

Toi Mai Workforce Development Council

UNDERSTANDING BARRIERS TO SUCCESS FOR TOI MAI SUB-SECTORS

Research report | April 2024





Contents

Introduction	3
Executive summary	5
The structural characteristics of thriving industries	7
Toi Paho - Broadcast and Screen Industry	14
Toi Ora - Sports and Recreation Sector	21
Toi Whanui - Enabling technology industry	29
Toi ā-Ringa - Art and design sector	36
Toi Puaki - Expressive Arts Sector	41
Toi Māori - Taonga works and the oral arts sector	48
In Conclusion	56
References	59

Disclaimer

Research First Ltd notes that the views presented in the report do not necessarily represent the views of Toi Mai Workforce Development Council. In addition, the information in this report is accurate to the best of the knowledge and belief of Research First Ltd. While Research First Ltd has exercised all reasonable skill and care in the preparation of information in this report, Research First Ltd accepts no liability in contract, tort, or otherwise for any loss, damage, injury or expense, whether direct, indirect, or consequential, arising out of the provision of information in this report. Please note that due to rounding, some totals may not correspond with the sum of the separate figures.



Section 1

Introduction



Within each of their subsectors, Toi Mai recognises a need to both understand the structures currently in place and to identify the most challenging barriers and gaps. This scope covers; policies and legislation, government and local authority funding, national-level strategies in place (or required), qualifications and career pathways to develop a skilled workforce, research and development focus, technology adoption and international collaboration.

Toi Mai's existing data/statistics is fragmented, and poor data capture makes it difficult to identify the problems and extent of impact across subsectors. Research First was commissioned to conduct a review of thriving NZ industries, to help Toi Mai identify their own industry gaps. The project provides a baseline understanding of problems in the sector and identifies specific or priority issues at a subsector level, enabling strategy development towards improved outcomes. The research provides a literature review that will support further data analysis and qualitative research conducted in-house by Toi Mai.

1.1 Research method and objective.

This study comprises a literature review, including grey literature (i.e., white papers, press releases, and government strategy reports), retrieved from open sources.

Several key factors and structures employed by thriving industries are discussed in the context of New Zealand. The report then discusses Toi Mai sub-sectors vis-à-vis these characteristics. Features unique to NZ industries are highlighted and the government's role in helping successful industries is also addressed through the research.



Section 2

Executive summary



Research First, on behalf of Toi Mai, undertook this research to understand the barriers to thriving for its six key sub-sectors:

- Toi Pāho Broadcast and screen
- Toi Ora Sports and recreation
- Toi Whānui Enabling technologies
- Toi ā-Ringa Art and design
- Toi Puaki Expressive arts
- Toi Māori Taonga works and oral arts.

Studying the Toi Mai industries against the thriving industries in New Zealand such as agriculture, tourism, and education, reveals some common barriers that hinder the growth of these sectors. These mainly include:

- · geographical isolation and smaller market size
- less government funding and support
- · lack of policy supporting industry growth and skill development
- lack of skilled workforce, workplace training and unsupported career pathways
- · lack of international collaborations

The report also highlights various structures and policy support countries such as Australia, Canada, and the UK provide to these industries. The government financially backs the industries in these countries and offers them regulatory support. Notably, geographical proximity largely influences these differences, leading to greater access to more significant markets and facilitating technological exchanges.

Learnings from our thriving industries suggest that Toi Mai industries need to rethink and restructure their business models. A more robust and resilient model, with diversified revenue streams, is the key to sustainability. Opportunities include:

- Leveraging emerging technologies such as automation, Al, and the Internet of Things
- Investing in research and development in collaboration with research institutes and universities
- · Adapting to the evolving consumer needs and preferences
- More support from the government and local bodies
- · Expanding global reach
- Diversifying revenue streams by exploring different methods and platforms for service delivery.

Above all, New Zealand's indigenous Māori culture provides a unique value proposition that industries can offer as part of their service offerings.



Section 3

The structural characteristics of thriving industries



Thriving industries typically exhibit several structural characteristics that contribute to their success. These characteristics vary across industries, but collectively, they contribute to the vitality and sustainability of booming sectors.

Thriving industries often serve markets with growing or stable demand. This can be driven by changing consumer preferences, technological advancements, or other factors.
To be sustainable, sectors need to generate revenue, jobs, and infrastructure and contribute to the country's economic development. Ensuring a higher return on investment results in more government support and funding, further enhancing returns.
Thriving industries are usually at the forefront of innovation, continuously developing new products, services, or technologies to stay competitive and meet evolving customer needs.
Many thriving industries are global, serving customers and partners worldwide.
Healthy competition is a common trait of thriving industries. It encourages innovation and efficiency, ultimately benefiting consumers.
The level of regulation can vary, but thriving industries often strike a balance between necessary regulation to ensure safety and fairness and the freedom to innovate and grow. In a paper published by MIT (Daron & James, 2004) titled "Institutions as a Fundamental Cause of Long-Run Growth", the role of institutions, such as property rights, the rule of law, and political stability, has been highlighted.
Thriving industries often have access to sufficient capital through venture capital, public markets, or other financing options, allowing for research, development, and expansion investments. Government funding and support of local bodies play an essential role in their survival and growth.
New jobs that have replaced old ones due to emerging technologies need a more skilled and mature workforce. In its paper titled, "From brawns to brains, the impact of technology on jobs in the UK", Deloitte has discussed how the UK has benefitted from its highly skilled workforce enabling businesses to transform through the uptake of modern technology. The tech workforce makes up 6.3% of the total employed workforce in the UK.
In its paper, "Getting serious about diversity", Harvard Business Review, "Dec.2020, delves into the need for a culturally and gender-diverse workforce. This would create resources for learning and build a more equitable environment. By improving their performance, diversity has benefited more stable and prosperous industries, such as banking.



