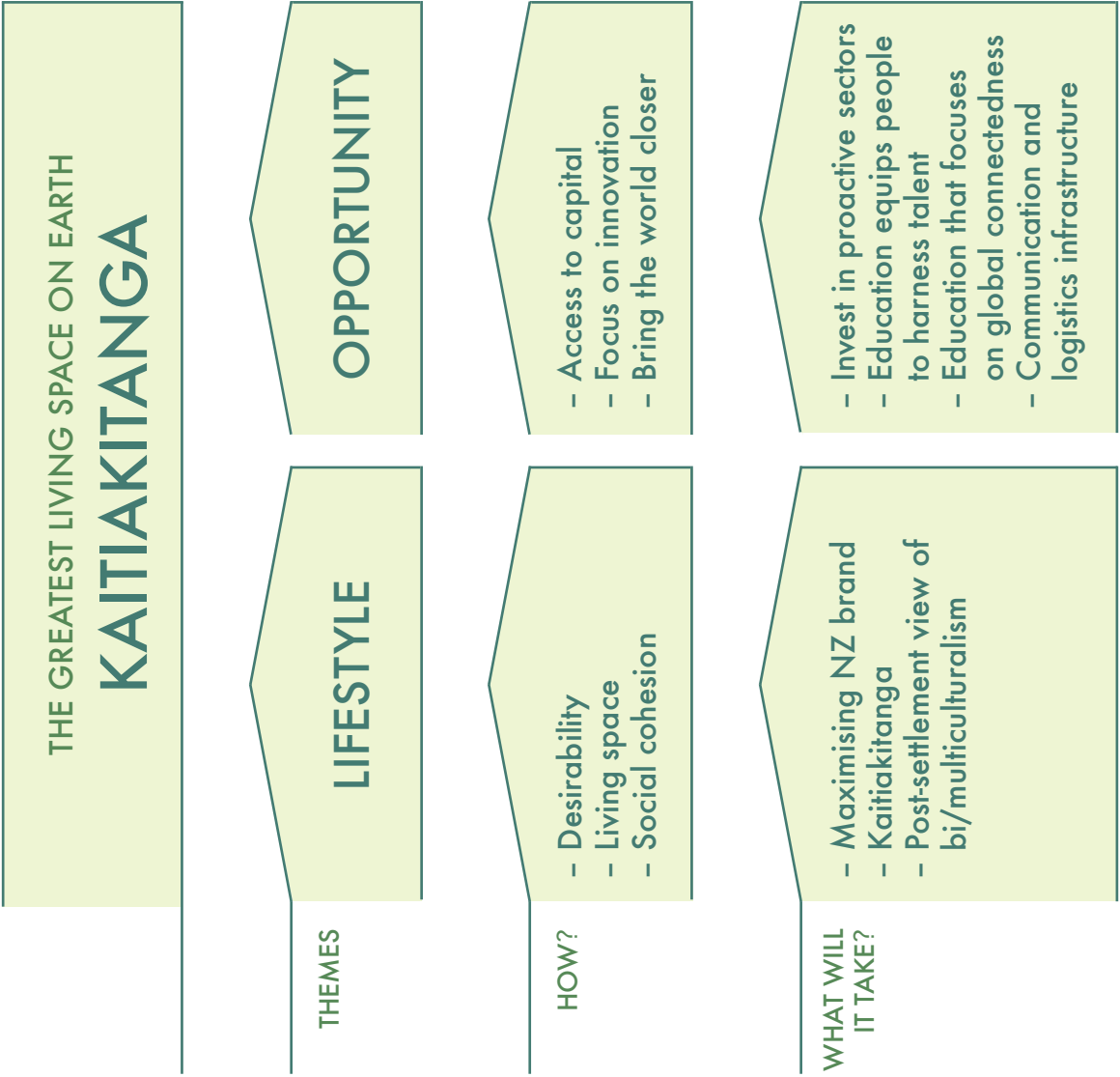
Output 1: New Zealand Listener cover in 2058



Output 2: The New Zealand Coat of Arms



Output 3: Strategy Map – Group 10



A participant's observations of viewing the ten group presentations

Dr Robert Hickson

One of the most compelling things about the strategy maps was the passion and energy that all participants brought to the task. Despite very tough timeframes, all managed to get through the mapping process with maintained inspiration and in good humour.

While different approaches were adopted, all the strategy maps recognised the need to have economic, social and environmental factors integrated. They were clear that prosperity involved more than just making money, it also needed to align with social and environmental values. There is no simple solution – change across many areas is required, and these changes need to be linked and coordinated. All recognised that smart choices need to be made to benefit all New Zealanders, and that the whole society – not just government – needs to be involved. Strength and determination will be required to achieve the goals the maps outline.

Common themes across the maps were:

- Making New Zealand a desirable and attractive place to live;
- A fair and just society;
- The need for longer electoral cycles to improve long-term planning;
- Improving the quality of education for all throughout life;
- The need for a strong commitment to research and development, and investment in infrastructure; and
- Being connected both within New Zealand and to the rest of the world.

A strongly expressed theme in all the maps was that New Zealand needs to be a desirable place to live and work, rather than simply being a nice place. A prosperous and attractive future will require making the most of the creativity, intelligence and skills of the current population, as well as attracting other talented people here. All aspire to make New Zealand a country that is admired for what it does, and one to which people will come to learn from the way things are done here.

