



The T & T Foresight Project

NIHERST

Sector Foresight
Project:

CREATIVE

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1 EXECUTIVE SUMMARY

1.1 Introduction

This report is the NEXT contribution to Chapter 1 of a 5 Chapter sector project that has the aim of providing a briefing paper that enables policymakers, researchers, entrepreneurs and investors to understand the potential to commercialise and grow key areas of the creative sector in Trinidad and Tobago.

Chapter 1 provides an overview of how the global creative sector is evolving and what the key focuses might be some 10 – 20 years from now in order to provide a context for examining potential niche opportunities that TT might seek to pursue. Chapters 2 – 5 focus on the current and potential capabilities that T&T has, identifying specific niches in the future global economy that T&T could realistically aim towards based upon the capability base, and then developing the associated business cases necessary for commercialisation to ensue.

The creative sector is now becoming a global business in which creative individuals and businesses have the opportunity to succeed in global markets, even as niche players. The sector is characterised by strong technology drivers which are opening up new opportunities for creativity and innovation as well as marketing channels that lead directly to end consumers. Global connectedness is key to the future of this sector.

1.2 Definition of the Creative Sector

We like this definition from the Creative Industries Research Centre in New Zealand because it provides an all-embracing overview of the sector.

The 'Creative Industries' is a sector which embraces 'relationships across art, culture, design, craft and media practices and their social contexts reducing hierarchical distinctions. There is a focus on interconnectedness, democracy, and enabling relationships and activity. It implies organisational and genealogical links across such fields as Advertising, Design, Architecture, Visual Arts, Crafts, Performing Arts, Fashion, Film, Interactive Games, Music, Television, Radio, Publishing and Software.' (1)

1.3 Key Trends Shaping the Future of the Creative Sector

The trend towards greater creativity and innovation has its roots in both the social and commercial evolution (5). New creative and innovative trends arise when needs meet means. When people have a need for personal development or gratification, and a technological or cultural innovation offers to fulfil that need, a new social trend results. The rise of the creative sector is born of a need for greater personal growth, a need which is growing stronger. That need is being matched by the growth in new technologies that allow greater self-expression.

The Copenhagen Institute for Future Studies says that technology driven automation is driving people out of both the industrial production and service sectors. But it is also creating new jobs in the creative and innovation industries. Technology and cultural movements give us a fertile ground for creativity and innovation.

They see the major sector drivers as being the following:

- A need to become more creative and innovative, because mass production is no longer competitive.
- The increasing availability of tools for creativity and innovation.
- Humans have a basic need to be creative and innovative (7).

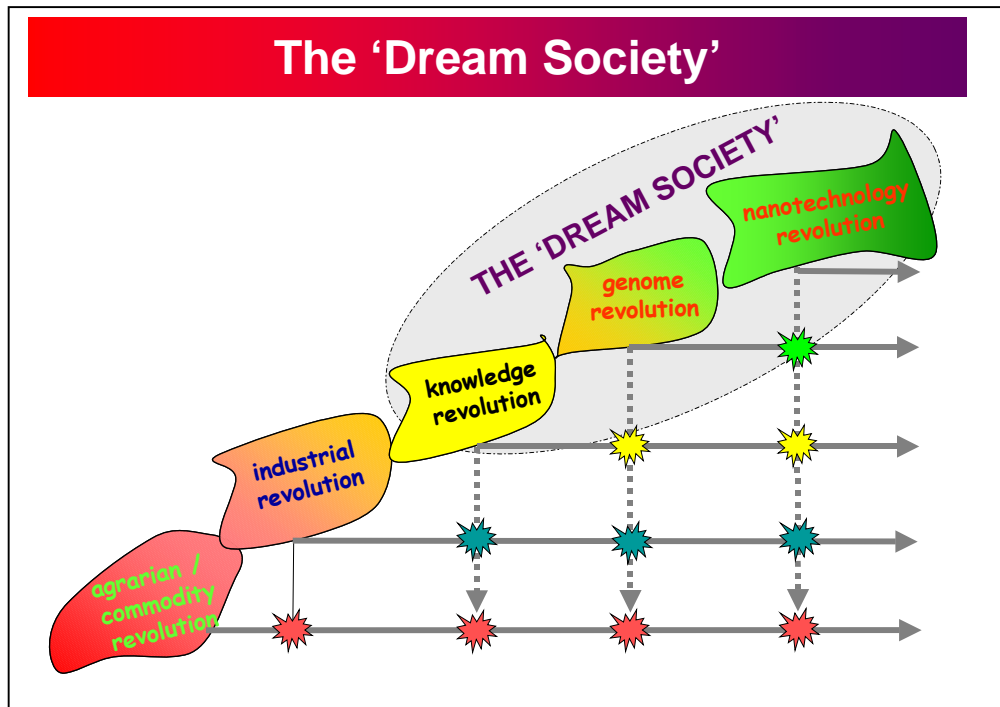
In our view the following trends are also shaping the future of the sector:

- Strong growth in the human need for fascination is driving creativity and innovation.
- Web 1.0 becomes Web 2.0 and eventually the 'global brain' – an interactive multi-sensory global neural network that reaches everywhere (12).
- The intellectual component of products and services – design and functionalities - is becoming more important than the physical products and services alone.
- Technology is having a major impact upon the face and shape of the creative sector – and old is rapidly being complemented or replaced by new.
- Digital convergence is radically reshaping products, structures and delivery.
- Globalisation not only enables mass exposure of mainstream creative products and services around the world but also the exposure of discrete niche focuses from unique groups and cultures from anywhere in the world.
- Material science is opening up a whole range of new innovative creative opportunities never thought possible previously.
- Governments and the private sector are investing large amounts of R&D funding into research associated with creative technologies and market development, in particular in the areas of innovation, convergence, and global connectedness.
- The primary focus of global S & T based research and development effort is into digital technologies, innovation in design concepts, material science, consumer fascination demands, and global connectivity.
- Research funding trends show a shift towards funding interdisciplinary research teams and research at the convergence of disciplines to drive discovery and innovation.
- Changing demographics will have a major impact upon the future of the creative sector – especially ageing populations. A move to life phase, gender, ethnic, belief, and technology-competency related experiences and solutions, will accompany this change.
- Societal reactions and concerns are increasing in importance as an important barometer of the acceptability of emerging creative products and services.
- A trend to big or unique – in all areas of the creative sectors. Big or unique producers; big or unique distribution chains; big or unique outlets, big or unique products (mainstream versus boutique).
- A shift in consumer spending priorities from traditional sectors to the experiential sector – and a strong interest in innovative, ethnic, and fusion focuses.
- The concept of marketing, mainly because of advances in global IT, is changing from a traditional supply push approach to a new demand pull dynamic based upon the widespread availability of goods and services online.
- Value creating strategies are becoming totally dependent upon developing an in depth understanding consumers and their needs – and these will change markedly over the next 10 – 20 years due to demographic change.

Futurist and author of the book 'The Dream Society', Rolf Jensen, sees the world moving into an age where stories and creative environments predominate as an outcome of technology impacts on human lives (2). Machines have taken away much of mankind's physical work and computers are increasingly taking away much of mankind's mental work. People are increasingly demanding new fields of experiential

fascination that engage, entertain, and ‘burn’ up their reserves of mental and physical energy. The ‘Dream Society’ is not an age in itself but an outcome that is evolving as the result of technological and societal change (see Figure 1).

Figure 1: The Dream Society – running in parallel to the technological evolution



2 WHAT'S HAPPENING GLOBALLY

The global creative sector covers a diverse and complex range of areas, both old and new, that includes both highly localised and global components. The following are some of the major global shifts occurring:

- The creative sector is becoming the main economic driver for mature and evolving new economies – Asia is taking over the commodity manufacturing role.
- The creative sector is becoming increasingly complex, involving diverse local, national, and global creative talents, players, agents and networks.
- Business models are changing rapidly – especially in the creative sector – but the incumbents are trying to resist change – often to the detriment of their markets (especially in the music and film/video sectors where digital piracy is easy).
- The channels for delivering creative products are fragmenting and this is also challenging the traditional incumbents.
- Smart players, often from outside the sector, are changing the playing field (e.g. Apple's I-Tunes).
- The traditional market 'push' model is rapidly changing to a demand 'pull' individual consumer driven model – a model that is becoming increasingly niche focused (9).
- The creative markets are constantly evolving driven not only by changes in consumer preferences, but also by technology, linkages between creative people, evolution of the value chain, and the impacts of prevailing policies and business environments.

- Sophisticated supply chains and distribution channels are now being adopted across different regions and national boundaries – and electronic delivery systems are becoming an increasingly important component for the sector.
- Moving from mass markets to mass customisation is driving a need for more creativity in both the design and delivery of products and services. Customised delivery to markets of one is a rapid growth area
- The evolution of digital communications systems, broadband, and emerging virtual reality networks (interactive digital video interfaces) is radically reshaping the sector's future.
- The creative industry will continue to evolve in response to specific consumer demands in individual markets, with significant differences between the creative sector strategies in the developing and the developed countries – big or unique.
- The value of global and niche brands is increasingly being measured in terms of the creative and design components behind their products and services.
- Culture – both ethnic and creative – is playing an increasingly important role in the knowledge economy and has the potential to create large numbers of jobs (3)
- Ethnic culture and creativity is becoming a growth area in all areas of the sector and the opportunities are being enhanced by rapid changes in global connectivity.
- There is an increasing blurring of the boundaries between the real world and fantasy world in all aspects of life, work, and play.
- Multi-sensory creative solutions and experiences are a major growth area, e.g. the design concept for blind restaurants such as 'Unsichtbar' in Berlin – (3).