Supply Chain Resilience and business adaptability

Resilient supply chains are vital for thriving industries, allowing for uninterrupted production and delivery of products and services.

Rapid urbanisation, resource depletion, political conflicts and natural catastrophes, and technology disruptions are some of the biggest destabilising factors industries face today, the biggest being global connectedness. Joseph Fiksel, in his 2015 book, 'Resilient by Design", suggests that businesses should be able to adapt to the changing world by restructuring their business model instead of resisting change. Enterprise resilience combines four systemic attributes, as shown in Fig.1.

Efficiency, Productivity and Sustainability

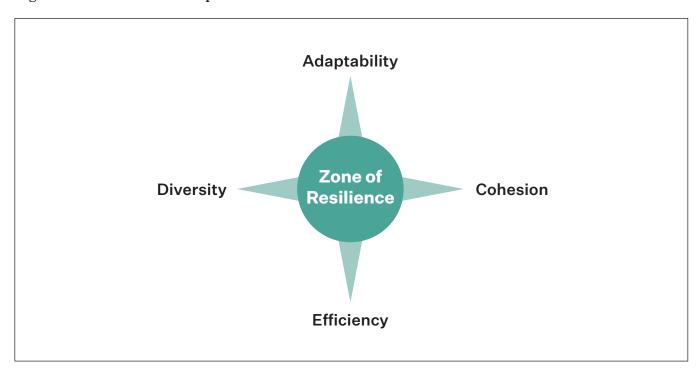
Thriving industries often focus on efficiency and productivity improvements to reduce costs and enhance competitiveness.

Many thriving industries increasingly focus on sustainability, considering environmental and social impacts, which can significantly drive long-term success.

Adopting a collaborative approach

The thriving industries are part of a broader ecosystem that includes suppliers, partners, and customers, fostering collaboration and mutual growth.

Figure 1: Attributes of enterprise resilience



Source: Resilient by design (Fiksel,2015)



3.1 New Zealand's identified thriving industries.

New Zealand has several thriving industries, including agriculture and agribusiness, tourism, forestry and wood products, wine and food production, and education. In their 2017 report titled, "Shaping our slice of heaven: Industries of opportunity", Deloitte has identified five industries at the heart of New Zealand's prosperity map that would show above-average growth over the next twenty years. These include:

- 1. Agribusiness
- 2. Tourism
- 3. Food processing
- 4. International Education
- 5. Advanced manufacturing.

These industries, they argued, would benefit both from global growth and national advantage, although recent experiences with COVID-19 revealed some vulnerability in tourism and education sectors.

While technology was not specifically mentioned, it has an implicit role in NZ Agritech innovation, food processing and manufacturing and has arguably shown broader significance since Deloitte's initial report.



3.2 Structural characteristics of thriving industries in New Zealand

This study analysed a few of these thriving industries in New Zealand. These included dairy, forestry, tourism, and education. The following section discusses the findings on the factors that have contributed to the survival and growth of these thriving industries in New Zealand.

1. Export Focus

Dairy, sheep, beef, and tourism were identified as the top export earners. A strong focus on international trade and exports allows these industries to access global markets, expand their customer base, and diversify revenue sources.

The dairy industry alone generated \$26 billion in exports in 2023 (25% of the total export value), registering a growth of 45 per cent over the last five years. It employs 55,000 people in NZ and acts as a "shock absorber" for regional communities in volatile times (DCANZ, 2023). Its strong export orientation and connections with international markets enabled this.

2. Government funding, Investment, and regulations

Thriving industries benefit immensely from government support through incentives, regulations and policies that facilitate growth and development.

- Agricultural policies and frameworks such as the Integrated Farm Planning Guide (2021) that advises on animal disease control and biosecurity issues, transfer of agricultural knowledge and information systems, and relief payments to farmers and growers in the event of natural disasters such as droughts, are all examples of steps and interventions that New Zealand government takes to safeguard and promote the industry.
- The Free Trade Agreement (FTA) announced in October 2021
 between New Zealand and the UK is a step towards improving market access for the agriculture sector.
- Another example is tourism, which sees government investment in infrastructure, transportation, and promotion through the Tourism Infrastructure Fund (TIF), contributing to its success.

3. Innovation and Research

Thriving industries, and the NZ government, invest heavily in research and development (R&D) and innovative practices, fostering a culture of continuous improvement and adaptation to changing markets. Dairy NZ, Plant and Food research, Education New Zealand, Scion, and Tourism New Zealand are some of the crown entities that enhance the value and productivity of their respective industries through their scientific work. These industries are adaptable and responsive to evolving technology.



Agritech, an essential input to the thriving primary industry, has been prioritised under the government's refocused industry policy.
Setting up an Industry Transformation Plan (ITP) to examine how digitization can improve outcomes for the primary industry while navigating the climate change pathways is a step forward (MBIE, 2019). Advanced technologies such as AI, the Internet of Things, and other end-to-end solutions are being explored and endorsed behind the farm gate and the whole food value chain (www.aiforum.org.nz).

These steps by the government clearly indicate the government's increased focus on innovation leadership, thereby propelling these sectors.

4. Role of infrastructure

Infrastructure plays a vital role in the prosperity of these industries. Due to the economic importance of the thriving sectors such as education and tourism and their dependence on an enhanced infrastructure, the government supports Councils and local communities through infrastructure funding. This enhances the experience of visitors and other users and helps attract international students to boost the sector.

5. Adapting to changing consumer needs and purchase behaviour

Consumer needs and buying behaviour have evolved. Consumers are now looking beyond price, taste, and convenience, making health and wellness a primary driver in purchasing (Deloitte, 2017).

