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Climbing the High Road: Strategic Design and Management of New Zealand's Human Capital and Economic Transformation

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Abstract

'Ui mai koe ki ahau he aha te mea nui o te ao, Maku e ki atu he tangata, he tangata he tangata'* 'Ask me what is the greatest thing in the world, I will reply: It is people, it is people, it is people!'

The strategic design and management of New Zealand's economic transformation is a sophisticated and long-term process. Economic transformation is not merely a re-branding exercise, although a forwardthinking national brand strategy could provide the catalyst for promoting the repositioning strategy. New Zealand's economic performance has always been affected by global events, socio-cultural factors and physical constraints - small population size and distance from key global markets. Therefore, New Zealand cannot compete in 'low-road' strategies by simply opening the economy to international trade, investment and technology flow, or by providing cheap labour. New Zealand's economic future will be transformed by significant human capital developments to enable the workforce and businesses to become design-savvy and capable of harnessing and commercialising new technologies, networking globally and adding value to everything we produce that is significantly more innovative and better than that of our competitors. Managing such a 'high-road' economic transformation strategy is both complex and challenging. Systems and processes must be put in place to enable the government, corporations, businesses and universities to work in partnerships and clusters to exploit creativity, innovation and technology to sustain global advantage. Capability development in creativity, innovation and the judicious use of technologies are the greatest assets for New Zealand's economic transformation. A rich pool of creative human capital will enable the nation to integrate its products and services into global value chains – thus adding value, forging new competencies, developing niches, and establishing a high-profile, brands, jobs and wealth for the nation. This paper will discuss these forces in detail, and highlights the agencies to strategically manage the transformation processes along with the government's Growth and Innovation Framework, sector taskforces, country branding, New Zealand Trade and Enterprise, and the bold New Zealand design policy to transform an agriculture economy into a design-savvy, high-wage and high-value globally competitive economy.

Keywords: Design, Country Branding, Strategic Innovation and Management, Economic Transformation

1 Introduction: New Zealand Economic History

In 2002 the Rt Honourable Helen Clark, the Prime Minister of New Zealand, set out in the government's economic development strategies – Growing an Innovative New Zealand – to lift New Zealand living standards. This strategy, now referred as the Growth and Innovation Framework (GIF) is a broadly based strategy designed to enhance innovation across the economy of New Zealand. GIF builds on the economic and social development policies that the government has put in place in earlier years, and on other public and private sector thinking about

^{*}Maori proverb.

how best to grow an Innovative New Zealand. Growing an Innovative New Zealand stresses the importance of sound foundations for national development, including good fiscal management; sound monetary policy; a competitive and open economy; social cohesion; a healthy, well-educated population; and a solid research and development framework. This is a 'high-road approach' to achieving sustainable economic transformation. This 'high-road' journey to prosperity is visionary, strategic and, above all, designed to developed human capital such as creativity, entrepreneurship and courage to meet global competitiveness (Growth and Innovation Framework, 2002).

National branding or country positioning has become increasingly popular. Many countries have adopted the concept as an economic panacea to create competitive advantages. Indeed, a positive national image can provide some advantages for promoting a country's trade, tourism and perhaps foreign investment. More than ever in recent times, countries from Asia to Africa and Europe to the Americas have jumped onto the bandwagon to rebrand and reposition themselves to gain economic and political advantages. There have been some very bold as well as many futile advertisements that are no more sophisticated than selling holiday destinations. Thailand, Malaysia, Singapore and Hong Kong, for example, have all wanted to be the 'hub' of knowledge, education, information technology, superhighway corridors and so on at one time or another. Impressive 'cyber' cities have been built only to be deserted or abandoned, wasting billions of dollars. Australia, Spain, Estonia, Poland, Scotland, Ireland, Canada, Nigeria, the UK, the USA and others are repositioning or rebranding themselves for political, economic or cultural reasons. While many PR and marketing companies believed that a repositioning strategy for a nation may follow the same approach as branding products, services or corporations, this paper addresses the issues involved in a significantly more holistic and considered manner.

The human capital and economic transformation strategy that New Zealand has put in place is not merely a rebranding or a repositioning exercise. It is an ambitious, well thought through, macroredesign economic survival strategy to transform a predominantly agricultural economy into a design-savvy and innovative economy. Instead of treating this paper as a branding or national repositioning exercise, the focus will be on the more complex issues of national transformation processes regarding analysis, design and implementation, that is the strategic design management of this transformation journey. Emphasis will be centred on two of the key elements – design and innovation – that the government has singled out as the most important factors to significantly restructure the psyche and economy of New Zealand.