2.1 Big Picture View of Sector Value and Growth

The global market value for all the creative industries is estimated to have grown from US\$831 billion in 2000 to US\$1.3 trillion in 2005 – a jump of over 56% in value (13).

The following are snapshots of some more important sector trends:

- Creative sector growth rates in general are outpacing general economic growth rates – in most cases by double or more.
- In 2005 the estimated value of the UK creative sector was around US\$104 billion and 8% of GDP, up from US\$21 billion in 2001 (8) and 6 – 7% of GDP.
- Growth of the UK creative sector is occurring at twice the rate of the economy as a whole.
- The music sector faces major challenges as the incumbents try to persevere with old business models in a digital age – and US retail music sales could slump from US\$12.5 billion in 2005 to US\$10 billion in 2010 because of that.
- Paid digital unit download sales of music in the USA increased 163.3 percent to 366.9 million units in 2005 - up from 139.4 million in 2004. Physical CD sales declined to 705 million units in 2005 from 767 million in 2004. Despite the 8 percent decline, the combined retail value of physical and digital formats at US\$12.27 billion was down only 0.6 percent from US\$12.34 billion. Mobile formats, including ring tones, reached US\$421.6 million in retail value (15).
- The international trends in digital music sales versus physical units are similar.
- The Australian digital content industry sector is today estimated to be 3.3% of the country's GDP and worth close to AU\$ 20 billion annually. This could rise to AU\$38 billion by 2015 if the right policies are pursued – an annual 6.2% growth rate (11).
- In the USA, the creative digital industry value was US\$708 billion in 2001 and represented almost 8% of GDP.

- The market for technology convergence items such as new generation digital music players, home entertainment systems, home video phones and enterprise collaboration systems is estimated to reach US\$90 billion by 2010 and have a cumulative value of US\$360 billion from 2006 – 2010 (14).
- Other emerging technology related convergence-driven growth areas to 2010 include enterprise collaboration software (US\$60 billion in 2010), Internet Protocol Television (US\$55 billion), mobile phone content (US\$50 billion), networked games (US\$ 50 billion), and online music (US\$20 billion).
- The big growth area in the digital convergence area will be Voice over Internet Protocol (VoIP), which is forecast to generate almost US\$ 200 billion in 2007 and have aggregate earnings of over US\$ 1 trillion by 2010.

2.2 Views of Profitability Expectations

Technological convergence, and how creative sector businesses embrace (or do not embrace) the changes taking place in markets, will be a major factor in profitability. The seven key drives of profitability up to 2010 are seen by Deloitte to be as follows:

- Successful convergence is driven by customer needs, not technology.
- Commercial creativity will maximise convergence's impact.
- Convergence requires mutual benefit to the parties involved – partnerships will be essential.
- Convergence and divergence can co-exist – to produce the simplest solutions.
- Laggards lose – companies stuck in the past will fail. Bold moves produce the greatest impacts and returns.
- Timing is everything – everyone must be in the same space at the same time.
- Convergence is dynamic and requires continuous searching for the next source of advantage to stay one step ahead.

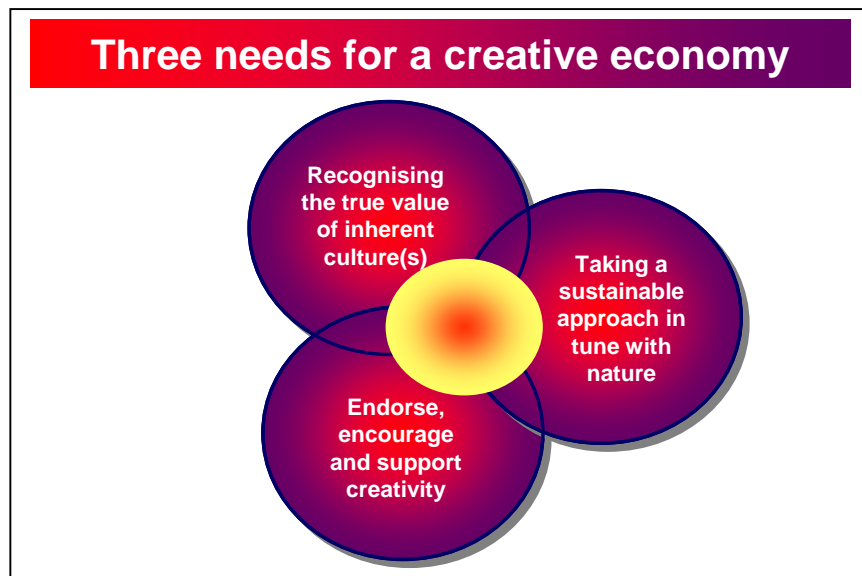
A further fundamental factor shaping future profitability is the move towards consumer demand 'pull' and away from producer 'push' in markets. Customers know what they want and those businesses that can supply it to them with the least hassles and in the quickest and most convenient way are going to be the winners.

3 WHAT APPROACH ARE SECTOR PLAYERS TAKING?

Finnish Professor of Futures Research, Markku Wilenius, says the creative industries have to be used as the tool to advance mature and emerging economies (8). *'We must consider how we can apply our current knowledge to create something new and interesting, something that will be valued worldwide (even if in a global niche).'*

The 'China effect' is seeing jobs shift to low wage locations. There is little point in pouring money into 'old' industries that have no future prospects. The future success of any country, especially smaller global players, demands that future generations be creative and active and that education systems should support development of those traits. Figure 2 illustrates the three key factors Wilenius says are fundamental to a creative economy.

Figure 2: The three needs for a creative economy – Markkus Wilenius



3.1 The Big Players

The big players are all focusing heavily on technology as it relates to the creative sector in all respects – in terms of product and service design, value chains, and delivery channels. The race is on to develop the latest concepts that will appeal to consumers in all aspects of their lives – whether in terms of product functionality and design or experiential uniqueness, fascination, and intensity of enjoyment. Traditional players are being challenged by increasing numbers of non-traditional large and small players.

3.2 New Zealand as a Small Country Example

The long-term approach being taken by the creative sector in New Zealand is a useful example for T&T. This is because New Zealand is also a small country and its economy has traditionally been built on the back of agricultural commodities – both from land-based agriculture and the surrounding oceans. However, it also has a strong ethnic and cultural heritage and is highly ranked globally in terms of entrepreneurship and innovation.

Revenue statistics for the creative sector in New Zealand are incomplete because of its multi-faceted make up. In 2001 it was estimated to make up 3.2% of the country's total GDP and have a value of around US\$ 4.7 billion (16). More important is the fact that the growth rates in individual sectors have been much higher than the general economy e.g. publishing growing at 18% per annum, television and radio by 13%, and film and video by 8% - compared to overall economic growth rates of 2 – 4% per annum (17). Since these figures were assembled, New Zealand has experienced major international success in the film sector e.g. 'Lord of the Rings', 'King Kong', 'The Chronicles of Narnia', 'Whale Rider'.

4 SECTOR BUSINESS MODELS AND PLAYER POSITIONS

Development of the Creative Sector in New Zealand is one of the key planks in the Government's Growth and Innovation Strategy and provides a useful model for T & T. Like T&T, New Zealand is also a country built upon immigration over a long period of time. It has a diverse ethnic mix that embraces various European, Polynesian (including the indigenous Maori culture), and Asian cultures.

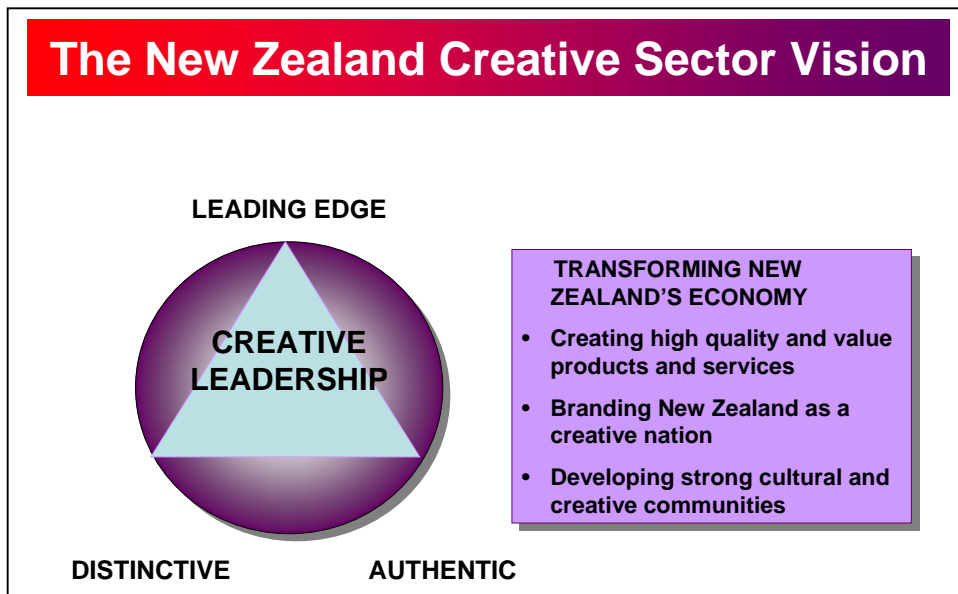
4.1 The Sector Approach

The country's Creative Sector Industry Strategy has two main thrusts:

- To grow a sector that is dominated by small to medium sized enterprises and develop a commitment to excellence in creativity, design and innovation and develop expertise in commercialisation and globalisation
- To develop a commercial advantage from the growing interest of global consumers in indigenous cultures and the unique experiences and contributions they can make to the whole creative sector from either a stand alone or fusion perspective.