- Thriving industries have aligned themselves with the global demand for eco-friendly and ethically produced goods. Food processing is an example of this, where sustainable and ethical production practices, eco-labelling and healthy foods are now a focus.
- Covid saw NZ technology companies taking centre stage in enabling tertiary education providers to deliver online programmes to domestic and international student bases. The Edtech sector contributed immensely to NZ's economy and helped many organisations survive.

These examples substantiate that adapting to changing times and consumer needs results in increased resilience through challenging periods.

6. Comparative advantage

New Zealand has a global reputation for producing high-quality goods and services. To leverage its reputation worldwide, many booming New Zealand industries, such as agribusiness food processing, prioritise high-quality products and sustainable practices.

 100% Pure New Zealand, regarded as one of New Zealand's most successful branding campaigns, is a logo used in local industries to highlight the authenticity of their products.



7. Collaboration and Networking

Companies in these industries often benefit from collaboration with research institutions, government agencies, and international partners to foster innovation and growth.

- Collaboration between NZ and China's governments has further strengthened sectors such as forestry. This has resulted in an exchange of technical knowledge, furthering forestry exports to China and improved environmental outcomes (Press release, June 2023).
- Recognising the need for networking in industries such as agriculture, there are ongoing discussions about harnessing social media platforms. Networking amongst farmers would allow knowledge transfer, consumer engagement, and crisis communication.

8. Cultural and Environmental Branding

New Zealand's cultural and environmental values are often integrated into branding and marketing efforts to attract customers who appreciate these characteristics.

- Māori culture is unique to New Zealand and there is high demand for cultural experiences in the international market. The latest campaign by Tourism New Zealand, "You Seek", is one such attempt to pull back its' tourist base. The campaign puts Māori culture at the forefront and showcases NZ's potential adventures. This unique feature has helped industries such as tourism.
- Businesses in thriving industries are prioritising sustainability and investing in sustainable technologies by adopting eco-friendly technologies. They have capitalised on a clean and green environment image and branding while creating initiatives in that direction.

While these industries share specific structural characteristics, each sector has unique elements and challenges contributing to its success in the New Zealand economy. Adaptability and a focus on quality and sustainability are key factors that drive these thriving industries.

The following section discusses various sub-sectors of Toi Mai, where they are currently, and identifies the gaps in thriving industries. Learnings from countries like Australia, Canada and the UK are also shared.



Section 4

Toi Paho - Broadcast and Screen Industry

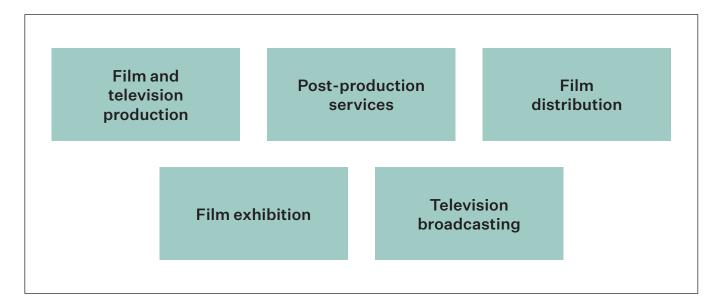


New Zealand's unique landscapes make it a premier location for screen production. Besides promoting other industries, such as tourism, the broadcast and screen industry directly boosts the country's economy by generating revenue and jobs across the spectrum, as illustrated in Fig. 2 below. As per the latest statistics, the gross revenue from the broadcast and screen industry was \$3.3 billion, generating employment for 16,200 people (Stats NZ, 2017).

New Zealand's broadcasting industry is also uniquely committed to promoting Māori language and culture.

There is a dedicated Māori television channel, Te Reo, to preserve and revitalise the Māori language. In addition, New Zealand has a strong focus on local content, fostering a sense of national identity in its broadcasting landscape. The public broadcaster Radio New Zealand (RNZ) is crucial in providing independent and diverse news coverage, distinguishing it from many other countries.

Figure 2: Composition of the broadcasting and screen industry in New Zealand





MAJOR PLAYERS AND MARKET CONCENTRATION

The New Zealand broadcasting market has a degree of concentration, with a few major players dominating the industry. Public broadcasters like TVNZ (Television New Zealand) and RNZ (Radio New Zealand) hold significant positions. Then, there are others like MediaWorks and Sky Network Television, which also play a crucial role, particularly in the pay-TV sector.

While these companies have substantial influence, there is still room for smaller players and independent media outlets, contributing to diversity in content and perspectives. The concentration level may vary across different segments of the broadcasting industry, but it can be considered moderate overall.

4.1 Barriers to thriving in the broadcasting and screen industry

The broadcast and screen industry, which includes television, film, and digital media, faces several barriers to thriving. These barriers vary with technological advancements, market dynamics, and cultural shifts. The major barriers facing the industry are:

1. Market Size and Scale:

The relatively small population of New Zealand limits the market size, making it challenging for broadcasters to achieve economies of scale and significant advertising revenue that broadcasters mainly rely on for their income. Economic fluctuations and changes in advertising spending patterns adversely impact the industry.

2. Funding and Resources:

The New Zealand Screen Production Grant (NZSPG) was introduced in the year 2014 (critical elements in Fig.2), with the overarching objective to –

"Encourage New Zealand screen businesses to develop resilient business models by, for example, generating and controlling New Zealand-owned intellectual property (IP) and developing technology and innovation that are hard to replicate" (MBIE, 2018).

The grant, overseen and administered by NZFC on behalf of MBIE and the Ministry of Culture and Heritage (MCH), is a rebate offered to screen productions. It fosters regional industry and local talent.