The present Labour government led by Prime Minister Helen Clark took office in 1999 to bring a change in the direction and better balance in economic and social policy after 15 years of failed neoliberal political tinkering by her predecessors. Prior to 1980s, the standard of living in New Zealand has always ranked around third in OECD competitiveness ranking. By the year 2000 – after a series of economic crises such as the 1974 oil shock, the 1998 Asian crisis, and economic mismanagement such as the 'think big' policy - New Zealand's economic position fell to the twentieth point mark in the global competitiveness ranking, and fell below most European countries in term of GDP per capital. For 20 years we had not kept up with the forces of change and globalisation. Until England joined the European Union, New Zealand was an 'offshore farm for Britain'. A large proportion of our exports were agricultural commodities - grown and packaged for Great Britain. There was a ready market. Our branding and marketing strategies were banal. There wasn't the need for competition. Since the 1930s the manufacturing sectors in New Zealand were under heavy import protection. They relied on import substitution and most businesses were not internationally competitive. The service sector was underdeveloped. In 1984 the outgoing government was having difficult producing a budget (Helen Clark, 2002). The most educated and experienced workforce continued to leave the country for greener pastures -

resulting in the greatest 'brain drain' in the history of New Zealand. New Zealanders were complacent. But these major structural failures could not be allowed to proceed. Significant change was needed to halt the economic decay. It was against this turbulent and gloomy background of modern New Zealand economic and social history that the GIF strategy to transform New Zealand into a design-savvy and innovative nation was born.

2 Design as Driver for Wealth Creation

Perhaps it is now well understood that design is a key creative and strategic activity that interacts with science, technology and business to enable innovation to take place. Design is increasingly being considered as the key driver for wealth creation and economic growth in the new economy. While the aim of this paper is to discuss the New Zealand government's strategic management to transform New Zealand into a more design-savvy nation – that is, a creative, innovative and technologically capable nation – a series of global contexts within which some of these initiatives have been informed will be discussed.

The notion that design is a key enabler for wealth creation, global competitiveness and economic growth is a relatively new phenomenon. Governments, corporations, businesses and universities around the world are now exploiting creativity and innovation to sustain global competitiveness. The importance of design functions lie not only in the individual products, services or systems, but rather in the whole process of design thinking in which design is seen as a business imperative. Building a national design advantage involves bringing on board a mutually shared vision between government sectors, industry and education. Unless businesses are well informed, nurtured and committed to becoming design-savvy and design-led, there will be no design advantage.

Becoming design-savvy and internationally competitive is a complex and long-term endeavour. Generally speaking, before a nation's design advantage could be fully effective there must be at least local understanding about industrial competitiveness. According to the United Nation Industrial Development Organisation (UNIDO) Report (2002–03), industrial competitiveness does not mean merely opening economies to international trade, investment and technology flow, nor merely cutting wages. These are considered to be 'low road' and short-term defensive strategies that are incompatible with sustained growth. Due to its high labour costs and small population base, New Zealand will not be able to compete with this strategy - a strategy that Mexico, China, Malaysia and Vietnam, for example, have adopted. Long-term and effective industrial competitiveness for New Zealand requires capability-building strategies to nurture innovation especially in the use of new technologies and research – the 'high-road' drivers – that the country has adopted. Driven by constantly emerging and rapidly changing new technologies that are altering relationship between local and global enterprises, national and international rules and regulations are constantly changing. Although many of these changes provide significant benefits to developing countries that can harness them in their economic interest, countries that cannot could be marginalised and excluded. Countries at all levels of development face the same opportunity and challenge for ensuring their products and services become and remain internationally competitive. (UNIDO Report (2002–03).

Countries such as New Zealand have to acquire enterprise-specific knowledge, skills and practices to develop those technological capabilities through an incremental learning process. This process can be slow and difficult, and could involve high risks and uncertainties. However, it is a key national imperative for building capability to enable it to compete internationally. In the new economy, New Zealand cannot afford to 'become a bystander at the technological feast,

stuck with the crumbs – stuck with simple manufacturing activities that do not lead to sustained diversified growth' (UNIDO, 2002—03, p. 9). To be competitive New Zealand must be savvy with global economic movements. Global market, policy and technological signals enable businesses to adapt to macroeconomic changes.