The sector vision can be summarised as shown in Figure 3.

Figure 3: Overview of the New Zealand Creative Sector's Vision



To achieve the vision the following priorities have been identified (17):

- Encouraging investment to grow and build capability for international excellence and global reach.
- Moving the sector towards independence from government funding.
- Developing links between design and science and technology innovation in businesses, and encouraging companies to use design, creativity and innovation to create high value products, services and processes to maximise their returns.
- Strengthening the country's existing international relationships and using them to create pathways for its creative and design-led industries to add value, and

develop new strategic alliances and commercial arrangements in new and emerging markets.

- Building international networks for New Zealand companies to access key emerging technologies and trends, and sophisticated and targeted research into global trends and consumer behaviour. This will help them design the products and services the world wants.
- Helping small creative enterprises by facilitating collaborative business models, e.g. clusters to enable them to take ideas to the global market, and by working with the Foundation for Research Science and Technology on research and development and commercialisation approaches.
- Building on the success of New Zealand's world-leading experiential entertainment and tourism (e.g. the Te Papa museum experience, Whale Watch), and developing products and services that provide multi-sensory and transforming experiences for which consumers will pay a premium.
- Developing the services sector – globally one of the fastest growing areas.

As part of the strategy, a number of key initiatives with associated task forces were set up to focus on four key areas:

- Creative leadership.
- Global connectedness and branding.
- Commercialising creativity.
- Design and technology led innovation.

The task forces set up were in the following areas:

- Design – in all areas of the economy.
- Screen.
- Digital innovations.
- Fashion and textiles.
- Music.
- Art and culture.

All of the above included a focus on how to develop and expand opportunities for unique indigenous and ethnic cultural and creative human capital assets.

The Design Taskforce developed the model shown in Figure 4 as a summary of the parameters key to developing a successful design sector in New Zealand in its report 'Success by Design' (18).

Figure 4: Design Sector Taskforce Success Model

<p>THIS</p> <p> </p>		<p>EFFECTIVE DESIGN PROCESS</p>	<p>SUPERIOR PRODUCT OR SERVICE</p>	<p>MARKET SUCCESS/ OPERATIONAL EFFICIENCY</p>	
		<p>SUPERIOR PRODUCT OR SERVICE</p>	<p>MARKET SUCCESS/ OPERATIONAL EFFICIENCY</p>	<p>COMMERCIAL SUCCESS (RETURN ON CAPITAL EMPLOYED)</p>	
<p>DESIGN PROCESS OUTPUTS</p>	<p>MAJOR INFLUENCE</p>	<p>MARKETING PRODUCT/SERVICE</p>	<p>Differentiation</p> <ul style="list-style-type: none"> • Latent need met • Functionality advantage • Performance edge <p>Fitness for Purpose</p> <ul style="list-style-type: none"> • More reliable/durable • Safer • User-friendly <p>Sensory/Emotional Appeal</p> <ul style="list-style-type: none"> • Enhanced experience (e.g. tactile feel) • Improved aesthetics and form • Environmentally friendly <p>Superior brand Imagery</p> <p>Communications reinforce value perception</p> <p>Engaging point of sale</p>	<p>High demand customer preference (sales)</p> <p>Customer loyalty (repeat sales)</p> <p>Premium pricing</p> <p>Reduced product (or service) failure or returns</p>	<p>Sustainable sales growth</p> <p>Superior margins</p> <p>Lower warranty and return costs</p> <p>Brand equity</p>
	<p>INFLUENCE</p>	<p>MANUFACTURING</p>	<p>Manufacturability</p> <p>Material/process efficiency</p> <p>Quality/consistency</p>	<p>Cost/capital efficient manufacture (or service delivery)</p> <p>Lower reject rates</p>	<p>Lower cost of production (superior margins)</p> <p>Lower quality costs</p> <p>Less capital employed (working capital and production infrastructure)</p>
	<p>DISTRIBUTION/LOGISTICS</p>	<p>Ease of specification</p> <p>Ease of sales support</p> <p>Ease of servicing</p> <p>Logistics efficiency</p>	<p>Efficient supply chain</p>	<p>Lower channel and logistics costs</p> <p>Less capital employed (working capital and distribution infrastructure)</p>	

The Screen Production Industry Taskforce (18) identified the following key goals as focus areas for long-term success for this creative sub-sector:

- Providing leadership for the industry with an emphasis on sustainable growth.
- Foster a new business environment for growth which facilitates investment, increases sales globally, grows the post production digital technology sector, grows the computer generated images sector, increases co-productions, and facilitates the retention and exploitation of intellectual property (IP) developed.
- To attract foreign productions which will utilise and develop New Zealand's capability and infrastructure.
- Improve the alignment between the private and public sectors to assist economic development of the industry.
- Developing skills and talent – which are becoming increasingly difficult to find.

The Fashion Sector's key focus is to build international niche brands (such as Nom D, Zambesi, Karen Walker, Trelise Cooper) by assisting with the development of global connectedness and market access. The sector has developed a cluster of fashion designers and businesses that is also supporting and encouraging new and innovative fashion designers to grow from a local base into global markets.

The Music Export Development Group (19) identified the following areas as key to future success in global markets:

- There is a need to better develop and exploit New Zealand's 'fresh and exciting new sources of creativity for the world' – in particular indigenous and ethnic cultural influences that offer a unique global authenticity and individuality.
- There is a need to leverage new and emerging technologies and industry models.
- Innovate in collaboration with other creative industries such as film and design.
- Develop and enhance New Zealand as an international 'hotspot' for creative endeavour.

The music industry's ten year vision is for New Zealand to be seen as a globally recognised source of music and that the country's music will play an integral role in building the international perception of New Zealand as an innovative, creative, and motivational force in the global economy. World-class global connectedness (technological and personal) is seen as being a critical part of achieving that vision.

Creative New Zealand has identified the following areas that require investment to help grow the New Zealand Art and Cultural Sector and has a strong emphasis on ethnic art and culture:

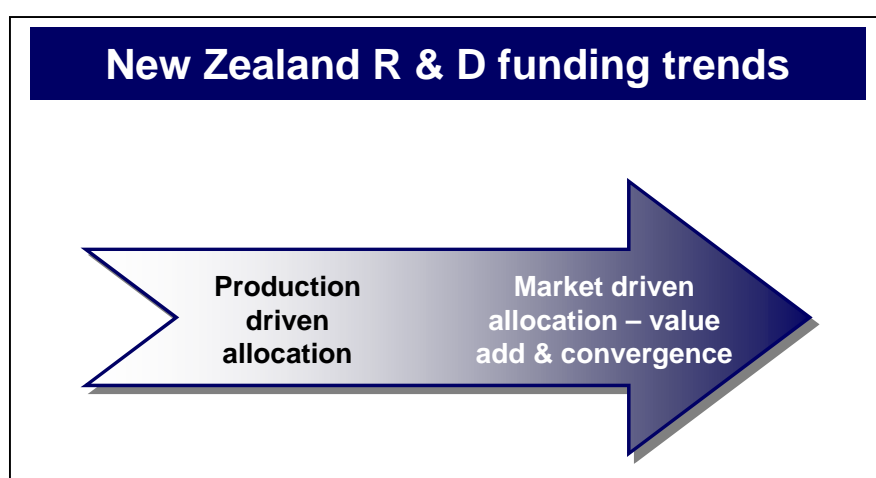
- To develop the international audience and market development.
- To understand where New Zealand could be commercially competitive.
- To support art form development which aims to achieve excellence and innovation.
- To strengthen indigenous links and creative capabilities and also strengthen national identity (and pride).
- To make exporting a priority.
- To undertake joint marketing and market development initiatives with other government and international agencies.
- In the area of research and communications – access and share international market intelligence.
- To develop and support strategic alliances between cultural and economic agencies, ethnic groups, the private sector, and creative artists for international activity.

Indigenous Maori culture and creativity is unique in the world and seen as a strong niche growth and development opportunity.

4.2 Science & Technology, Research & Development Investment

There has been a marked shift in the approach taken to public investment into S & T focussed research and development as it relates to all sectors. In the past funding was largely on a non-competitive basis and based upon historical production driven criteria. As part of the New Zealand Government's Growth and Innovation Strategy, the bulk of research funding is now allocated on a contestable basis and applications need to meet specific short- and long-term objectives that integrate science and technology focuses within the country's GIS objectives – Figure 5.