There was recognition that wellness and prosperity go hand in hand. In part, this can be achieved through individuals, communities and institutions working together. Improving engagement between communities and government (both national and local), leadership and governance were identified as

essential to ensure all are working toward a common goal.

There was unanimity about the need to have longer electoral cycles so that Parliament has the time to effect real change and take a longer-term view of the challenges and opportunities that New Zealand faces. Governance that enables rather than inhibits is a necessity, since change will come through incentivising individuals, firms and institutions rather than relying solely on government.

Education for the whole of life is also viewed as essential. School children will need a broader education, for example, a curriculum that covers civic processes and entrepreneurship. This will create a generation that can continue and extend the aspirations of the country. To thrive in a changing world, all New Zealanders will need to continue to learn and develop.

New Zealand has some great natural resources, but many of the maps recognised that we can't rely on what we are currently good at if we want to be a more prosperous and healthy nation. We need greater investment in research and development to turn ideas into innovations so that we can both use the resources we have in more responsible and effective ways and create new economic and social opportunities.

None of the maps regarded New Zealand as an island fortress, isolated from the rest of the world. New Zealand needs to be better connected to the rest of the world. This will help provide the ideas and innovations the country needs, attract talented people and enable us to influence other countries. There was also recognition that better connected and engaged communities within the country are required so that the country can progress as one.

The best strategy maps had a clear and simple vision, underpinned with pragmatic actions and quantifiable means for achieving the stated goals. They demonstrated clear linkage between causes and effects. The most compelling cases were made when these elements were combined with strong imagery and symbolism.

None of the strategy maps can be considered complete. They are a great and inspiring start that creates the basis for further discussion and refinement.

Dr Robert Hickson is a senior adviser at the newly established Ministry of Science and Innovation. Previously, Robert led the Ministry of Research, Science and Technology's (MoRST) Futurewatch programme, which aimed to build government's alertness to new scientific knowledge and technologies and the implications – opportunities and risks – that they present to New Zealand. Prior to joining MoRST Robert was a scientific adviser at the Environmental Risk Management Authority. Robert received his PhD in Genetics from Massey University and undertook post-doctoral research in evolutionary biology at the University of Hawaii at Manoa, AgResearch, and the Ludwig-Maximilians-Universität München, Germany.



Part 5 | Three workstreams

Overview

After judging, the four groups selected to present their vision for New Zealand's long-term future at the Legislative Council Chamber dispersed to boardrooms around Wellington to polish their strategy maps and presentations. Thank you to Willis Bond & Co., KPMG and Kensington Swan for the use of their boardrooms.

Those who were not part of groups selected to present were free to attend one of two other working lunches.

Working lunch 1: International futurists

A discussion on how New Zealand could collaborate more effectively with international futures organisations was led by Dr Peter Bishop, Dr Richard Slaughter, Dr Stephanie Pride and Gareth Moore-Jones.

Working lunch 2: Integrated reporting

Speakers Jane Diplock, Jan Lee Martin and Rachael Milicich led a discussion on measures of progress and integrated reporting.

Working lunch 3: Polishing the strategy maps

The four selected teams worked on their presentations in preparation for the Legislative Council Chamber.



Dr Peter Bishop

Working lunch 1: International futurists

Rory Sarten

Dr Stephanie Pride introduced this session with her paper about New Zealand's level of engagement with international futurists. Participants found themselves involved in an interesting discussion that extended beyond the topic of New Zealand's involvement in international futures networks. After canvassing attendees for any questions they may have had about future studies in general, speakers engaged with the audience about how success can be recognised in the futures field. The importance of trend analysis rather than 'pop-culture futurism' – something which ultimately undermined the credibility of futures studies – was discussed by New Zealand futurist

Gareth Moore-Jones. Dr Richard Slaughter, an Australian futurist, lamented the absence of futures education at a tertiary level and its impact on the perception of future studies. Dr Peter Bishop, delayed by the judging of the strategy maps, joined the discussion towards the end and brought an American futurist's perspective.

Rory Sarten joined the McGuinness Institute in early 2010. He manages the Institute's information technology, and contributes to reports and other publications as a researcher and writer.

Dr Peter Bishop

Dr Peter Bishop is an Associate Professor in the College of Technology and Director of the graduate programme in Futures Studies at the University of Houston. He specialises in techniques for long-term forecasting and planning and holds seminars on the future for business, government and not-for-profit organisations. He also facilitates groups in developing scenarios, visions and strategic plans for the future. His clients include IBM and the NASA Johnson Space Center. Dr Bishop is a founding board member of the Association of Professional Futurists, and President of his own firm, Strategic Foresight and Development.

Dr Stephanie Pride

Dr Stephanie Pride is Principal Consultant at StratEDGY Strategic Foresight, a futures consultancy based in Wellington, serving public, private and NGO sector clients across New Zealand and overseas. Stephanie also serves as a board member for both the international Shaping Tomorrow Foresight Network and the New Zealand Futures Trust. Previously Stephanie was Chief Advisor at the OECD-affiliated Secondary Futures and at the State Services Commission, where she designed and led the futures programme for the New Zealand state sector.