3 Human Capital Developments

Human capital developments for economic transformation take place primarily in small and medium enterprises – the SMEs, who usually, on their own, do not have the knowledge and means to invest in design processes. Thus capability building requires complex design of interactions, collaborations and strategic management of the key stakeholders – the government, industry, SMEs and education. The complexity of the capability building process varies from industry to industry and by the level of industrial development of a country. Within both industrialised and developing countries, such as New Zealand, increasing competitiveness and strengthening technological systems and research are both costly and complex. It is crucial that strong government design and economic policy supports are implemented. Countries must have design policies to guide their enterprises to cope with the challenges of globalisation, especially to do with the true meaning of design and innovation, value-chain insights and adaptive capabilities for driving creativity and innovative use of technology to sustain and increase competitiveness. Countries must now accept that the globalisation of industry and market are irreversible. Both developing and industrialised countries are similarly affected by trade and investment liberalisation, accelerated technological advancement, new organization and management system, new international rules and regulations, challenges and opportunities (UNIDO 2002-03).

Competition is constantly taking new forms. New Zealand must now travel the 'high road' to become competitive and survive through strategic creativity. Plentiful labour and low costs are important, but not as important as imagination, innovation, flexibility, reliability, service and quality. Fresh innovative products, delightful services and cool processes are becoming the key drivers for competitiveness. Knowledge, technology, capital and skilled labour are becoming increasingly available commodities – offering opportunities for enterprises, industries and countries to draw upon an existing stock of knowledge and advanced technology without lengthy and costly learning process. Developing and industrialised countries – Switzerland, Finland, Sweden, France, Germany, Italy, Korea, Japan, Luxemburg, the UK and the USA – are increasingly dependent on design as the key driver for improving economic competitiveness, rather than relying on skilled labour, technology or knowledge.

Innovation is increasingly becoming New Zealand's greatest asset in the new economy. The economic transformation process also include strategies for exploiting intangible activities and benefits such as finance and design and in using services more aggressively and innovatively to enable them to positively integrate into value chains. These chain activities will enable New Zealand business to forge new competencies, developing niches, strengthening national identity and securing brand positions, jobs and wealth. Through partnership, cluster participation and networking the competitive advantage of companies and the nation could be further enhanced. National and international clusters, such as Silicon Valley, have proven to be capable of enormous economic growth: developing and sustaining business leadership in export markets, significant employment generation, preservation of high-value-added jobs and sustained technological progress. This 'High-Road' journey to prosperity that New Zealand has mapped out is visionary, innovative and above all strategically designed, implemented and managed to

developed human capitals and capabilities such as creativity, innovation and entrepreneurship to compete in the new economy.

4 Design and the National Competitive Nexus

The relationship between design competitiveness and the economic competitiveness of a nation indicates the value-adding potentials of design. Many studies have indicated strong and compelling evidence of the significant relationship between the use of design and high economic performance (NZIER Report, 2003; Mees Pierson, 2005; Designium, 2003; Friedman, 2004). The Global Competitiveness Report published annually by the World Economic Forum lists the most competitive countries in the world. Using the 2001–02 report and a suite of indexes that measure a range of factors, including the use of design as a business input that influences competitiveness, the New Zealand Institute of Economic Research (NZIER) has demonstrated the significant relationship between design application and economic competitiveness. Among the indexes compiled in the Global Competitive Report were five indexes that relate to the application of design – 'capacity for innovation', 'uniqueness of product design', 'sophistication of production process', 'extent of branding' and 'extent of marketing'.

Figure 1 below clearly shows the strong linear relationship between economic competitiveness and design application for the 20 most highly ranked countries in the 2001–02 global competitive ranking.

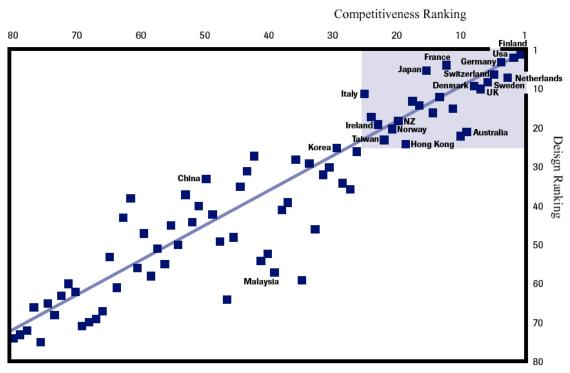


Figure 1. World Competitive and Design Rankings

Source: NZ Institute of Economic Research, 'Building a Case for Added Value through Design'. Report to Industry New Zealand 2003.