A regular review of the economic impact of the grant reveals that it has boosted expenditure and growth in international production and generated 17,600 FTEs in the industry (OLSBERG SPI, 2022).

16



In a 2018 assessment by Sapere Group, commissioned for MBIE and MCH, significant growth was reported in the grant. The mixed method approach highlighted that the grant has resulted in domestic businesses/ proprietors expanding overseas. This has also increased the focus on research and development and more innovations.

Figure 3: Key elements of NZSPG

NEW ZEALAND SCREEN PRODUCTION GRANT: KEY ELEMENTS	
Value	Up to 40% of QNZPE for domestic, 20% (up to 25% with additional 5% Uplift) for international
Туре	Applicable to above and below-the-line expenditure (international, post-production, digital, and visual effects grant available)
	NZ\$6 million
Сар	Additional grant for productions meeting additional criteria and have QNZPE NZ\$15 million to NZ\$50 million

Source: www.nzfilm.co.nz

A more significant finding of this report was that it pointed out that the industry cannot sustain itself without the grant. Compared to more significant entertainment hubs like Hollywood, the industry faces challenges securing funding and resources for new projects. Competitiveness in costs is critical to attracting international projects. Given these facts, the government must continue supporting the domestic players.

3. Digital Disruption and Consumer Expectations:

Digital platforms and streaming services challenge traditional broadcasters. The industry needs heavy investment to adapt to changing consumer behaviour and technological advancements. New interactive and immersive content experiences, like virtual or augmented reality, are emerging.

There is also a growing demand for personalised experiences and services. Many digital platforms utilise data analytics to understand viewer preferences and recommend personalised content. Traditional broadcasters lag in effectively leveraging data to enhance user experiences and content relevance.

Adapting monetisation strategies to the digital landscape can be challenging. While advertising remains a significant revenue stream, balancing advertising and subscription-based models requires strategic planning.

The broadcasting industry might face survival challenges if it does not keep pace with these innovations and provide engaging, cutting-edge content.

17



4. Regulatory Environment and Content Piracy:

The industry faces constraints due to regulations. Striking a balance between cultural preservation and commercial viability is an ongoing challenge. Contracting accounts for half of the earnings and more than a third of the workforce employed in the screen sector (Stats NZ, 2018). It poses a problem when securing IP as the rights move with the person.

Intellectual property theft and content piracy can thus significantly impact the industry's revenue and profitability.

5. Limited Local Production and Increased Competition:

While New Zealand is known for its contributions to international film productions (e.g., "The Lord of the Rings" series), the domestic production scene may not be as extensive as in some other countries. A limited number of local productions can impact the industry's output and growth.

The global availability of digital content has resulted in more competition from domestic players and international streaming services. This requires continuously enhancing content quality and variety.

Lack of availability or access to state-of-the-art infrastructure and production facilities can make competing with international products more complex and costly.

6. Diversity and Inclusion:

The industry has faced criticism for its lack of diversity in content and inclusion of various ethnic groups and genders, which can hinder its ability to resonate with diverse audiences. NZ On Air Diversity report (2016) points at gender and ethnicity imbalances, as evidenced in Pākehā being overrepresented in all roles and an under-representation of Asians. Women were found to be the most under-represented in the industry1.

Local and international audience preferences can influence the types of content that gain popularity, and these preferences may not always align with the local industry's strengths in presenting New Zealand's local content. These factors have a far-reaching impact on the industry's productivity, thus impacting its sustenance.

^{1 &}lt;a href="https://www.nzonair.govt.nz/news/new-report-diversity-screen-production-highlights-gaps/">https://www.nzonair.govt.nz/news/new-report-diversity-screen-production-highlights-gaps/



7. Talent Drain and Labour Issues:

New Zealand's talent pool may sometimes migrate to larger entertainment markets, such as the United States or the United Kingdom, in search of more significant opportunities, potentially impacting the growth of the local industry. Labour disputes, union regulations, and the need to meet the demands of skilled workers can be challenges for production companies.

8. Impact of External Events:

External events like the COVID-19 pandemic have disrupted Production and distribution, affecting industry growth. The impact was felt more strongly by the not-so-thriving broadcasting and screen industry.



4.2 Learnings from Australia and Canada

1. Diversification of content

Both countries have focused on diversifying their broadcasting content and have incorporated local and international programming. New Zealand could learn to balance local content with global offerings to cater to a broader audience.

2. Investment in technology

The countries have embraced technological advancements from streaming services to digital platforms to adapt to changing consumer behaviour. New Zealand needs to learn from them and adapt to the trends.

3. Support for Indigenous content

Australia and Canada are actively working on promoting indigenous content on broadcasting platforms. The Aboriginal People Television Network (APTN), launched in 1999, was Canada's first independent broadcaster offering programmes about Aboriginals in Canada and worldwide. This was possible with government support and indigenous activism. Broadcasters like CBC/Radio Canada often collaborate with indigenous creators like APTN and Canada's indigenous screen office.

Taking cues from them, New Zealand can also voice the stories of its indigenous communities. Diversifying and presenting unique indigenous content would bring more global viewership and awareness and further industry investment opportunities.

4. Public broadcasting and funding models

The funding models in these countries support public broadcasting and ensure diversity and quality content.



4.3 In Conclusion: International collaboration is key

Research suggests that the New Zealand government's support to the screen industry, primarily through funding, has resulted in progress. However, more support is needed.

New Zealand can benefit immensely from collaboration with international screen productions by leveraging its picturesque views, indigenous culture, and local talent. This collaboration can help NZ showcase its content globally and create access to a broader audience. The skills acquired through international projects also improve the quality of domestic production.