Figure 5: Sector funding trends in New Zealand



Access to these R & D funds is open to both the public and private sectors and is dependent upon the case submitted for a funding allocation.

The big shift has been a move away from traditional production-related funding allocations towards projects that have a high value adding or a strong sector convergence focus.

The main thrust of research and development aimed at New Zealand creative sector includes the following:

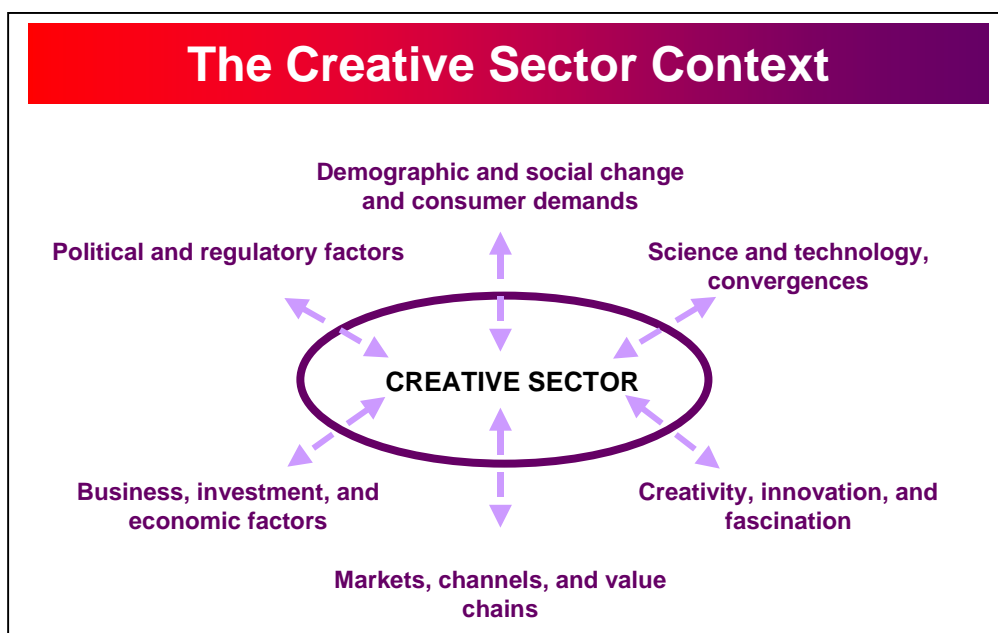
- Supporting and encouraging creative leadership and the acquisition of skills.
- Supporting and encouraging the commercialisation of creativity.
- Developing and strengthening global connectedness and branding.
- Supporting and encouraging technology led innovation.

5 HOW THE CREATIVE SECTOR IS EVOLVING

5.1 The Creative Sector Context

Figure 6 provides an overview of the factors that are shaping the future of the creative sector and which, in turn, the creative sector is shaping.

Figure 6: The key parameters shaping the future of creative sector



5.1.1 Key Sector Roadmap Influences

How the creative sector evolves depends on being able to monitor and adapt to the following:

Intersections – a fork in the road: Where one path becomes favoured over another e.g. physical delivery versus digital delivery.

Interdependencies – synergy or clash? For example digital delivery systems can grow the market for the creative sector, or damage them – depending upon how the players play the game. Traditional music companies have destroyed value in the sector by resisting digital delivery and have not focussed on supplying potential customers with the solutions they want rather than what the companies want to sell them.

Regulatory readiness – are we future-proofed? Does the country's legislative system help or hinder emerging creative products and services?

The emergence of a possibility space: Where a convergence of technologies emerging from different market sectors can enable totally novel solutions, e.g. digitalisation and interactive virtual 3-D technologies.

Uncertainties – the need for flexibility: Certainty is only one side of the equation. There are areas of uncertainty that can change the playing field – such as IP piracy over the Internet. The sector needs to be use foresight to be aware of potential uncertainties, be flexible so it can adapt, and take advantage of any opportunities that arise.

5.1.2 Sector Convergences

There are a number of powerful sector convergences that are shaping the future of the creative sector. A few examples follow:

- The most obvious is digitalisation in virtually all the creative areas and the systems that deliver creative products.
- Advances in materials science are enabling whole new concepts to be developed in the fashion industry – such as 'intelligent' apparel with potential

functions such as invisibility, electricity generation, colour changes, and body function monitoring.

- ICT and product design – being able to develop and test virtual concepts of products in advance of manufacture.
- Research priorities are increasingly being focused towards multi-disciplinary projects that embrace material science, ICT, digital technologies, as well as market development, network building, and ethnic connectivity with global niche markets.

5.2 Key Creative Sub-Sectors

The creative sector is huge and complex at both global and local levels. We believe the major changes that will shape the future of the creative sector can be divided into a number of important sub-sectors.

5.2.1 Overview

In our view there are five main sub-sectors as shown in Figure 7.

Figure 7: An overview of main creative sub-sectors

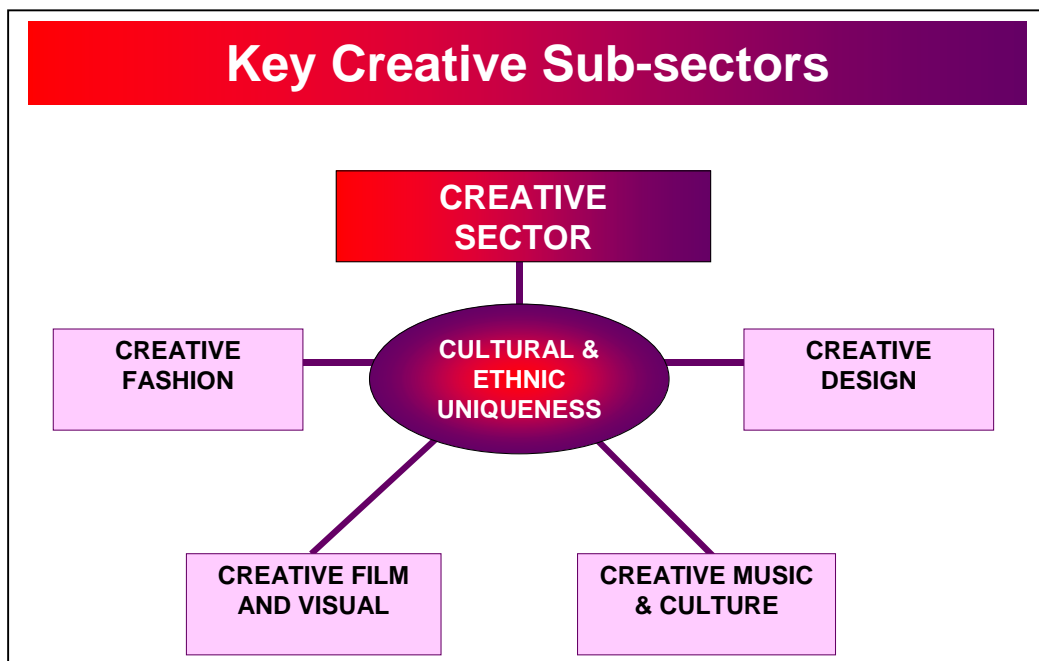
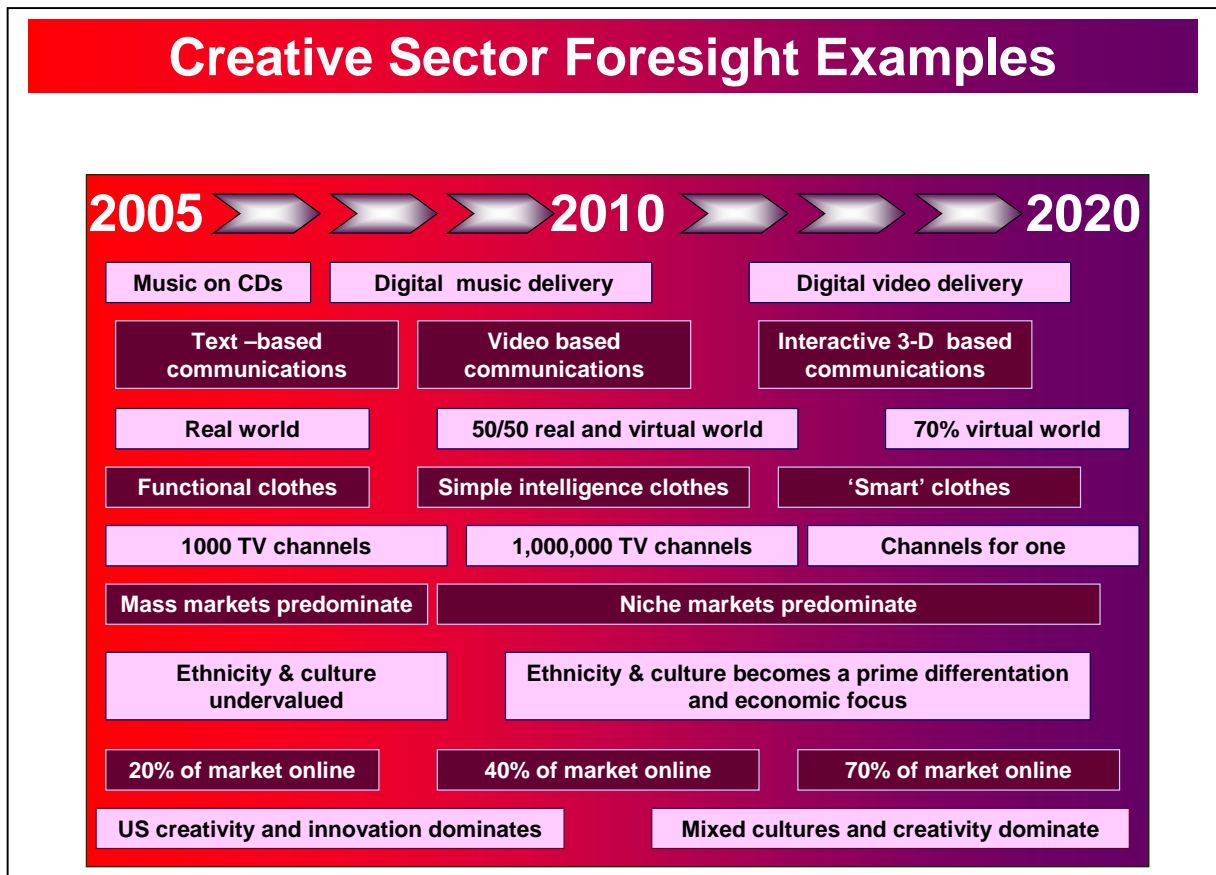