The shaded area in the chart shows the common area for which both the overall competitive index ranking and the design index ranking are 25 or better. It is worth observing that, with the sole exception of Korea, there are no countries ranked in the top 25 in terms of design that are not also ranked in the top 25 in terms of overall competitiveness. In other words, there are no countries that are ranked in the top 25 in terms of overall competitiveness that are not also ranked in the top 25 in terms of design application.

Many other global case studies have also discovered the close nexus between high-ranking competitive countries and the efficient use of design. Two more recent Global Competitiveness Reports of the World Economic Forum (GCR Survey 2003; GCR Survey 2005) have found almost similar patterns with this relationship. Mees Pierson (2005) also found very compelling connections between design and competitiveness. In a five-year analysis of share price performance of companies, Mees Pierson found that those with 'a high inclination' towards design were 'higher than' the average performers of the Standard and Poors 500 index, and 'much higher than' the companies that have 'little inclination' to use design. This study revealed that companies that have an inclination towards design performed much better in their share price than companied that don't in five out of five years, between 1995 and1999, on the Standard and Poors 500 indexes. The results shown in Figure 2 below leave no doubt of the strong nexus between high design application and high competitive ranking for business.

Figure 2. Stock Exchange Performance: Standard and Poors 500 Index

	Business	with a high	h
Inclination	towards	desig	n
		_	
	+63%		
	+75%		_
	+30%		_
	+73%		_
	+63%		_
	Inclination	Inclination towards +63% +75% +30%	+63% +75% +30% +73%

Source: J. Hertenstien, M. Platt, Northeaster University; R. Veryzer, Rensselelaer Polytechnic Institute, 'Impact of Design Effectiveness on Corporate Financial Performance', 2003.

Further analysis of the competitive edge of design at the economic-wide level has to do with the extent a nation's brands have become internationally recognised. The countries identified as

being the most competitive in the Global Competitive Reports – such as Finland, the US, the Netherlands, Germany and Switzerland – have each developed product brands that over time have become household names. Further reflection on the positive nexus between design and global high-ranking makes us aware of the obvious role that marketing plays for each of the top-ranking countries. All these countries have seemingly tapped into the global value chains to gain further economic advantage and competitiveness. Participation in the global value-chain provides countries with a means for accelerating the development of their enterprises for exploiting markets and technological capabilities via wider networking and connections. This means that the enterprise can perform a continuum of related dependent activities that are required to bring a product from its conception to its end users. This includes activities such as design, production, marketing, distribution and support for the final customers.

Within recent global value-chains there has been a loosening up of local controls for tangible (manufacturing) and intangible (idea/knowledge) activities. Governments and large corporations are delegating key functions and roles to smaller efficient players operating in different countries. A significant effect of industrial activities becoming globally dispersed has been the shift of key intangible competencies – such as design, branding, marketing, R & D, the provision of venture capital, financial services and so on – to developed countries such as New Zealand, Australia and England – to further increase a country's overall economic advantage and competitiveness.

5 Strategic Brand and Design Management of a 'Smart' New Zealand

In order to gain competitive advantage in the new economy, New Zealand will have to enhance its national brand strategy to differentiate New Zealand internationally as a creative, innovative and technologically savvy nation. Perhaps, the most renowned national brand image of New Zealand is its 'clean', 'green' and '100% pure' image. While the clean and green pastoral image has worked significantly well for some of New Zealand's major export sectors, in particular, tourism and primary products, it is considered to be strategically inappropriate for other areas such as the technology-focus sectors in ICT, product design and development, biotechnology and other creative industries, involving fashion, film, games and other new media designs, which New Zealand is gaining unprecedented creative and strategic advantages.

The clean and green image has been an important determinant of New Zealand's image perception for many decades. However, it is considered that this 'place' and 'tourism' branding strategy that was narrowly confined with, and heavily reliant on rural or traditional imagery, is now being regarded as detrimental to the strategic repositioning of a 'smart' New Zealand and the country's technological advantage as a whole. It is important to note that 'place' branding differs from 'trade and investment' branding in the mechanism by which the brand message is conveyed. Place branding is usually focused on advertising campaigns that target the individual, but, trade and investment branding employs public-relations activities to promote stories about businesses to create brand value through more credible promotional opportunities such as education and public relations channels to the intended audience. (Evaluation of Brand New Zealand, 2006.)