Navigating these challenges requires strategic innovation, adaptability, and a keen understanding of changing consumer preferences. Broadcasters must invest in digital technologies, understand audience preferences, and explore innovative content delivery models to enhance survival prospects. Adapting to changing consumer habits and technological advancements is crucial for the industry's sustainability.

Fostering local talent, securing international partnerships, and adapting to changing audiences and market dynamics can help overcome some of these challenges and contribute to the industry's growth over time.



Section 5

Toi Ora - Sports and Recreation Sector

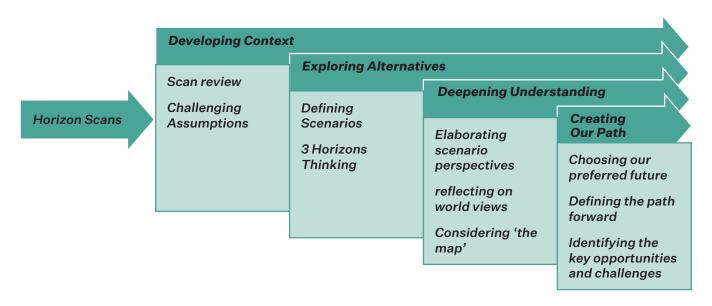


New Zealand's sports and recreation industry has contributed significantly to its economy. This includes employment generation and consumer spending through fitness centres, entities in coaching, sports tourism, event management and other related services.

Sports New Zealand (the Government Agency for Sport and Recreation) has a clear vision of getting "Every Body Active" in Aotearoa, New Zealand. Through 'Towards 2032 -Strategic Direction', its Te Tiriti commitment statement as the guiding principle, it has recognised the need to shift from the current risk-averse and conservative nature to a more future-looking approach.

In a four-phased research project commissioned by Sports NZ (2023) involving thought leaders from the sports and recreation sector and the Māori population, drivers of change and possible challenges in the future were identified (Refer to Fig 3 below). An immediate action that was proposed was working in collaboration with the local leadership, involving Māori community, and building a strong network.

Figure 4: Research phases



Source: https://jfsdigital.org/articles-and-essays/2023-2/vol-28-no-1-september-2023/the-future-of-sport-and-recreation-in-new-zealand/



MARKET CONCENTRATION

The market does not exhibit the level of concentration seen in larger countries such as Australia and Canada. Also, the market is highly fragmented. Market concentration can vary across different sports and aspects of the sports industry, such as equipment distribution, broadcasting rights, sponsorships, and merchandise sales.

In a report titled "The Economic Value of Sport and Outdoor Recreation to New Zealand" (AERU, 2014), the industry has been classified into the following categories

- Producers of sports and recreation goods and services (including domestic production as well as imports and exports)
- Providers of sport and recreation infrastructure mainly central, local, and private government, recreation clubs
- Promoters of sport and recreation to spectators and supporters (includes merchandising, broadcasting, accommodation and hospitality, clothing, and international tourism.

5.1 Support for sports and recreation businesses in New Zealand

The sports sector in New Zealand plays a significant role culturally and socially, contributing to the national identity. While it may not be as economically dominant as some other sectors, such as agriculture and tourism, the sports industry's cultural significance, community engagement, and the promotion of health and well-being contribute to the overall quality of life in New Zealand. Each sector plays a unique role in the country's economic and social landscape, and their importance can vary based on different criteria, including economic output, employment, and cultural influence.

New Zealand has several structures and support mechanisms that aid businesses in the sports and recreation sector. These include:

- In February 2023, the government provided financial assistance to help sports and recreation organisations recover from the losses they incurred during COVID-19 (press release, www.beehive.govt.nz).
- Charitable organisations such as Recreation Aotearoa (www.nzrecreation. org.nz) focus on building capability and networks within the recreation workforce and advocate for investment in recreation and a skilled workforce.
- Several Councils across the country have outlined the need and initiatives
 to create and maintain open spaces, swimming pools, community halls,
 libraries, sports fields, and other recreation facilities for their residents as a
 critical part of their future strategy.
- This also comes from respecting the Tiriti of Waitangi and Māori values, for whom land is Taonga (a treasure), must be taken care of and used judiciously.



5.2 Gaps become apparent compared to other thriving industries.

1. Funding and Investment:

Aligning its investment with its strategic priorities, Sports NZ has partnered with communities and public and private organisations to enable active recreation and sports opportunities in the communities. **The National Facilities Strategy** supports developing facilities for various sports in New Zealand. **The Sporting Facilities framework by Sports NZ**, which provides guidelines and investment to organisations making decisions around creating such facilities in the region, is another step in this direction.

So, while funding opportunities and grants are being offered to organisations working in the sports and recreation sector, the level of financial support is not as robust as is in some other industries. Sectors like agriculture receive more investments and support due to their economic importance, creating a gap in access to sufficient capital for growth, particularly for smaller or newer businesses.

2. Innovation and Technology Adoption:

Thriving industries invest heavily in innovation and technology. Some technological innovations, mainly in performance improvement, are finding a place in the NZ sports industry, but the adoption is slow-paced. There are gaps in consistent support for technological advancements and innovation, which affect competitiveness and growth.

3. High competition:

The market for recreation businesses, particularly health and fitness, is huge in New Zealand, but so is the competition. The fitness industry alone employs close to 5000 people employed by large club chains or standalone operators. The industry has a high customer churn, so businesses often compete for customers. In its review of the fitness industry, the New Zealand Institute of Health and Fitness (NZIHF) emphasises that these businesses can thrive if they offer a unique selling proposition and are well set up and staffed.