Figure 8 illustrates a number of foresight derived sector development pathways associated with these sub-sectors.

Figure 8: Selected creative sector foresight examples



In the following sections, we look at the key overarching drivers, technology trends, paradigm shifts, and uncertainties associated with the various creative sub-sectors.

5.2.2 Creative Fashion

Fashion trends will still come and go – but the influences of technology, materials science, demographic change, and changing delivery channels will close opportunities for some and open up opportunities for a many others

Key trends impacting on this sub-sector are shown in Table 1.

Table 1: The key overarching drivers, technology and consumer trends, paradigm shifts, and uncertainties associated with the future of creative fashion

Parameter	Creative Fashion Sub-sector
<i>Overarching drivers of growth</i>	<ul style="list-style-type: none"> • S & T – making more from less • Convergence • Economic – value add, productivity, channels • A blurring of boundaries • Creativity and innovation • Global connectedness
<i>Technology trends</i>	<ul style="list-style-type: none"> • Digitalisation – at all levels • Materials science • ‘Intelligent’ textiles and garment components • Functional quality enhancement • Interactive design interfaces
<i>Consumer trends</i>	<ul style="list-style-type: none"> • Individualism – markets of one and the need for customisation • The need to be different • Ageing consumers with a new set of needs • Young generations favour technologically smart solutions • Unique brands
<i>Paradigm shifts</i>	<ul style="list-style-type: none"> • From apparel to smart wearable interfaces between the person and environment
<i>Uncertainties</i>	<ul style="list-style-type: none"> • The fickleness of fashion • Complexity – the more we know the less we know • Being in the right space at the right time • Being blindsided by competitors

5.2.3 Creative Film and Visual

Digitalisation is the big driver of change and is impacting on product content and design, delivery systems and channels, and the blurring of boundaries between the real and virtual worlds. It is also leading to a massive fragmentation of future delivery channels – to markets of one. An overview of the drivers and trends is shown in Table 2.

Table 2: The key overarching drivers, technology and consumer trends, paradigm shifts and uncertainties associated with the future of creative film and visual

Parameter	Creative Film & Visual Sub-sector
<i>Overarching drivers of growth</i>	<ul style="list-style-type: none"> • S & T- digitalisation • Convergence • Economic • Fascination • Governmental – intervention, investment and market development policies • A blurring of boundaries • Global connectedness – high speed broadband • Creativity and innovation
<i>Technology trends</i>	<ul style="list-style-type: none"> • Digitalisation in all areas from conception, production, marketing and delivery • ICT – in particular the evolution of interactive video interfaces • 3-D technologies • Multi-sensory experiential technologies
<i>Consumer trends</i>	<ul style="list-style-type: none"> • The changing balance between the real and virtual world • The need for ‘5 minute fascination’ – increasing frequency and intensity of experiences • Changing demographics • Growing ethnic and fusion demands • Enhancement – of the human senses • Uniqueness
<i>Paradigm shifts</i>	<ul style="list-style-type: none"> • A shift from mass audiences to audiences of one
<i>Uncertainties</i>	<ul style="list-style-type: none"> • How far the balance shift between the real and virtual worlds will go • The effects of overexposure to bigger and better experiences • The impact of digital piracy • Being in the right space at the right time • Being blindsided by competitors

5.2.4 Creative Music & Culture

Once again digitalisation is the big driver – and rapid advances in global connectedness offers opportunities to individuals with something to say or offer anywhere in the world. Networks will drive the future, not the traditional hierarchical agencies and recording companies - which are likely to fade away. An overview of the key drivers and trends is shown in Table 3.

Table 3: The key overarching drivers, technology and consumer trends, paradigm shifts, and uncertainties associated with the future of creative music and culture

Parameter	Experiential F & B Sub-sector
<i>Overarching drivers of growth</i>	<ul style="list-style-type: none"> • S & T-digitalisation • Economic – changes in spending priorities • A blurring of boundaries • Global connectedness – high speed broadband • Globalisation drives ‘glocalisation’ – local niche differentiation on a global scale • Creativity and innovation
<i>Technology trends</i>	<ul style="list-style-type: none"> • Digitalisation • Materials science and ICT creating new sounds • Interactive video interfaces • Enhancement of the human senses • Virtual reality – to be in the music rather than just a viewer or listener
<i>Consumer trends</i>	<ul style="list-style-type: none"> • Individually customised solutions • Growing interest in the unique (including ethnic and fusion) • Digital delivery is what I want • Visual as well as aural – and participative if possible • Unique ‘brands’ • Fashions
<i>Paradigm shifts</i>	<ul style="list-style-type: none"> • A trend from listening and watching to being totally ‘immersed’ in interactive virtual music
<i>Uncertainties</i>	<ul style="list-style-type: none"> • The impact of virtual reality – at home or away • Fashions • The impact of digital piracy • Being in the right space at the right time • Being blindsided by competitors

5.2.5 Creative Design

The design becomes more important than the product – a major thrust for smart companies in mature economies. They are increasingly using design to develop a value added competitive advantage. An overview of the key drivers and trends is shown in Table 4.

Table 4: The key overarching drivers, technology and consumer trends, paradigm shifts, and uncertainties associated with the future of creative design

Parameter	Niche Focus F & B Sub-sector
Overarching drivers of growth	<ul style="list-style-type: none"> • S & T-digitalisation • Economic – changes in spending priorities • A blurring of boundaries • Creativity and innovation • Global connectedness
Technology trends	<ul style="list-style-type: none"> • Digitalisation • Materials science and ICT creating new integrated product concepts • Interactive video interfaces • Enhancement of the human senses • Virtual reality – try before you buy interactive systems • 'Intelligent' products
Consumer trends	<ul style="list-style-type: none"> • Individually customised solutions – across all demographic groups • Mass customisation • Growing interest in the unique • Digital interaction • New age technology driven functionality as well as visual appeal • Unique brands
Paradigm shifts	<ul style="list-style-type: none"> • From fragmented to integrated value chains • From product driven to design and functionality driven
Uncertainties	<ul style="list-style-type: none"> • Consumer fashion • Being in the right space at the right time • Being blindsided by competitors

6 CONSUMER FORESIGHT

The future of any sector depends upon customers – whether they be purchasers of specific products and services, or wish to enjoy a personal benefit – experiential, lifestyle compatible, or enhancement orientated. Understanding tomorrow's consumers and the things they are likely to want and demand is key to mapping the future of any sector.

6.1 The Global Consumer Market

The world's population is ageing – rapidly. Latest estimates indicate it may peak as early as 2050. There are still likely to be an extra 2 billion+ people in the world by the time that peak is reached. However, the make-up of the population in most countries is likely to vary significantly – particularly in wealthy countries.

For example, the average age of the German population is expected to be 45 years within a decade. In Japan, close to 50% of the population will be 50 years or older and in India almost 25% by 2025. China is also greying rapidly with 35.6% of the population expected to be 50 years+ by 2025. This is a major shift – never seen before in the history of mankind. This will impact on markets in every country in a multitude of ways.

In major markets we are also seeing greater ethnic diversity driven by immigration patterns around the world. Second and later generations of immigrants have a

greater connection with the country they live in than the old home country of their predecessors. Some ethnic groups, e.g. Chinese in America, have high rates of inter-marriage with other ethnic groups. Ethnic focuses and fusion concepts are growth areas as a result of such patterns.