Dr Richard A. Slaughter

Dr Richard A. Slaughter is a writer, practitioner and innovator in futures studies and applied foresight. He was the Foundation Professor of Foresight at the Australian Foresight Institute in Melbourne and then the President of the World Futures Studies Federation. He is the author or editor of some 20 books and many papers on a variety of futures topics. Two of his recent works are *Futures Thinking for Social Foresight* (2006) and *The Biggest Wake Up Call in History* (2010). He is Director of Foresight International and has a blog about various futures-related subjects.

Gareth Moore-Jones

Gareth Moore-Jones is Director of Ideaus Ltd – a futures consultancy specialising in recreation and community planning. He is currently working with New Zealand's largest provider of recreation activities as the National Sport, Recreation and Outdoors Manager for the YMCA. He has expertise in strategic planning, leisure planning analysis, project management, organisation and stakeholder liaison, professional development planning and event-based management. Gareth is Chair of the New Zealand Futures Trust.

Working lunch 2: Integrated reporting

Nicola Bradshaw

Former chair of the Securities Commission Jane Diplock led conference participants, accountants and other financial professionals in a discussion about measures of progress and integrated reporting. Ms Diplock shared her experience as Chairman of the Executive Committee of the International Organization of Securities Commissions (IOSCO) and New Zealand's involvement with this. Jan Lee Martin drew attention to the importance of achieving balance in reporting between different, but equally

significant, measures. Statistician and member of the OECD/UNECE Taskforce on Sustainable Development Rachel Milicich highlighted the role that statisticians have to play in measuring performance against sustainable development indicators through her discussion on Statistics New Zealand's latest reports.

Nicola Bradshaw has worked for the McGuinness Institute for the past five years. She has recently completed a Bachelor of Commerce and Administration at Victoria University of Wellington.

Jane Diplock

Jane Diplock is the former Chair of the New Zealand Securities Commission and a member of the International Integrated Reporting Committee. Jane's professional qualifications also include being a barrister and solicitor of the Supreme Court of the Australian Capital Territory and High Court of Australia, a barrister of the New South Wales Supreme Court, Chairman of the Executive Committee of the International Organization of Securities Commissions (IOSCO), a fellow of the Institute of Public Administration of Australia, a fellow of the Australian Institute of Company Directors and a fellow of the New Zealand Institute of Management Inc.

Jan Lee Martin

Jan Lee Martin started her career as a public relations manager for IBM in New Zealand in the 1960s. She then established a corporate communication consultancy in Australia and became a member of a team of Australia's leading futurists, who established the non-profit Futures Foundation. She is a member of the editorial board of the *Journal of Futures Studies*; contributes to The FutureMakers Network, an independent cooperative of professional futurists working to put futures studies at the centre of policy development; and serves on the steering committee of Millennia2015.

Rachael Milicich

Rachael Milicich has worked for Statistics New Zealand for over fifteen years, mainly in the development and compilation of key macroeconomic statistics. In her current role as Manager of National Accounts, she has responsibility for the national accounts, environmental accounts, tourism satellite account and, more recently, sustainable development indicators. Rachael also represents New Zealand as a member of the OECD/UNECE Taskforce on Sustainable Development.



Jan Lee Martin and her husband watch the group presentations

Working Lunch 3: Polishing the strategy maps

Louise Grace-Pickering

Boardrooms of Kensington Swan, KPMG, Willis Bond & Co. and Te Wharewaka o Pōneke

After the judging process, selected teams were given the opportunity to work on their outputs in preparation for the evening's presentation at the Legislative Council Chamber. The four groups were hosted in beautiful boardrooms around Wellington where they were visited by Dale Pearce, a member of the judging panel. Dale provided specific feedback from the judges about each strategy map.

Teams had the opportunity to ask Ms Pearce questions and discuss and clarify aspects of their strategy. Designers made use of the time by refining

the covers for the *New Zealand Listener* and the Coats of Arms images. The delivery of the presentations was also worked on and teams had the opportunity to use the extra time to consider how they might improve on this. A staff member from the Institute was made available to the teams to assist with logistics and be on hand to provide any support that might be required.

Louise Grace-Pickering joined the McGuinness Institute in early 2010 to manage the library and undertake research.



Event co-ordinator Maria Gorham and Louise Grace-Pickering at StrategyNZ: Mapping our Future

Part 6 | Presentations to Members of Parliament at the Legislative Council Chamber

Overview

Two Members of Parliament have actively supported *StrategyNZ: Mapping our Future*. Charles Chauvel and Chris Auchinvole agreed to co-host the presentation of the selected strategy maps at the Legislative Council Chamber (LCC) to Members of Parliament and other invited guests. The LCC was chosen for its significance as a non-partisan location where, historically, considered and long-term thinking took place. It was extremely generous of the MPs to host this event and we are very appreciative of how the Parliamentary staff and Jessica Prendergast worked together to deliver the finale in such a prestigious venue.

The presentation was chaired by Hon Fran Wilde, a member of the judging panel. We were very fortunate to have political journalist and commentator Colin James as our closing speaker. Colin's observations of New Zealand's attempts at centralised, long-term strategy work, as well as his knowledge of the political landscape of this country, enabled him to deliver a comprehensive insight into New Zealand's opportunities and obstacles. His contributing paper, entitled 'History is full of unpredicted futures', is included here.

The four best maps, as determined by the panel of judges, were presented to a 240-strong audience. Along with workshop speakers, consultants and participants, the audience included current and former mayors, ambassadors, MPs, councillors and other friends of the Institute.