5.1 Brand New Zealand

In 2002 New Zealand Trade and Enterprise (NZTE) launched the 'Brand New Zealand' strategy 'New Zealand New Thinking' to promote a 'smarter' New Zealand. Like many government-driven country-repositioning programmes, 'Brand New Zealand' has to face the key challenge of

having to effectively provide an over-arching strategy capable of providing value and meaning to a range of different areas of the nation's economy. Brand New Zealand's key objectives are to promote creativity, innovation and technology – the main aims of the GIF initiatives for New Zealand's economic transformation. It is difficult to speculate whether the strategy is sufficiently unique enough to differentiate its intention on the global scene. National branding is significantly competitive and can quickly become blurred – in the crowded global scene – by competing strategies and ideas adopted by competing countries promoting remarkably familiar messages, such as:

Australia's a progressive and technological savvy country South Africa's a new way of doing things Britain's modernising, diverse and creative Scotland's a dynamic competitive country The EU's crossroads for ideas.

These are obviously not merely re-branding initiatives, but rather sophisticated national repositioning plans aimed strategically at innovation and managing the economic transformation, trade and wealth creation of the respective countries.

6 Strategic Management of Economic Transformation Process

GIF, NZTE, the four sector taskforces (Design, Biotechnology, ICT and Screen Production), Brand New Zealand, as well as many other government initiatives, are intricately linked to form a wide-ranging umbrella to strategically drive and manage the economic transformation of New Zealand. Led by the Minister for Economic Development, Trevor Mallard, the main aim is to create a culture and empowerment for businesses to strive for competitive advantage through creativity, innovation and technology.

New Zealand Trade and Enterprise (NZTE), the key government economic development agency, has the mission to assist the country's businesses to improve their capability, international competitiveness and profitability. This is done by providing a range of high-quality services and programmes to meet the needs of the many small and medium-sized enterprises (SMEs) that are the engine of the New Zealand economy. Through its global network of staff and its investment promotion agency, Investment New Zealand, NZTE also helps international buyers source for world-class products and services that New Zealand businesses produce and assists investors access opportunities in New Zealand. Export development is a key focus, and NZTE places special importance on growing businesses and industries in which New Zealand is internationally competitive and where there is potential for high growth. NZTE has offices throughout New Zealand where staff work with public and private sector allies, industry sectors and regional organisations to address barriers to business growth and create a culture that supports and celebrates entrepreneurs and business success. NZTE provides a number of key services for business start-up and business development, the most important being financial advice and assistance; business advice; grants for prototype development, incubators; feasibility studies or expert advice; business planning; business monitoring; research and development; skill development and training; investment raising; access to resources, knowledge and clustering; to do with developing business systems and growing the customer base; strategic planning and the establishing of 'beachheads' in key trading countries to enable New Zealand businesses to access global markets, and much more. (NZTE, 2004).

Brand New Zealand's New Zealand New Thinking originated out of the NZTE programme to

promote New Zealand to the world as an innovative and technologically savvy/smart country – besides being clean and green. It is a powerful repositioning framework for reshaping the way we see ourselves and are seen internationally. 'New thinking' aims to grow more globally competitive businesses that are highly productive, highly skilled and highly innovative. There is, however, no economic transformation formula that we can simply apply to New Zealand situation. 'Rather, the process of economic transformation will be more a case of learning by doing, and diversifying from what we have been doing into new and substantially enhanced activities that arise from the process of innovation' (Hon. Trevor Mallard, 2006.) The government needs to work closely with businesses, academics and educators, scientists, regions and communities to raise our level of ambition and capabilities about what we can achieve for our country, and lift our nation's economic performance further through creative advantage and globally competitive businesses – the 'high-road' strategy.

7 The Design Taskforce of New Zealand

With this background in mind, I would now like to single out the Design Taskforce to demonstrate the strategic management of the human capital and business capabilities development that will enable the country to be design-savvy. As has been alluded to, the Prime Minister of New Zealand, Helen Clark, set out in the government's economic development strategies – Growing an Innovative New Zealand – to lift New Zealand living standards in 2002.

GIF has identified four broad strategies for economic improvement for New Zealand:

- Strengthening of innovation
- Developing skills and talents
- Increasing international connections
- Engaging with the various sectors.

This is an evolving process. Since its inception in 2002 GIF have changed and expanded as sectors, industry and businesses become more involved. At the heart of GIF was the formation of the NZ Design Taskforce, along with the ICT, Biotechnology, and Screen Production taskforces to achieve the government's economic mission. These sectors were identified for special attention and development because of their high growth potential and because the technologies or capabilities are enablers and drivers of activity across the economy generally. (Growth and Innovative Framework, 2005. NZ Ministry of Economic Development.)