6.2 Key Consumer Groups

In tomorrow's world we believe the following consumer groups will be of growing importance and shape tomorrow's markets:

- **Cultural Creatives** – people with knowledge and skills who contribute strongly to the creative economy and who also have strong personal values – especially regarding personal health and wellness, ethics, and the environment.
- **Ethnic entrepreneurs** – in both mature and emerging economies. Self-assured, successful, ready to take risks, and look at new ways of doing things.
- **New generations of ethnic immigrants** – the next generations born in the country adopted by the original immigrant family – more confident, more intermarried, driving fusion concepts.
- **The new old** - Today's over 60s who may well live until their late 80s or 90s. This generation is healthier than previous generations and will need customized solutions not seen with previous generations of the same age.
- **The 60s generation in their 60s** – more independent and healthier than previous generations – they want to still look good and feel good and enjoy life.
- **The Baby Boomers** – a self-indulgent generation, always a bit rebellious, determined to fight ageing for as long as possible. The oldest are now reaching their 60s. Fashion and experiences are growing in importance as many are 'empty nesters' – the kids have grown up and left home – now its time to indulge themselves and spend their inheritances before they die.
- **Gen X** – especially in mature economies looking for new experiences and global influences – e.g. growing German interest in cultural (and fusion) niche music from small countries in Africa and the Caribbean.
- **New age women** – self-confident, independent, financially secure, delaying or not having children, looking for something that addresses their individual needs.
- **Generations Y & D** – the under 28 year olds. Live 50/50 in the real and virtual worlds. The boundaries between the two are blurring. They need constant fascination – including mind-altering substances, are ready to try anything new and high-tech, re-fashion their bodies and minds without a thought, have grown up with high technology solutions that they don't question.
- **Global nomads** – high net worth individuals who move from country to country and contract to contract with a highly mobile lifestyle that embraces a mix of cultures and peoples around the world.
- **Cyber tribes** – who interact through interfaces such as the Internet. They spread 'fact', 'fiction', and 'fads' rapidly around the world through their networks.

6.3 Key Consumer Trends

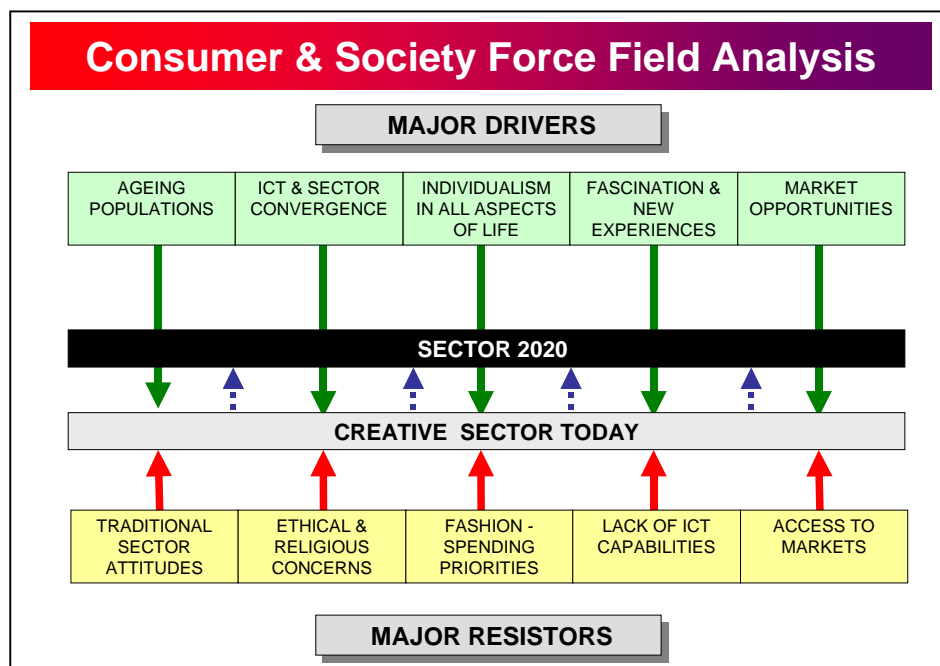
We have identified a number of trends likely to impact significantly on the creative sector markets over the next decade or two including:

- Pursuit of pleasure, quality of life, and happiness.
- Self-enhancement - including body sculpturing, outerwear, technological gadgets, heightening the senses.
- Comparative material well-being.
- 'Give me a gift of time – so I have more time to do the things I love.'
- Longevity and 'Age Defiance' – people want to defy ageing and will pay for it – particularly amongst the over 45s but also increasingly a focus of the young – so anything that makes people feel young is a growth area.
- Individualism – markets of one - more singles, the egoistic society.
- Fascination – people are looking for '5 minute fascination' – instant gratification.
- A move from the 'technology immigrants' to the 'technology natives' – those who have been born and brought up in a technology driven world and accept major advances as being an expectation and normal.
- Global living – being able to move freely around the world with the minimum of hassles and enjoy ethnicity and culture as part of that lifestyle.
- Health and wellness – particularly as the over 45s begin to realize half their lives are behind them and looking after their health and wellness is essential is they want to maximize what they get out of life.
- Being 'out' is 'in' – the death of the mass market – an aspect of growing individualism – 'I am unique' – and a move to extremes.
- Changing spending priorities – the high priorities are now smart technology, experiences and entertainment, and personal enhancement.

6.4 How Do These Relate to Future Sector Prospects?

How consumers are likely to influence the future of the creative sector can be illustrated by separating impacts into drivers (characteristics that will favour the sector) and resisters (characteristics that will hold back progress) as shown in Figure 9.

Figure 9: Consumer and society force field analysis



Consumer drivers favouring growth of the creative sector include:

- A growing need for more creative and innovative solutions.
- The new options opened up by convergence.
- Anything that gives consumers fascination or helps them to express their individualism; especially (but not only) for generations Y and D – anything that is cool, experimental, technological, and helps them to be different.
- Increasing global connectedness means increasing access to the unique and different.
- Markets are becoming more open globally and allow a greater range of new and innovative products to be accessed and supplied from a wider range of sources to satisfy a need for customised solutions for markets of one.

The resistors holding back advances in the creative sector include:

- Traditional attitudes towards what constitutes a creative sector.
- Ethical and religious concerns that can restrict creative and innovative expression.
- Fashion can change quickly and can change the whole proposition for an individual creative sector player within a very short time frame.
- The broadband ‘haves’ and ‘have-nots’ – the have-nots are losing out.
- Old fashioned creative sector marketing, distribution and retail businesses that are trying to fight inevitable change – and which are damaging consumer relations and markets in the process.

7 SECTOR FORESIGHT – SHAPING THE CREATIVE SECTOR OVER THE NEXT 10 – 20 YEARS

Several tools can be used to develop a picture of how the sector might evolve over the next 10 – 20 years. These include PESTE (an analysis of major influences on the future of the sector from the **P**olitical, **E**conomic, **S**ocial, **T**echnological, and **E**nvironmental perspectives), SWOT (**S**trengths and **W**eaknesses – as seen today; **O**pportunities and **T**hreats – in the future), and global scenarios.

7.1 Sector PESTE

The major future influences on the future of the creative sector from a PESTE perspective are shown in Table 5.

Table 5: PESTE - Major future influences on the food and beverage sector

Parameter	Influences
Political	<ul style="list-style-type: none"> • Legislation impacts – positive and negative • Infrastructure policies • IP protection • Access to markets
Economic	<ul style="list-style-type: none"> • Returns on investment – how the sector performs relative to other sectors
Social	<ul style="list-style-type: none"> • Consumer demands and fashion trends • Demographic and ethnic shifts • Connectedness – locally and globally • Cultural pride and self esteem
Technological	<ul style="list-style-type: none"> • Developing ways of dealing with complexity • New breakthroughs • Convergence of technologies
Environmental	<ul style="list-style-type: none"> • Sustainability

7.2 Sector SWOT

The SWOT tool provides a simple matrix analysis of key areas that are fundamental to scenario development. Table 6 lists some of the more important areas.

Table 6: Creative sector SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • The human need for fascination • Proven investor interest • Easy to enter the sector • Highly creative and innovative • Vast experience and knowledge resources • High technological uptake • Diversity • High spend priority for consumers 	<ul style="list-style-type: none"> • Rapid changes in fashion • Short attention spans • Traditional value chain players hinder progress • Gaining recognition – especially for small players • Continuous change
Opportunities	Threats
<ul style="list-style-type: none"> • Individual customisation for markets of one • Digital delivery direct to the end user • Convergence of technologies opens up whole new fields • Growing interest in unique ethnic and cultural offers • Globalisation favours both big and unique 	<ul style="list-style-type: none"> • Being blindsided by change • Piracy and IP protection • Manipulation of digital markets

7.3 Global Scenarios

Scenarios are becoming a valuable tool for the global creative and design sectors. Using scenarios can be useful for developing a picture of alternative futures and developing an understanding of how to develop a flexible approach to future markets and opportunities. There is a need to identify spaces where a creative or innovative idea provides a solution to an evolving issue or provides a totally new proposition or experience that no-one has considered previously.

7.3.1 Australian Digital Content Scenarios.

These scenarios describe three possible futures for the Australian digital content industry – a preferred high growth scenario, a base case (business as usual) scenario, and a negative (pessimistic) scenario (11). The detailed parameters shown in Table 6, as they relate to those scenarios, provide a useful way of assessing creative sector futures.

Table 6: Summary of the key parameters for the Australian digital content industry sector scenarios.