The selected groups and their visions were:

- Group emerald green – 'Ka haere nga mokopuna ki te hi tuna! The grandchildren will fish the eels.'
- Group avocado – 'In 2058 Aotearoa/New Zealand will be a healthy, creative and prosperous country in which people will want to live.'
- Group purple – 'New Zealand: the place to be.'
- Group yellow – 'By 2058, New Zealand will be the most desirable country to live in.'

The passion and commitment of all participants was evident during the presentations. While the level of detail contained within a strategy map does not lend itself to being easily communicated in a 10-minute presentation, groups did an outstanding job of delivering their strategy maps, Coats of Arms and covers of the *New Zealand Listener*. The strategy maps were underpinned by a significant amount of detail and hard work. Groups described the results their vision would deliver, identified how these outcomes would be achieved and detailed what resources would be necessary to enable the vision. Time constraints meant that presentations needed to be high level and the decision-making around identifying priorities could not be fully explained. This report seeks to highlight the efforts and outputs of the entire strategy mapping process.



Emerald green group presents at the Legislative Council Chamber

History is full of unpredicted futures

Colin James

‘You say things about the future but you have not been there so you cannot know.’

—Peter Carey, *His Illegal Self*

‘The political and economic structures made by humans share many of the features of complex adaptive systems ... Whether the canopy of a rain forest or the trading floor of Wall Street, complex systems share certain characteristics. A small input to such a system can produce huge, often unanticipated changes — what scientists call “the amplifier effect” ... causal relationships are often nonlinear, which means that traditional methods of generalising through observation (such as trend analysis and sampling) are of little use. Some theorists of complexity ... say that complex systems are wholly nondeterministic, meaning that it is impossible to make predictions about their future behaviour based on existing data. When things go wrong in a complex system, the scale of disruption is nearly impossible to anticipate.’

—Niall Ferguson, ‘Complexity and Collapse’, *Foreign Affairs*, March–April 2010, p. 24.

1. The past is peppered with unpredicted discontinuities

- A 50-year future scan in 1910 could not have predicted two devastating world wars, penicillin, the splitting of the atom, the bikini, the invention of the transistor, the DNA double-helix and the first space satellite, which all occurred before 1960. The triumph of communism in Russia and China would not have been confidently predicted. At home aerial topdressing would have been on few, if any, 1910 scans and the welfare state would have seemed utopian. Even a 20-year future scan would have missed the first world war, communist Russia, penicillin, splitting the atom and the 1929 stockmarket crash.
- A 50-year scan in 1960 could not have predicted the collapse of communism, epigenetics, nanoscience and the Internet and related digital technology. It would have deemed as fantasy the reach and depth of globalisation of information, finance, production and people and a global conference to discuss combating climate change. At home, would world-class wines, world-leading

digital imagery for films, the restoration of the Treaty of Waitangi, Asians making up 10% of the population and a free-trade agreement with a rapidly modernising and marketising China have been in anyone’s 50-year scan? Add a year in which the Prime Minister, Governor-General, Chief Justice, Chief Executive of the biggest listed corporation and head of the accountants society were all women.

- So any peering into the future and any attempt to build platforms of resilience to make the most of that future must recognise that there will be large discontinuities. History, it might be said, is full of unpredicted futures.

2. Some global reference points

- Bearing in mind the impossibility of predicting the unpredictable discontinuities, here are my base points for a 20-year projection.
- **Globalisation** of information, finance, production and people (large-scale migration) will likely continue through the next 20 years, embedding interconnectedness and interdependency but also fuelling *interstate and intrastate* tensions (over, for example, resources, inequalities, privacy and cultural differences), which may result in attempts by states or political movements within states to stall or reverse elements of the globalising process (notably some trade, ownership of land and some enterprises and people flows).

While the sovereign *nation-state* will still be the organ of political organisation, its sovereignty will be constrained by a growing need for international agreements, instruments and policing mechanisms.

The once monolithic state is likely to fragment, diversify and/or operate differently: the state will contract in rich countries relative to national output and expand in getting-rich countries where middle classes demand better services and extend this to the still-poor.

Two items: (i) if the United States blocked Chinese imports, United States-based Apple would lose \$US 2 billion revenue on its iPhone alone; and (ii) call centre wages are the same in the United States as in India.

- **Inequalities** within economies will persist and, in established rich economies, may continue to grow as lower-income activities come under competition from emerging economies. Inequalities between economies will diminish, particularly for routine, readily replicable activities ('the world is flat'). Those engaged in non-routine, high-knowledge-intensive activities will command high incomes, set by global demand. The global elite as redefined over the past 25 years is likely to maintain its ascendancy.
- **Urbanisation** is likely to continue (unless there are major disasters). Large cities will likely continue to lead economic growth but the emerging top performers will reflect the geo-economic rebalancing from North America and Europe towards China, India, south-east Asia, maybe elements of South America and, possibly, some yet-to-emerge economies elsewhere. The top performers will be of two sorts:
 - fast industrialising cities en route to post-industrial centres; and
 - cities that are 'spikes' – aggregations of people engaged in non-routine, high-knowledge-intensive activities that generate high incomes.

New Zealand will not have cities in either category. But by the 2020s the dynamics may have changed so as to enable smart small countries' cities to link into the major spikes.