This paper addresses only the Design Taskforce and its initiatives, as it is beyond the present scope to deal with more than one sector. It is important to note that the Design Taskforce's strategy does not set out to position New Zealand design for international markets; it is also not a strategy for the design industry, but rather a strategy to make more New Zealand businesses design capable (Success by Design, 2003, p. 5).

The main aim of the NZ Design Taskforce is to encourage New Zealand businesses to be innovative in order to 'achieve three things':

- More New Zealand businesses achieving sustainable export success
- A more capable, business-savvy design profession
- Greater international recognition of New Zealand design

The Taskforce has developed on these initial aims to take up the challenge of creating a transformation that increases the value and competitiveness of New Zealand business through strategic use of design, and to build New Zealand's design capability through:

- Raising the awareness of design as a key enabler for industry in New Zealand and within the New Zealand creative industries
- Developing a design-focus strategy for selected manufacturing sectors (i.e. products, furniture) and New Zealand industry in general
- Developing an understanding of what 'partnership' means between government and industry
- Developing an awareness of the significance of and need for a more focused and collaborative approach within design-using industries
- Promoting the importance of protecting design IP, and providing information to help shape sector strategy.

5 X 50 X 500 X 5

The government recognises that innovation, imagination and creativity will be the key driving forces for wealth creation and economic and social growth. The primary mission is to put in place challenging and bold strategic initiatives to capture the following:

5 X 50 X 500 X 5, which translates as: in the first 5 years at least 50 existing businesses made internationally competitive through design leadership, generating an additional \$500m per year in export earnings, growing 5 times targeted Gross Domestic Product to produce \$1.5 billion by year 10.

A dynamic design-business partnership or cluster will not only be expected to contribute to achieving the above, but it will also create significant downstream opportunities for other New Zealand businesses – including producers of raw materials, testing laboratories, financial institutions, industrial, technical and management consultancies, training institutions and local government agencies. Perhaps more importantly, a dynamic international design cluster will help to shape and develop a global design strategy, competencies and opportunities for businesses and individuals to compete globally through the generation and exploitation of intellectual property. This includes advertising, architecture, art, antiques, branding, crafts, design (products), designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer games, television and radio.

Forging a design-led business or economy in any field is complex. Dynamic and efficient clusters do not happen naturally within the private sector without facilitation and support from the government. External assistance from the Design Taskforce – based on a public-private sector partnership – can therefore greatly facilitate the organisation and development of an efficient national design-business-industry cluster to profile New Zealand, besides building professional, entrepreneurial and business competencies in global value-chains.

7.1 Initiatives of the Design Taskforce

A series of initiatives have been established to take effect concurrently to enable integration between business and design.

1 Design Reference Group

This is a nine-member body to guide the implementation of the Taskforce's strategy and to provide advice to government, industry and education sectors.

2 Communication Programme

This programme is aimed at informing businesses of the value generation potential of employing design leadership as a fundamental business strategy and process, and at putting New Zealand design on the world map.

3 Design Enabling Business Conference

A high-profile event aimed at building initial momentum by bringing national and international design and business leaders to launch the Taskforce strategy, vision and initiatives, and create a design-enabled 'tipping point'.

4 Design Resource Directory

A listing of recognised professionals, practicing designers in all disciplines with associated service providers to enable New Zealand businesses, potential overseas clients, manufacturers, marketing companies, government, educators, and other organisations to access suitable qualified and experienced designers and the services that support them.

5 Design Audit/Mentoring

Programmes aimed at allowing businesses to build on their understanding and awareness of the value of design, and to put practical steps in place to increase design capability.

6 Design Project Funding

A practical programme aimed at assisting businesses develop their competitive advantage and build design capability by supporting the development of a specific design project with government funding of up to \$50,000.

7 Design Funding/Financial Assistance

A programme to reduce the financial barriers so that more New Zealand businesses are enabled to employ design strategically. Funding bridges the gap between New Zealand and economies where design is more highly integrated.

8 International Design Cluster

A programme aimed at promoting New Zealand's international design reputation and enabling design professionals to compete internationally.

9 Education

The education initiative consists of four programmes: managing internship for newly educated designers and industry-sponsored projects for design students and design researchers; overseeing the development of design management/strategic application courses for senior managers; promoting design management/strategy application in commerce and engineering professional education; and vocation for professional accreditation of tertiary design qualifications and promoting a greater business component in design education.

Source: Success By Design, 2003.

8 The Design Taskforce's Education Initiative

It is not the intention of this paper to describe all the design initiatives that are listed in Figure 3 above. However, as an academic I would like to specifically report in greater detail on the Education and the International Design Cluster initiatives as examples to show the significance of each the nine initiatives. Readers who wish to have more details of the various initiatives are advised to visit the New Zealand Design Taskforce website http://www.industrytaskforce.govt.nz.