4. Marketing and Branding:

Unlike other sectors, there are gaps in marketing strategies and branding initiatives for businesses within the sports and recreation industry. This could impact visibility, market reach, and the ability to attract sponsorships and partnerships.



5. Policy Alignment and Long-Term Vision:

Thriving industries like agriculture and allied industries benefit from long-term government vision and policy frameworks. In comparison, the legislations and organisations in the sports and recreation sector are relatively new and face gaps in consistent, long-term strategic planning and policy alignment to foster sustained growth and innovation.

6. Education programmes and learning pathways:

The availability of a skilled workforce plays a key role in sustaining businesses within sports and recreation. Polytechnics, universities, and private training establishments in New Zealand offer Level 3 and 4 certificate programmes, such as that for fitness trainers/ apprenticeship and sports management, amongst others. These courses create a pool of trained professionals for sports and recreation businesses. Institutes like the New Zealand Institute of Sport have joined with Let's Play Live, a gaming organisation to offer esports courses. This is another step towards catering to a different market that needs trained analysts, referees, player management and personal trainers (www.nzis.co.nz). However, the number is insufficient to cater to the industry's needs.

7. Cultural significance:

With the passing of the Physical Welfare and Recreation Act of 1937, a shift was seen from sports and recreation being seen as the responsibility of individuals to that of the government. The legislations from Hillary Commission (1995-2001) to Sports and Recreation NZ (Sparc, 2002-08) and eventually setting up Sport NZ in 2002 suggest the government's growing acknowledgement of the vitality of sports and recreation in New Zealand's physical and mental well-being.

Addressing these gaps could require a more concerted effort to increase funding and investment opportunities, prioritise technology and innovation, enhance infrastructure development, improve marketing strategies, invest in workforce development, and ensure long-term policy frameworks aligned with industry growth goals. Closing these gaps further bolsters the growth and development of the sports and recreation industry in New Zealand, bringing it closer to the standards set by other thriving sectors within the country.



5.3 Learnings from abroad

AUSTRALIA:

Supporting its sports industry is a key focus area for the Australian government. The following highlights that:

1. Research and development in sports medicine:

Australia's Sport strategy, 2030, outlines an action plan to support its thriving sport industry. A primary focus of this strategy is to initiate and facilitate research and development in sports science and medicine. The emphasis is on developing an industry-led approach supported by government, university, and research stakeholders.

2. Organizing international events:

The Australian government has been promoting itself as a host for international events such as the Commonwealth Games and the Olympics. As a long-term strategy, enhancing its reputation will bring investment, further accelerating the growth of the sports industry. Though New Zealand does this to some extent, it falls short of the infrastructure required for bigger events. Partnering with Australia on more significant events can allow the industry to thrive.

3. Programmes in partnership with the sports industry:

Sporting organisations are vital in delivering various government sports programmes. The Pacific Sports Partnerships (PSP), Australia's flagship Sport for Development Program, is delivered through partnerships between sporting organisations and the Department of Foreign Affairs and Trade.

CANADA:

Post-pandemic, Canada has focussed on developing facilities to promote an active, healthy, and inclusive lifestyle. To that end, it has supported many nationwide recreational and sports infrastructure projects, aiming to have safe and modern facilities.

Some organisations and programmes support businesses through funding and provide advisory and networking opportunities. The major ones are:

- · Sports Canada, a federal government body, funds businesses.
- The Business Development Bank of Canada offers financial and advisory services.
- Sports support programmes that offer federal, provincial, and municipal funding.
- The Investing Canada Infrastructure Program (ICIP) is one programme through which the federal government invests in recreational infrastructural projects across provinces.



- Innovation hubs and incubators that support technology-developing businesses.
- Some examples are sports industry associations and networks, such as the Canadian Olympic Committee and the Canadian Sport Tourism Alliance.

THE UNITED KINGDOM:

The UK also has several structures to support businesses within the sports and recreation industry. The major ones are:

1. Funding and support from the government:

Organisations such as UK Sport, Sport England, and Innovate UK offer funding to businesses involved in sports-related technology, innovation, and infrastructure.

- Businesses developing sports-related technology, equipment, and services leverage the expertise of these organisations.
- The British Association for Sustainable Sport (BASIS) aids businesses that can provide UK sports teams with green technologies and sustainable practices.

2. Sports Technology Innovation Hubs and R&D:

The UK has a large tech talent pool and has achieved the highest number of Sports tech startups in Europe (Department for Business & Trade, 2023). These startups are supported by innovation hubs and accelerators, such as Sports Tech Hub by London Sport, for mentorships and networking opportunities. Over the past few years, Sports Tech Hub has helped 31 startups by providing product validation and scaling production. Institutions such as the English Institute of Sports (EIS) and universities across the UK are bolstering the UK's research and development capacity to improve athletes' performance.

3. At the forefront of sports technology:

The UK hosts many tech companies and is an early adopter of immersive technologies like AR and VR, which have changed how viewers interact with sports. New transactional methods such as cryptocurrency, blockchain, and non-fungible tokens (NFTs) have opened new avenues of interaction and working. Fully leveraging on 5G, the UK has upped its game by delivering next generation viewing experiences to its spectators through Project Vista. Research and development in leading UK universities is an attractive global investment by joining hands with tech giants and further advancing technology uptake in sports.



4. Trade Association and Networks:

Organisations such as UK Active, Sport and Recreation Alliance and the Sports Industry Group provide networking opportunities to the businesses within this industry.

5. Local Business Support Initiatives:

Small businesses are supported by local and regional authorities through grants, advice, and networking events.

6. Tax incentives and Grants:

Businesses investing in sports-related research, development or community-focused initiatives are incentivized through R & D grants and tax credits.