Note a possible counter trend of *micro and local* initiatives and preferences: micro-markets for products/services; niche companies doing well locally and internationally.

- Global interconnectedness will enable *criminal and terrorist activity*, some of it state-backed *cyber-warfare* aimed at disrupting or destroying communication lines and stored information. Some see this as the 21st century form of, or trigger for, any major war that might occur (minor wars will be more recognisably 'conventional'), which could break out suddenly and unpredictably. Ferguson, in the article quoted above, noted that the first world war '[broke] out to the surprise of nearly everyone'.
- The *rising global population* and the enrichment of enlarging segments into *middle class* status and income will *intensify competition for resources* – notably energy, metals and minerals, food and water – perhaps in this decade to the point of inter-state conflict, possibly to the point of major and devastating conflict as periodic price spikes and shortages cause distress. New plant technology and better management of

water and stocks may have provided the means to offset that by 2030 but are unlikely to come fast enough or spread widely enough to effect a smooth transition. New Zealand may be able to avoid involvement in such conflicts but may not.

- If there is *atmospheric and oceanic warming* of the degree outlined by the International Panel on Climate Change, this may precipitate famine, disease and inter-state conflict and may displace populations in low-lying island territories or places that become drier. New Zealand may come to be perceived to be a wet haven, which would be a huge plus but may come at the cost of wealthier countries and huge companies seeking to buy into this country to ensure food security. It is also possible an alternative pressure will come to bear on policy in this country if there is international action by states on the issue (either belatedly to contain warming or to block interaction with, including exports from, states deemed to be backsliding). But such events may be some decades off.
- *China* will continue its rise through the next 10–20 years and, consequently its exercise of soft and hard power, will increase in the region and globally, in part to ensure access to resources. Increasingly, new science will come from China; and its ideas about social and political organisation, which are deeply different from the post-Enlightenment 'Western' ideas, will have ramifications beyond its borders, especially in countries with high Chinese-ethnic populations. But China's rise is highly unlikely to be linear and even: water problems, access to resources, pollution, social and political tensions, bureaucratic mistakes and a post-2020 workforce shortage as the ratio between old people and those of workforce age rises steeply thanks to the one-child policy, coupled with interstate tensions, are likely to throw sand in the gears from time to time, possibly (probably?) causing severe temporary disruptions and global security and economic shocks.

Rising powers at some point in the past have triggered *wars* (cf Germany from 1870–1945). This is distinctly possible with China's rise. But, if so, it will be a war like none seen before. One line of analysis focuses on cyber-warfare.

India will also develop and will exercise greater soft and hard power but 20 years behind China. It is set to have the largest single-nation population, but it has large economic, political and social complications and its economic rise is likely to be uneven.

- The relative *global influence of the United States and Europe will diminish, thus ending the half-millennium of Atlantic domination*. There may at some point be collapse of the sort Ferguson talks about above: a sudden end of empire. But for some time they will continue to be pre-eminent in new science and technology.
 - **Science and technology** (increasingly, in future, from Asia) will continue to drive some fast and deep changes in economic opportunity, resource availability and use, human health and longevity, connectivity and social control and capacity for destruction. Major areas: artificial intelligence, GPS and other ICT technologies (and antidotes to preserve privacy and liberty), nanotechnology, synthetic biology, RNA interference, epigenetics and energy technologies. But there is no compelling reason to believe science will forever continue to ensure safe and self-sustaining ecosystems in the face of over-exploitation.
- ### 3. New Zealand's starting points
- New Zealand has a number of attractive *natural comparative advantages*:
 - *water* in abundance (in a water-constrained world);
 - a relatively benign *climate*, less affected by climate change than most other countries;
 - the capacity to grow high-quality *food* plus a huge fishing zone (in a food-short world);
 - abundant sources of *energy* (in an energy-constrained world) and so the capacity to do well in a carbon-constrained world;
 - distance from mayhem and thus a *safe* haven (though also distant from markets and vulnerable to the severance of supply lines); and
 - a great marketing *brand* – clean/green, 100% pure – and a strong brand reputation – fresh/safe/natural – (which it doesn't try hard to earn or preserve);

all of which may make it highly desirable over the next 20 years.
 - New Zealand also has some **institutional, cultural and social comparative advantages**:
 - *strong institutions* by world standards – the rule of law, very low corruption, a stable political system, high in ease-of-doing-business rankings;
 - high ranking in *prosperity* measures that go beyond simple GDP per capita – an attractive stepping-stone for immigrants;
 - a reasonably good *education* system (though in need of rethinking) and thus a reasonably well-educated populace even though one which emigrates in large numbers;
 - Other major *starting characteristics* are
 - a *globalised* economy and society;
 - an *unbalanced economy*, legacy of the bubble mentality of the 2000s;
 - a rapidly *Polynesianising* society (Māori and Pasifika) that is increasingly of the Pacific, not just in the Pacific and in which mainstream culture increasingly reflect indigenous culture and custom and in which iwi/hapu are built into the power structure;
 - a rapidly *Asianising* society (3% in 1991, 9% in 2006 and 11% now);
 - a rapidly *Australasianising* society and economy through the single economic market, a common labour market and involvement of New Zealand ministers in Australian federal-state Council of Australian Government (COAG) meetings; and
 - a society reaching the end of the 'population bonus' which has been a factor in past economic growth.
 - **Some down points:**
 - New Zealanders have lost a sense of 'progress' and the striving that goes with that.
 - New Zealanders don't save because they have a strong sense of entitlement.
 - New Zealanders emigrate to Australia and beyond in large numbers.
 - New Zealand has great difficulty retaining its elite.
 - New Zealand is still essentially an extractive economy (primary products, landscape tourism) rather than a human-capital-based economy living off innovative ideas.
 - New Zealand is very small and its supply lines very long.
 - As to brand, New Zealand is not clean-green; it is dirty and brown and empty.
- In short, New Zealand is a rich developing country but puts the emphasis on rich – which makes it defensive, so issues are 'problems' – instead of on 'developing', which would engender an outgoing, achieving mentality, so issues are 'opportunities'.