Key dimensions and futures for the digital content industry			
<i>Dimension</i>	<i>Preferred</i>	<i>Base Case</i>	<i>Pessimistic</i>
Creativity	<ul style="list-style-type: none"> ▪ rich in artistic, technical and business creativity including through attracting foreign talent ▪ widespread access to high quality education and training ▪ access to emerging and existing ideas - rapid adoption of new ideas and innovations 	<ul style="list-style-type: none"> ▪ artistic, technical and business creativity underdeveloped and underutilised ▪ education and training sometimes at odds with commercial needs ▪ patchy adoption of new ideas and innovations 	<ul style="list-style-type: none"> ▪ few suitable stories (content) ▪ loss of artistic, technical and business creativity to other global creative centres ▪ no access to high quality education and training ▪ limited access to emerging and existing ideas
Capacity	<ul style="list-style-type: none"> ▪ financiers/investors involved in providing capital (especially access to capital by SMEs) ▪ cross media innovation raises capabilities and enables efficient re-use of ideas and content ▪ significant funding for R&D and innovation ▪ seed funding encourages more successful creative start up companies 	<ul style="list-style-type: none"> ▪ limited capital available (particularly scarce for creative smaller enterprises) ▪ limited funding for R&D and innovation ▪ limited access to leading technologies ▪ enterprises struggle to win sequences of projects and accumulate expertise over time 	<ul style="list-style-type: none"> ▪ loss of capital (especially capital held by SMEs) ▪ scarce funding for R&D and innovation ▪ poor access to skilled people ▪ no access to leading technologies ▪ loss of firms and collective expertise – industry regresses to cottage industry/ad hoc project structures

Table 6 (continued)

Clusters	<ul style="list-style-type: none"> ▪ strong clusters/ecosystems ▪ connections within sectors and between sectors ▪ strong linkages between creative, educational and commercial centres 	<ul style="list-style-type: none"> ▪ patchy and ad hoc connections within sectors and between sectors ▪ technological convergence favours larger/international organisations ▪ ad hoc linkages between creative, educational and commercial centres 	<ul style="list-style-type: none"> ▪ fragmented industry ▪ bifurcated structure very pronounced with market dominated by large/international distributors ▪ technological convergence favours economies of scale/scope and blocks smaller start ups ▪ poor linkages between creative, educational and domestic commercial centres
Channels	<ul style="list-style-type: none"> ▪ aggressive and successful production of branded Australian content ▪ excellent access to communications (ie, broadband access) plus widespread adoption of other new technologies support wider audiences and markets ▪ strong commercial linkages in upstream and downstream aspects of the industry ▪ good access to overseas markets with reduced restrictions provide 'shelf space' for content 	<ul style="list-style-type: none"> ▪ ad hoc relationship between producers and customers ▪ contacts in upstream and downstream aspects of the industry ▪ access to communications (ie, broadband access) ▪ partial market access and restrictions to access 	<ul style="list-style-type: none"> ▪ random and limited relationship between Australian industry and customers ▪ almost universal access to true broadband Internet services raises global content aggregators' access to the Australian market, leading to a significant leakage of demand ▪ shift in consumer tastes towards the products of large global content aggregators
Commerciality	<ul style="list-style-type: none"> ▪ internationally recognised brands ▪ capacity to charge for content through convenient, cheap payment systems ▪ better industry understanding and use of rights management and protection of intellectual property 	<ul style="list-style-type: none"> ▪ partial capacity to charge for content ▪ patchy management of intellectual property rights 	<ul style="list-style-type: none"> ▪ limited access to charging systems for smaller firms. Larger and international firms operate proprietary systems that give them a major competitive advantage ▪ poor management of intellectual property/rights ▪ IP laws become a barrier to the use of existing ideas and content rather than an aid to new producers who struggle for commercial sustainability
Competitiveness	<ul style="list-style-type: none"> ▪ heightened awareness of Australian content drives strong demand ▪ Access to overseas markets opens opportunities ▪ good supply of creative skills and other inputs keeps costs down 	<ul style="list-style-type: none"> ▪ patchy international awareness of Australian content ▪ Australian industry demand relies largely upon cultural factors and time zones as a barrier to trade protecting the domestic market ▪ Competition based upon lower cost rather than higher quality 	<ul style="list-style-type: none"> ▪ Shrinking awareness of Australian capabilities and ideas ▪ Continued improvements in communications results in domestic market being swamped by dumped content (ie, content sold at below cost to drive out competition)

7.3.2 EU Textile Sector Scenarios

The following four scenarios have been developed as a tool to try and determine future options for the European fashion-related textile and leather industry – which is facing major challenges from emerging economies in Asia (22).

Dimensions of the scenarios

The five dimensions, which were identified as the basis for scenario building, were characterised as follows:

- **1st Dimension: Tech 1.** It refers to how advanced the general and industry-specific use of information and communication technologies (ICT) and industry production technologies are in 2010. There are two versions of this driver: 'high', where the ICT infrastructure and use of ICT is sophisticated and production technologies are advanced and highly flexible also, and 'low', where there has not been much development since the present.
- **2nd Dimension: Tech 2.** While Tech 1 refers to the technologies related to the processes of design, production, and sale of textile products, Tech 2 refers to technology that is fundamental to the actual products of the textile industry in 2010: chemistry, nanotechnology, biotechnology, and other 'fundamental' technologies that may change the way textile materials are produced and used. There are two versions of this driver: 'high', where Tech 2 redefines the conception and use of these technologies, and 'low', where there has not been much development since the present.
- **3rd Dimension: EU.** This dimension refers to the European Union's progress and its ability to act cohesively. There are two versions of this driver: 'success', where the enlarged EU has become a democratic and economic success and is able to work in the interests of its citizens and companies, and 'failure', where the enlargement process is highly problematic and the EU is unable to provide 'value' for its citizens and companies.
- **4th Dimension: International Trade.** This dimension refers to global and national trade agreements and legislation in 2010. There are two versions of this driver: in the 'open' version most of the quotas and trade tariffs barriers have gone while the remaining legislation and agreements are predominantly aimed at ensuring that international trade is conducted according to the principles of sustainability and fairness in relation to the less developed regions of the world; in the 'closed' version most quotas have been removed but national states can protect their home markets with tariffs.
- **5th Dimension: Market.** This dimension refers to the state of the world market and how competitive European companies are in relation to it. More specifically, it refers to whether or not market conditions are good on the European home market. There are two versions of this driver: 'good', where market conditions are favourable for EU companies in Europe and in the rest of the world, and 'bad', where conditions for EU-based companies are poor internationally but acceptable for EU home markets.

The scenarios

Scenario 1: ‘Perfectly prêt à porter’

This is in many ways a utopian scenario. The year 2010 has been preceded by a period of economic, social, and technological progress, and the world is at peace. The enlargement process of the EU has been a striking success and the EU is emerging as a very strong player on the world scene. International trade is free but fair, and the companies are looking for business opportunities all over the world. The dimensions of this scenario are Tech 1 = high, Tech 2 = high, EU = success, Int. Trade = open, and Market = good.

Scenario 2: ‘Rags and riches’

This is a scenario where EU companies are maintaining their competitive advantages, but developments in international trade, ICT, and production technology prevent them from exploiting these advantages outside Europe. EU policy and initiatives have played an important role in the development of the companies’ competitive base, and challenges related to labour market issues are solved by upskilling and re-skilling the workforce. The dimensions of this scenario are Tech 1 = low, Tech 2 = high, EU = success, Int. Trade = closed, and Market = bad.

Scenario 3: ‘The emperor’s new clothes’

This is a scenario where the promises of new technologies have not borne fruit, and the EU has failed in many ways. Most of EU textiles production has therefore been outsourced or closed down. International trade is very open, and consequently many EU companies find themselves in a cost game where they are having a hard time matching the price/value offers of companies based in emerging-market countries. The dimensions of this scenario are Tech 1 = low, Tech 2 = low, EU = failure, Int. Trade = open, and Market = good.

Scenario 4: ‘Driving Miss Daisy’

This is a scenario where product and process technologies are developing rapidly, but the ‘engines’ driving the development are located outside the EU. The EU has not been able to exploit the opportunities presented by enlargement and is generally having a hard time supporting its citizens and businesses. Although international trade has developed rapidly, European companies are focusing on the European market, even though competition on this market is becoming stronger with the entry of emerging companies from Asia. The dimensions of this scenario are Tech 1 = high, Tech 2 = high, EU = failure, Int. Trade = open, and Market = bad.

The Industry-specific effects of the scenarios

The analysis of the industry-specific effects on companies across the five dimensions is categorised as follows:

- 1. Skills and education:** This theme deals with the issues and challenges related to skills and education for industry in general and with the use of skills and education in textiles companies.
- 2. Work organisation:** This theme deals with the organisation of work in the textiles companies. Issues are related to internal enterprise organisation and to the distribution of work throughout the value chain.
- 3. Business strategies:** This theme deals with the generic business strategies that companies follow in the scenarios, involving issues such as brand management and sourcing strategies.

4. Innovation strategies: This theme deals with the various innovation strategies that companies pursue and, on a more general level, with the role and importance of innovation seen from a European perspective.