The Design Education initiative have been identified as a major component of the GIF Design Taskforce Strategy for nurturing a new breed of designer entrepreneurs for a more complex and connected word. The Design Taskforce Education Strategy is aimed at improving the design capability of businesses in New Zealand to achieve and sustain global competitive advantage through better use of critical creative thinking and entrepreneurship as strategic tools within the Growth and Innovation Framework. It is believed that there are substantial opportunities to broaden the scope of design education to encourage a deeper understanding of the potential of design within business and increase the awareness of the cultural and commercial value of design in New Zealand An innovative design culture, through education, will improve the integration of emerging creative talent in industry, while equipping business with the ability and insights to implement design strategically and effectively (Success by Design, 2003).

8.1 Key Educational Issues

The Taskforce has identified three key educational needs to make New Zealand businesses design-savvy and design-led:

For the design profession:

- The need for a more commercial content in design education and greater connection to business, to assist engagement and integration of designers with business (without compromising their creative focus)
- The need for accreditation of design education to raise the standards, ensure appropriate levels of funding and build confidence in design qualifications by prospective employees.

For business:

- The need for upskilling of chief executives and senior managers in design appreciation and its management and strategic application
- The need to ensure that new business and professional graduates have a good understanding of the value of design and how to work with designers in this area of value creation.

In the public arena:

• The need for New Zealanders generally to have an appreciation of design, to enable more informed purchase decisions and to become more aware of design in helping local businesses realise their global potential.

9 Conclusions: Participations and Achievements

Developing a national brand – for economic transformation – and managing it to develop competencies and to increase value-added exports requires considerable human resource participation, financial investment and strategic innovation and management. It is important for national-brand strategies to be based on actual competitiveness and focused on incremental change, rather than 'branding' the image of a nation too far from what is regarded by offshore audiences as potentially credible and possible. Claims have to be earned by results and achievements. Hence, human capital development in creativity, innovation and technological capabilities is one of the key drivers for the success of the New Zealand's national branding strategies. 'New Zealand New Thinking' is not a destination or a 'Made in New Zealand' strategy. It has at it's foundation an economic and human capability development strategy aimed at nurturing, devising and managing New Zealand's strengths from a trade and investment perspective and promoting New Zealand as a place to live, work, invest and do business. National branding should not be used merely as an empty promotional tool. The credibility of a nation is at stake if it cannot achieve what it has advertised it will deliver.

The success of Brand New Zealand needs to be proven and earned – and this is achieved not only in international successes of New Zealand businesses – as this is only a single component in the effort to 'brand' New Zealand as 'New Thinking'. Success is defined in a network of other 'smart' activities as diverse as national safety, sporting success, governance arrangements, taxation, diplomacy, research and academic achievements. To ensure that the Brand New Zealand strategy is communicated consistently across public and private sectors, as well as to offshore stakeholders, it must be strategically 'owned', promoted and systematically co-managed in concert with other agencies that promote New Zealand at home and offshore, for instance New Zealand Trade and Enterprise (NZTE), Tourism New Zealand, the Ministry of Foreign Affairs and Trade (MFAT), the Ministry of Economic Development (MED), Creative New Zealand, the New Zealand Immigration Service (NZIS), sector taskforces, universities, schools, business, state-owned enterprises and regional and local economic development agencies and councils. Every individual and businesses is involved and affected, one way or another, in the economic transformation of New Zealand.

There are not many studies in the literature that have been carried out to evaluate the success or otherwise of national branding or national positioning. Using branding to position a country's competitive advantage involves a complex interweaving of strategies such as those outlined in the economic transformation of New Zealand. How much of an outcome could be apportioned to the branding component or the innovative design and management of the strategy is usually difficult to ascertain. Moreover, economic transformation is affected by constant changing global political and economic events, and requires a long lead-time, of 20 years or more, before any significant outcomes could be assessed. Therefore, brand messages may need to be updated periodically to strategically manage local and global fluctuations and demands.

However, New Zealand New Thinking has produced many positive outcomes. After 20 years of strategic economic repositioning – especially the past five – New Zealand is on the path to transforming its agrarian economy – dependent on concessionary market access in the UK – into a more design-savvy, industrialised, free-market economy that can compete internationally.