5.4 Where is New Zealand falling short in this international context?

Compared to Australia and Canada, New Zealand's sports sector faces some unique challenges:

1. Market Size:

Australia and Canada have larger populations than New Zealand, providing a broader audience base and potentially attracting more significant investments and sponsorships. The overall size and revenue of the sports industry in Australia and Canada are more significant, allowing for more extensive investment in marketing, broadcasting, and sports-related businesses.

2. Diversity of Sports Culture:

Australia and Canada have diverse sports cultures, including a wide range of popular sports, providing more business opportunities.

3. International Exposure:

Geographical proximity and larger populations increase international exposure, attracting global attention and business opportunities.

4. Professional Leagues:

Australia and Canada often support multiple professional leagues across various sports, offering businesses within sports more avenues for development.

5. Promoting R&D in universities:

Taking cues from the UK, New Zealand needs to invest in R&D in sports technology in universities. Tie-ups with businesses offering grants and tax rebates should also be considered.



5.5 Conclusion

Despite all the challenges, New Zealand has a strong sporting culture and excelled in sports like rugby, cricket, and yachting. To enhance the thriving of the sports industry, efforts to invest in infrastructure, support and retain local talent, and promote sports participation and spectatorship can be valuable. Collaboration with international sports organisations and expanding the global reach of New Zealand sports can also contribute to growth.



Section 6

Toi Whanui - Enabling technology industry



As the name suggests, enabling technologies are tools and technologies that enable and improve user capabilities. The players operating in the emerging technology landscape, such as automation, artificial intelligence, virtual reality, internet of things, and software as a service, face several barriers to thriving. These barriers can impact innovation, growth, and competitiveness in the sector.

In a report by the Technology Users Association of New Zealand (TUANZ), titled "Aotearoa's Digital Priorities in 2022", New Zealand has been ranked 42nd worldwide for access to technology. It falls behind countries like Australia by several places.

Considering the current situation, it becomes imperative to understand what challenges are impacting the sustenance of the organisations in technology and what a conducive environment for them would look like.

6.1 Barriers to Thriving for the Enabling Technology Industry in New Zealand

1. Access to Skilled Workforce:

There is a digital skill gap in New Zealand that mainly relies on immigration to fill up tech roles. Attracting and retaining highly skilled engineering and software development talent is essential but comes at a cost and can be competitive.

Other countries offering better growth opportunities to the digital workforce and low levels of investment in upskilling the existing staff in NZ make it less attractive to the talent.

The lack of proper career pathways from education catering to the industry's needs also acts as a barrier.

2. Global Competition and Research and Development Costs:

Technology companies compete globally, facing competition from international firms and navigating various regulatory environments.

Developing cutting-edge enabling technologies often requires significant investments in research and development, which can be a barrier for smaller companies and startups. Their reliance on complex global supply chains, makes them vulnerable to disruptions, as seen during events like the COVID-19 pandemic.

3. Rapid Technological Change and Dependencies:

The fast technological advancements can make it challenging to stay at the forefront of innovation and keep existing products and services relevant. Enabling technologies often depend on other technologies and infrastructure. Changes or issues in these dependencies can affect the industry.



4. Intellectual Property Protection and Regulatory Hurdles:

Protecting intellectual property is critical, but it can be costly and complex to defend against infringement and piracy. Also, while it is imperative to adopt technologies such as Al to improve business efficiencies, there is an increasing concern about data accessibility, security, and privacy which call for regulations to protect consumers' rights.

There is a need to review the legal implications of these technologies and laws and obligations for users and sellers so that they no longer remain an impediment to their adoption.

5. Cybersecurity Threats:

The industry is susceptible to cybersecurity threats, and protecting sensitive data and technology from breaches is a constant concern.

6. Market Adoption and Education:

Convincing businesses and consumers to adopt new enabling technologies, significantly when they disrupt existing practices, can be a barrier.

7. Funding and Investment:

Access to capital and investment is vital for research, development, and scaling up operations, and limited funding can hinder growth. The industry needs the government's support in critical areas of education, sustainability, safety, inclusion, growing exports and improving productivity.

Companies must adapt to these challenges to thrive in the enabling technology industry. This can involve strategic investments in R&D, a focus on sustainability, strong cybersecurity measures, and international market expansion. Collaboration and partnerships with other tech companies, research institutions, and government agencies can also help overcome these barriers.

Research also suggests barriers to transferring these technologies from scientific organisations to industry.

Adam and Beata (2016), in their several years of research in Poland, have classified the barriers to technology transfer into three main types: technical, organisational-economic, and systemic barriers. These barriers must be recognised and eliminated by having a skilled workforce, systems, policies, and institutions to allow growth and sustainability.



6.2 Learnings from Abroad

AUSTRALIA:

1. Australia's Digital Economy Strategy, 2030:

The Australian government, recognising the role that it can play in being a leader in the digital economy and society by 2030, has formulated a digital strategy. It has also been exploring opportunities to use technologies such as blockchain and artificial intelligence to enhance government service delivery, increase economic prosperity, and generate more well-paid jobs, amongst other benefits. With that as its focus, Australia has included emerging technologies, such as artificial intelligence, as one of the critical technologies the government will support. The three pillars of this digital policy are:

- Building a foundation that includes infrastructure, a skilled workforce, safety, world-class systems, cyber security, and regulations.
- · Building capability in emerging technologies
- Setting priorities for digital growth in various sectors in private partnerships.

2. Support and Grants from Government agencies:

Entities like the Department of Industry, Science, Energy and Resources and Austrade (Australian et al. Commission) support innovation, research and development and promote the adoption of enabling technologies across industries.

The Australian government offers grants and tax incentives from the Australian Research Council that support research and development.