4. Some assumptions about New Zealand's next two decades or so

- **Australia** will continue to loom large. The income differential is likely to persist. The economies and political systems will continue to mesh. Within 50 years federation is likely to be periodically discussed but not in the next 20 years.
- The ethnic **Polynesian (including Māori)** proportion of the population will continue to grow but this will be qualified by a rising proportion of Māori who have very small proportions of Māori ancestry and/or see themselves as citizens of the world (note the large and increasing numbers of Ngati Kanguru already in Australia) or citizens of New Zealand/Aotearoa before they see themselves as Māori; therefore the Treaty is likely to lose some force as a driver of policy by 2030.

Some (most?) **iwi** collectively and individually will become a stronger economic force and maybe an important provider of social and educational services.

- The ethnic **Asian** proportion of the population is likely to grow, a factor of rising investment and other economic integration and, particularly in the case of lower-income source countries, socioeconomic mobility; but, at some point, fewer Asian students will come as the quality of their home institutions improves.
- The economy will likely increasingly be **owned by Asian interests**, particularly Chinese and Indian, in part supported and facilitated by the rising presence of Chinese and Indian residents. In 50 years (maybe in 20) Asians will be of sufficient critical mass and the export/tourism importance of Asia of sufficient weight to make it difficult to take effective political steps to curb their influence.
- The **climate** will be affected to only a limited extent even through 50 years but sea-level rises and changes in rain patterns may become significant towards the end of the period.
- The considerable **petroleum, coal, silicon and other mineral reserves** will be proven and extracted in significant quantities (mainly with foreign capital).

- There may be increasing interest in New Zealand as a **safe haven** from terror, climate change and overcrowding, with consequent pressure on politicians to define and preserve the 'brand' ('safe', 'fresh', 'secure', 'well-governed').
- New Zealand gets better at taking ideas to scale, capturing more of the benefit of new thinking and entrepreneurial enterprise.

5. Possible discontinuities in the next two decades or so

- This list of assumptions needs to be treated with caution because the compiler of the list cannot know the actual discontinuities that will occur.
- Among **possible global discontinuities** are:
 - major war, maybe including use of nuclear weapons;
 - nuclear, biological or cyber terrorism;
 - severe resource bottlenecks and constraints;
 - severe food and/or water shortages (though conversely radical new food growing and processing technology which easily feeds 9 billion people, coupled with radical new technologies for extracting water from the sea, for storing water, for reusing water and for using less water);
 - a lurch in climate change, causing widespread severe hardship;
 - a virulent pandemic that wipes out a quarter of the world's population;
 - a breakdown of the Internet and related cyber-based systems, either endemically or as a result of criminal cyber-hacking or cyber-warfare, and a consequential seizing up of global or major-country financial, corporate, bureaucratic, airway and other systems;
 - a great leap forward in combining epigenetics, RNA-based bioscience, synthetic biology and nanoscience to predict and control disease and physical disability;
 - major innovations in energy and rapid spread of the technologies; and
 - sudden global recognition of and action on the threats to ecosystems, with interesting ramifications for the sovereignty of the nation-state.

- **Possible New Zealand discontinuities are:**
 - a volcanic eruption (e.g. Taranaki, which wipes out much of the dairy and oil industries, or offshore Auckland, which seriously damages the commercial centre and harbourside suburbs);
 - an 8 or bigger earthquake in Wellington or in some other well-populated place (Christchurch proves the point);
 - serious inter-racial or inter-ethnic strife;
 - large and unmanageable influxes of climate (and other) refugees; and
 - default on sovereign debt.

Colin James is a political journalist with more than 35 years' experience, and was political columnist of the year in 2003. He writes weekly columns in the *Dominion Post*, the *Press* and the *Otago Daily Times* and a monthly column in *Management Magazine*. He has written six books plus several editions of a guide to journalists covering elections, and many chapters in books, and has written or edited six books or monographs for the Institute of Policy Studies. He was awarded an honorary doctorate by Victoria University of Wellington in 2008. Colin is also chair of Motu Economic and Public Policy Research. He is a fellow of the Institute of Public Administration and a life member of the Parliamentary Press Gallery and the Engineering, Printing and Manufacturing Union.

6. The steady-state alternative

- It is possible that the world is headed towards the sort of steady-state social and economic conditions that preceded the rise of Newtonian science, the Enlightenment, the industrial revolution and European imperialism. But even if so, that is most unlikely in the next 50 years because of the continued rapid development of science, rapid demographic change and environmental constraints.