The following extracts from the 2006 Budget Speech (Hon. Dr Michael Cullen, 2006) indicate some of the significant results that New Zealand has achieved through the strategic design, implementation and management of the economic transformation endeavour:

'Over the period from 2000 to 2005 New Zealand experienced very strong economic growth, averaging nearly four percent over the last five years. This has led to strong household income growth, rising real incomes, and very low levels of unemployment. Since December 1999 an additional 313,000 jobs have been created in the New Zealand economy.'

'The strong economic growth in recent years led to a pattern of strong and rising operating surpluses and significant cash surpluses. This meant that the Government has been in the unusual position of funding all its capital needs — including transfers into the New Zealand Superannuation Fund — out of current income'.

'Budget 2006 therefore provides for new operating spending of \$9.6 billion and capital of \$2.7 billion over the next four years'.

'All this means something very simple. New Zealand is in a far stronger position to cope with the fiscal consequences of the demographic transformation which will occur over the next thirty to forty years than almost any other developed country. This will increasingly become a competitive advantage for us as other countries face increasingly difficult fiscal trade-offs which will be less challenging for New Zealand. Again, governing for long-term stability and security will pay off, compared with governing for short-term gratification'.

'Economic transformation must build on an understanding of the need for continuous change and adaptation. A small and relatively isolated developed nation in the South-West Pacific – the most isolated developed nation in the world – has to build its prosperity on its flexibility and adaptiveness, its responsiveness to changing market conditions and demands'.

'New Zealand must lift its productivity levels and increase the value of its exports. Budget 2006 invests new funding in upskilling the workforce, encouraging new business and exports, increasing research and development, and investing further in the country's infrastructure'.

'The most important contributor to economic growth in a modern economy is human capital. The Government has already announced proposals for major changes to the funding system for the tertiary education sector which will underpin our commitment to quality and relevance.'

'The second key area for action in relation to economic transformation is infrastructure. The Government's announcements two weeks ago on telecommunications included unbundling the local loop, provision for naked DSL, removing the upstream limit on bitstream unbundling and increasing the powers of the Commerce Commission.'

'Budget 2006 builds on the work of the Growth and Innovation Taskforce and continues our commitment to transform New Zealand into a high value, innovative export-led economy that can compete effectively in global markets.'

'To that end, there will be a \$64.2 million increase in market development assistance for firms operating in offshore markets over the next four years, and a \$60 million boost to the venture capital market through the Government's Venture Investment Fund.'

'Both are aimed at helping more New Zealand businesses to be globally competitive.'

'By supporting firms to implement their marketing strategies in new markets, we will help grow New Zealand's export sector. This is crucial to our economic prosperity.'

'Successful globally competitive firms also need access to good research and development to add value to their exports and strengthen their innovation.'

'Budget 2006 is a Budget for the long term. At a time when the economy is moving through the bottom end of the cycle it shows that the Labour-led Government has put New Zealand in an enviable position to meet the challenges we face over the next generation.'

'We have eliminated net debt. Assets are building up in the Superannuation Fund and the other crown financial institutions which are there for our long term needs.'

'This Budget contributes significantly to meeting the demands of economic transformation. It continues the increase in the funding of human capital, especially trades and technical skill.'

In 2005, there were 17 incubators containing 159 companies. Ninety-eight companies have already graduated from the government incubator programme. Thirty-nine of these are classified as high-growth companies, with the potential to becoming multi-million dollar international enterprises. Currently there are 70 high-growth technology-focused companies exploring overseas market through the Beachhead Programme spread across six beachhead offices in the US (Silicon Valley and Fort Lauderdale), the UK (London), Dubai, Singapore, and Japan. The programme is expected to serve over 120 companies by early 2007 (Trevor Mallard, 2006.)

All these have been achieved in a comparatively short time – and under difficult economic conditions. The Growth and Innovation Framework – for growing an innovative New Zealand to lift living standards – is the most comprehensive and ambitious economic transformation strategy New Zealand has ever put in place. 'New Thinking' to drive New Zealand business forward has succeeded not by slogans or branding, but rather by strategic design thinking, innovation and strategic management of the human-economic-innovation system to transform the economy into a producer of high-value exports – electronic appliances, fashion, film, music and computer games. Contrast this with the1984 economy – when New Zealand was at the brink of bankruptcy – the economic, social and political advances that the country has achieved during the past twenty years have been impressive. The strategic design and management of New Zealand's economic transformation has paved the path for New Zealanders to raise their standard of living through the recently acquired knowledge and capabilities in design thinking and innovation – probably two of New Zealand's most important human capitals and strategic competitive advantages for now and the future.

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