Figure 10: The industry specific effects of the textile and leather sector scenarios

Table 1: *Industry-specific effects of the scenarios*

	<i>Perfectly prêt à porter</i>	<i>Rags and riches</i>	<i>The emperor's new clothes</i>	<i>Driving Miss Daisy</i>
Tech 1	High	Low	Low	High
Tech 2	High	High	Low	High
EU	Success	Success	Failure	Failure
Int. Trade	Open	Closed	Open	Open
Market	Good	Bad	Good	Bad

How the creative sector evolves is very dependent upon how the world evolves over the coming decades. Ageing populations and increasing demands for fascination are going to be major drivers.

8 FINAL COMMENT

We have developed a global view of the creative sector and key sub-sectors that provides a context for looking at potential opportunities which T&T can choose as 'best bet' opportunities.

The challenge is to identify areas that are going to be of the greatest relevance in markets 10 – 20 years from now rather than in today's context as the whole sector is changing rapidly.

As the various global scenarios demonstrate, how the sector evolves will depend upon how the various scenarios play out. At present parts of all three are in play and impacting differently in different parts of the world.

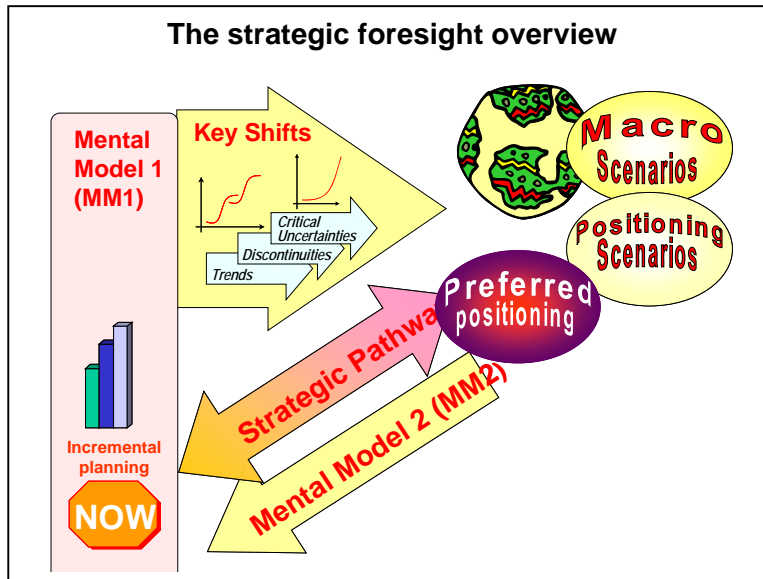
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10 APPENDIX 2: GLOBAL FORESIGHT OVERVIEW

To develop a context for the creative sector and the opportunities it may offer to T&T economically and socially, we first need to look at the global picture of the sector – the trends, players and positioning, then develop scenarios which relate to the T&T situation within that global picture, and then a way of determining the strategic positioning T&T might take to exploit opportunities the sector offers.

Figure 11: The overarching strategic foresight framework



A key part of developing an understanding of how the global picture is being shaped is by knowing the meta-trends that are driving change. We call these the 7 Tsunamis of Change. These global drivers are shaping the future of our lives, of markets, of business, of the world we live in. The Tsunamis are changing the landscape within we will operate – destroying some things, changing other things, causing new things to be build in their aftermath.

Figure 12: Meta-trends – The 7 Tsunamis of Change

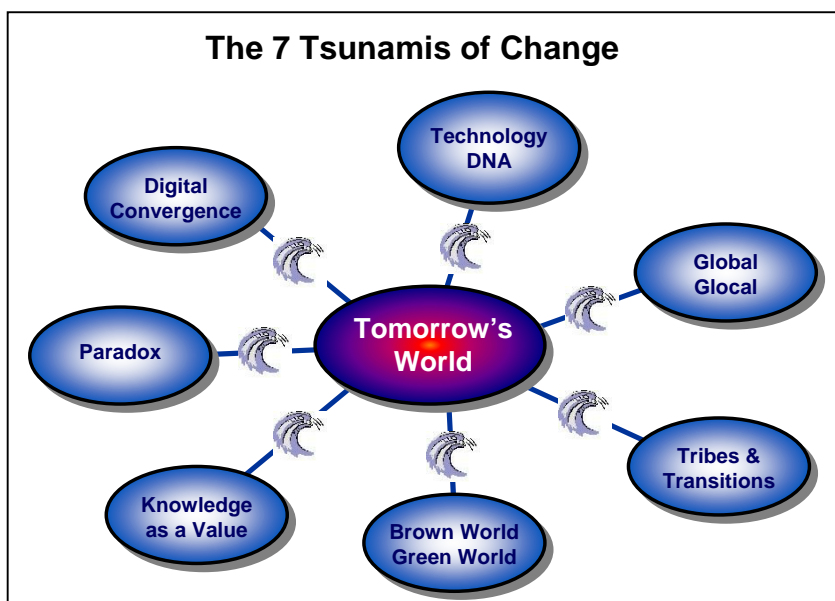


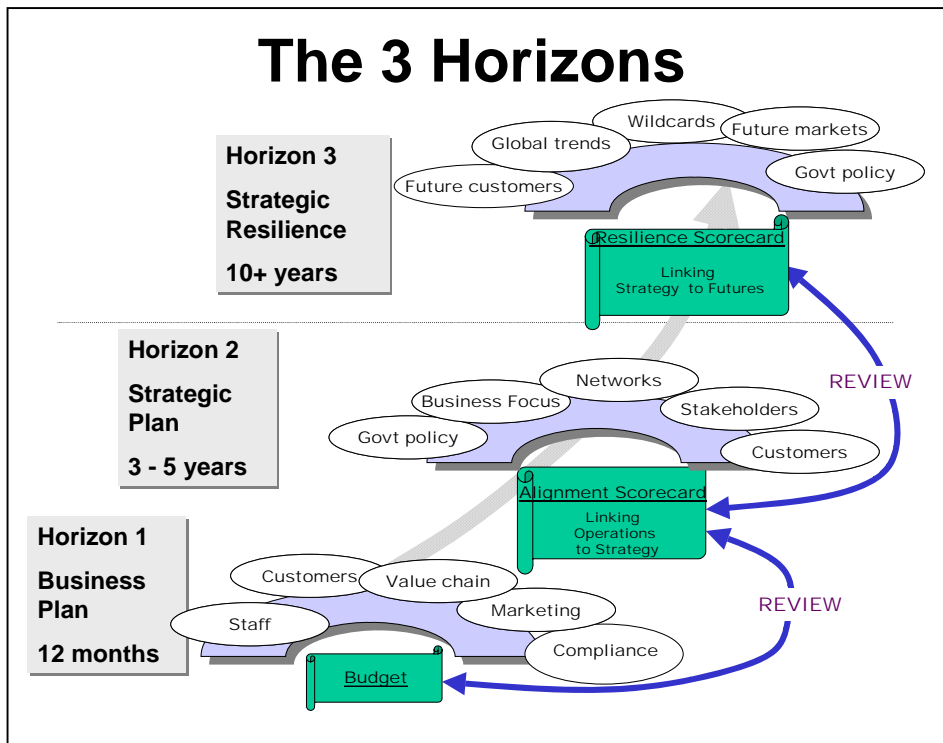
Table 7 provides a brief overview of the areas each Tsunami is driving.

Table 7: Areas where each Tsunami of Change is impacting

TSUNAMI	CHARACTERISTICS
<i>Digital Convergence</i>	<ul style="list-style-type: none"> • Chips in everything • Total interconnectivity • Virtuality
<i>Technology DNA</i>	<ul style="list-style-type: none"> • Biological/technological convergence • Cumulative innovations • Re-shaping of life itself
<i>Global Glocal</i>	<ul style="list-style-type: none"> • Global village • Cultural convergence • Biggest or most unique
<i>Tribes & Tribulations</i>	<ul style="list-style-type: none"> • The digital divide • Tribalism • Changing lifestyles / work styles
<i>Brown World, Green World</i>	<ul style="list-style-type: none"> • Climate change • Resource productivity • Water, air, energy
<i>Knowledge as a Value</i>	<ul style="list-style-type: none"> • Hierarchy of knowledge and value • Knowledge management • Consumer Power
<i>Paradox</i>	<ul style="list-style-type: none"> • Unexpected effects • Living with degrees of grey versus black and white • Solutions take opposites into consideration

The long-term views we develop through foresight help us develop a picture of how a business Horizon 3 may look 10 – 20 years from now – which is often quite different to how it looks today. This horizon helps us understand the future destination we wish to aim for – the desired scenario. By backcasting from Horizon 3 we can then develop a 3 – 5 year strategic plan (Horizon 2) and then a short- term business or implementation plan (Horizon 1) – see Figure 13. By taking this approach, commercialisation of opportunities discovered during the research and evaluation process is made within a long-term context.

Figure 13: The three business Horizons



There are a number of tools and processes that can be used to help shape Horizon 3. These include foresight research, the PESTE analysis, scenario development (for the global sector), developing a view of the long-term destination for the sector and country, and then local scenarios that provide a framework for decision making.

Figure 14: Tools and processes for developing a Horizon 3 perspective