Attendees of the Legislative Council Chamber in the Grand Hall

Next steps

Wendy McGuinness

The objectives of the workshop were well and truly met. Through the application of future studies and the adoption of the strategy mapping process, ten strategy maps were developed and four were presented at the Legislative Council Chamber – all within two days. The quality of the strategy maps demonstrates the commitment of the workshop participants to developing long-term, inclusive and robust strategies to deliver a sustainable future for New Zealand.

In the preface to this report, Hon. Fran Wilde describes these strategy maps as providing a ‘vehicle for considering and engaging with New Zealand’s long-term future’ and suggests they be ‘shared between people, organisations, businesses and government departments’. As a first step toward enabling this sharing, this report documents the inputs, process and outputs of the event so that they can be analysed, discussed and built on. The next step is for the Institute, the participants and the wider population to build on both the processes and the outputs, to shape New Zealand’s long-term future.

During the preparation of *Report 11 – History of future-thinking initiatives in New Zealand 1936–2010*, we researched the inputs, processes, outputs and outcomes of the future-thinking activity that has taken place in New Zealand in the past. What clearly stood out in this exercise was that, of these stages, the most important and also the most difficult to measure is the outcome. Outcomes can take a long time to eventuate and can be hard to quantify or link back to initiatives. With this in mind, follow-up activity is a hugely important part of StrategyNZ: Mapping our Future, and continues for the Institute in a number of forms.

The first step after the event was for the Institute to acknowledge the significant support we received from a wide range of individuals and organisations, and to honour that support by documenting and acting as a repository for the considerable amount of material that was developed over the two-day workshop. This includes publishing three post-workshop documents: a working paper documenting feedback on the workshop, an e-book containing reflections from participants and this report. The publication of this report is the final output of this stage in the process.

The next step builds on the outputs of the workshop. Key themes that resonated with the participants were the importance of attracting talent to New Zealand and retaining it, and the desire to move to a much more entrepreneurial, high-income society. The forthcoming constitutional review and, in particular, concerns over the length of the three-year electoral cycle, was a constant theme. There was also a clear appetite from our young people to develop youth forums and find ways in which they can become part of the solution, and a realisation that while we need to act nationally, we must think globally. This means not only being a good global citizen but being connected globally so that we obtain the latest information, adopt and applaud best practice, apply the best methods and models, export quality products and services, and keep asking questions about the best way forward. All these findings have been integrated into the Institute’s work programme.

One of the initiatives on which the Institute is working follows on from Sir Paul Callaghan’s presentation. It is Sir Paul’s belief that another 100 exceptional entrepreneurs could turn this country around. In response to this idea, we have invited a group of 12 highly successful and influential entrepreneurs to meet with Sir Paul to consider how our education, immigration and employment systems could be recalibrated to ensure New Zealand becomes ‘a place where talent wants to live’. We have had a very positive response, and look forward to supporting this group with any initiatives they may wish to pursue.

To follow up on the theme of the constitutional review and youth engagement, we have developed a new project with a group of recent graduates who aim to engage youth (18- to 30-year-olds) in a discussion about the long-term future of New Zealand and to identify ways in which they might shape that future. Specifically, the project aims to promote awareness of, and interest in, the upcoming constitutional review and referendum on MMP by supplying information to young people in a non-partisan manner. This project aims to strengthen the ability of young people to become better informed and more connected and, as a result, more committed and able to work together to shape the future of New Zealand.

Two other areas of study have been strengthened as a result of the workshop. Our first book *Nation Dates: Significant events that have shaped the nation of New Zealand 1770–2011* has recently been expanded in response to feedback from workshop participants, speakers and consultants. The Institute hopes to sell this book to the public in September. The Institute has also written a think piece for the PostTreatySettlements.org.nz website, a collaborative project between the Institute of Policy Studies and Māori Studies (Te Kawa a Māui) at Victoria University. *Think Piece 14 – Constructing a House Fit for the Future* examines the future of the Māori electoral seats and explores new ways of representing the Treaty in our constitution.

Internationally the Institute will take the process and the outputs to both Vancouver and Penang in the next six months. I have presented on *Project 2058* twice before at the World Future Society's annual conference, and have developed relationships with people in other countries who are interested in investigating ways to develop national scenarios and strategies. This July, Jessica Prendergast and Rory Sarten will join me in Vancouver to present on the experience of *StrategyNZ: Mapping our Future* and share insights into how such an event could be staged in other countries. Dr Peter Bishop will also be joining us. The presentation will be available on YouTube in late July.

Further, as a result of the outputs from the workshop, we have decided to attend and present a similar paper at the joint 3rd Global Higher Education Forum (GHEF) and World Future Studies Federation conference in Penang, Malaysia, in December. At both conferences, our main objective will be to bring back useful insights for building on the outputs of the workshop and further the progress of *Project 2058. StrategyNZ: Mapping our Future* delivered much more than we had hoped. The ten strategies clearly displayed common themes and an overarching vision has emerged for New Zealand to be an entrepreneurial, globally connected and prosperous place where talent wants to live.

The Institute is now focused on the themes that support this vision and is pursuing workstreams with key decision-makers and the broader community through both private forums and public consultation. We are keen to support those who are interested in making that vision a reality, either by working together or simply by publicising your initiatives. *StrategyNZ: Mapping our Future* is not the end of the process but the beginning of a work programme we are committed to, one that will contribute to building the best possible future for our country.



Exploring New Zealand's Coat of Arms in 2058

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Mai Chen
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Legislative Council Chamber

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 Rodger Pringle
 Te Ao Pritchard (Te Ao
 Hinengaro, Te Awhi Paa Trust
 & Te Runanga o Rauakawa)

Betty Radford
 Stephen Rainbow
 Joanna Randerson
 Richard Randerson
 Peter Rankin
 Lara Rapson
 Geoff Rashbrooke
 Patsy Reddy
 James Richardson
 Jonathan Routledge
 Mayor Jenny Rowan
 His Excellency Justice (Ret.)
 M P H Rubin,
 High Commissioner
 Grant Ryan
 Rory Sarten
 Andrew Saunderson
 Scott Savage
 Heike Schiele
 Dean Schmidt
 Rodney Scott
 Mayor Tim Shadbolt
 Isabella Shonakan
 Karen Shonakan
 Sibylle Shwarz
 Christian Silver
 Leanne Silver
 Wayne Silver
 Geoff Simmons
 Kevin Simpkins
 Dr Richard A. Slaughter
 Matthew Sole
 Daniel Spector
 Joseph Stafford
 Fred Staples
 Jeremy Star
 Hilary Sumpter

Phil Tate
 Rhys Taylor
 Hugh Templeton
 Kat Thomas
 Robert Thompson
 Ann Thomson
 Peter Tinsley
 Ali Tocker
 John Tocker
 Amosa Tolo
 Darryl Tracy
 Roger Tweedy
 Roger Twose
 Christine Vivian
 Mayor Celia Wade-Brown
 Sarah Wakes
 James Wall-Manning
 James Walshe
 Meredith Walshe
 Andrew Warden
 Rob Warner
 Ema Weepu
 Rebeka Whale
 Hon Fran Wilde
 Christian Williams
 Dr Morgan Williams
 Dr Pamela Williams
 Hayden Wilson
 Murray Wu
 Mike Yardley
 Ian Yeoman

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Thank you for having the foresight to support this and other initiatives that explore the long-term future of New Zealand.

Gold:



WILLIS BOND & CO

Silver:



Bronze:



Workshop participants

Special thanks to the participants who made the event a success.

Group 1: Emerald green

Alison Nevill (Process chair)
Don Christie
Ben Guerin
Sue Hanrahan
Simon Harvey
Ruth McLennan
Christian Silver
Joseph Stafford
Richard Randerson
Grace Ridley-Smith
Ema Weepu
Katy Miller (Designer)

Group 2: Avocado

Jan Bieringa (Process chair)
Anthony Cole
Geoff Hamilton
Mark Hargreaves
Caleb Jago-Ward
Raf Manji
Hugh McDonald
Sue Peoples
Joanna Randerson
Grant Ryan
Angus McBryde (Designer)

Group 3: Purple

Phil Tate (Process chair)
Paul Atkins
Donald Clark
Tim Clarke
Hamish Gow
Maria Ioannou
Michael Moore-Jones
Hugh Norriss
Hilary Sumpter
Wayne Silver
Jeremy Star (Designer)

Group 4: Yellow

Leanne Silver (Process chair)
Jill Bowman
Scott Dalziell
Trish Franklin
Peter Furnish
Carolyn Gullery
Neville Henderson
Roger Tweedy
Hayden Wilson
Joshua Jeffery (Designer)

Group 5: Teal

Murray Wu (Process chair)
Mick Abbott
Shona Albert-Thompson
Desmond Darby
Andrea Frost
Ben Mason-Atoni
David McGuinness
Rodger Pringle
Kat Thomas
John Tocker
Machiko Niimi (Designer)

Group 6: Navy blue

Ged Lynch (Process chair)
Stuart Barson
Marina Battisti
Lance Beath
Yvonne Curtis
Richard Logan
Kieran Meredith
Onur Oktem
Heike Schiele
Matthew Sole
Josie Lee Brough (Designer)

Group 7: Plum

Leanne Holdsworth (Process chair)
Vibhuti Chopra
Marie Collin
Krystal Gibbens
Anake Goodall
Stephen Hay
Beat Huser
Rebeka Whale
Gillian McCarthy (Designer)

Group 8: Brown

Marty Donoghue (Process chair)
Storm Adams-Lloyd
Rodney Adank
Rachel Bolstad
Lauren Christie
Debbie Dawson
Mia Gaudin
Damian Lawrence
Gareth Moore-Jones
Sascha van der Plas
Te Ao Pritchard (Te Ao
Hinengaro, Te Awhi Paa Trust
& Te Runanga o Rauakawa)
Scott Savage (Designer)

Group 9: Red

Jonathan Routledge (Process chair)
Sheryl Boxall
Amy Fletcher
David Glover
Beth Houston
Anna Jacobs
Susan Jones
Fred Staples
Sarah Wakes
James Wall-Manning
Christian Williams
Lara Rapson (Designer)

Group 10: Rust orange

Ella Lawton (Process chair)
Stephanie Bickerstaff
Kaila Colbin
Nina Harrap
Chris Lipscombe
Megan McMullan
Barbara Nicholas
Sarah Ottrey
Ashok Parbhu
Brian Penetaka Dickson
Peter Rankin
Rodney Scott
Rhys Taylor
Rob Cape (Designer)



Participants gather on the steps of Parliament