3. Regulatory framework and policies:

Recognizing the benefits of AI and privacy breaches and security and safety issues that crop up, Australia has enhanced regulations for tech companies and other platforms, ensuring they are not inhibitive to their development and deployment.

In a paper titled "Addressing Big Tech Regulation in Australia", 2023, more substantial penalties in case of hacks and leaks and consumer protection laws have been suggested to overcome these challenges.

4. Innovation hubs and technology transfer offices:

Australia has technology-focused centres such as CSIRO (Commonwealth Scientific and Industrial Research Organisations that conduct cutting-edge research and collaborate with industries.



Universities and research institutions often have technology transfer offices to commercialise research outcomes. Hosting incubators and accelerators to support startups and emerging technologies helps the talent to grow. These platforms offer resources to develop and scale their technologies.

CANADA:

1. R&D - Investment and patents:

By measures of its investment of \$2.57 billion in research and development in the AI sector and a 57 per cent growth in AI patents filed in 2022-23, Canada has outpaced several countries like Japan, Australia, Germany, and France.

With a venture capital investment of \$8.64 billion in AI, Canada has also been ranked third in capital venture capital investment among G7 countries (Deloitte, 2023). Canada's well-respected research community has contributed to its success in the area. In 2022-23, 83 per cent of the global AI-themed publications were co-authored by Canadian researchers.

2. Pan-Canadian Al strategy:

Canada rolled out its Pan-Canadian AI strategy in 2017 across various states. This was aimed at fostering the creation and adoption of digitally enabling tools. Recognising how a **strong collaboration** between public and private organisations is critical to its success, Canada's strategy was built on three main pillars, as follows:

- Commercializing applications developed and promoted by the Canadian
 Institute for Advanced Research (CIFAR), Canada's national institutes
 and global innovation clusters. Amii, Mila, the Vector Institute, and Protein
 Industries Canada are some of the few.
- Standards are enforced through the Standard Council of Canada.
- · Attracting and retaining world-class talent through programmes.

Under the strategy, the government has been offering funding to various organisations. The strategy is pivotal to Canada's substantial AI patent filing (Deloitte, 2023).

3. Replacing legacy systems:

Canadian citizens rely heavily on the government's digital systems for service deliveries. The government currently suffers from sluggishness caused by legacy systems that have hampered service quality and resulted in increased costs and maintenance requirements. The main task before the government is to have a digital approach that meets the expectations of its citizens. Improving the technical foundation and reducing technical debt have been the core of the solutions being explored.

35

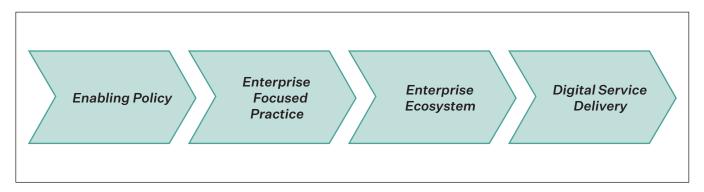


Considering the current situation, the **Treasury Board of Secretariat** suggested a new model for digital enablement of the Canadian government's services in their paper - Service and Digital Target Enterprise Architecture (2021).

The approach suggested a gradual and cost-friendly replacement of **redundant legacy systems with new applications**. It emphasized leveraging enabling technologies like APIs and cloud-based services to do away with many legacy systems and improve service delivery.

The figure below shows the transition process planned.

Figure 5: GC (Government of Canada) enterprise ecosystem transition steps



Source: Service and Digital Target Enterprise Architecture White Paper (2021)

4. Integrated regulatory policy:

Change is enabled through directives and regulations aligned with the strategy. The government launched their **Digital Ambition Strategy in 2022**, reviewing progress made on the above plan.

5. Talent and job market:

To address the challenge of shortage of digital talent, the Canadian government has adopted a digital talent strategy. The strategy ensures that the Government of Canada has digital talent, processes, and culture to deliver improved services to the people of Canada. Under this strategy, the barriers to attracting and thriving digital talent in Government of Canada are regularly reviewed.

The main highlights of the strategy are:

- Government of Canada Digital Talent, which is a platform for sharing opportunities with candidates interested in technology
- An employment pathway in public service through an IT apprenticeship program for Indigenous people passionate about IT



 Cloud skills adoption project led by Shared Services Canada (SSC), which tests industry curricula on the cloud.

THE UNITED KINGDOM:

1. Responsible innovation and transfer:

The industry's main challenge is building public trust in cutting-edge technologies. With a rapid growth in the availability of these technologies, concerns about the risks they pose to privacy, human rights, and the safety of people are also rising.

Britain offers fertile ground for many innovative technologies, such as AI, and currently hosts many providers, with many more in the offing. Maintaining trust is quintessential to enable businesses and end-users to understand the benefits of and quickly adapt to these technologies. In its blueprint of the world-leading approach to innovation in artificial intelligence (press release, March 2023), the UK government has outlined five principles to ensure the responsible transfer and use of innovative technologies. At the approach's core are safety, transparency, fairness, accountability, and contestability for end users.

2. Easing the regulations for adopters:

The UK government has also recognised that heavy regulation can be an administrative burden for companies and thus impede their adoption rates. The responsibility is now entrusted to regulators - the Health and Safety Executive, Human Rights Commission and Markets Authority - to develop context-specific approaches to resolve the problem.

6.3 Conclusion:

The technology sector is mostly battling with the problem of a lack of skilled workforce and issues regarding patenting and property rights. Unable to attract and retain talent who find better opportunities elsewhere makes it imperative for New Zealand to reflect on the current establishments, incentives offered, career pathways, regulations and policies that fail to attract and develop the right talent.

New Zealand can draw inspiration from digital strategies adopted by the governments of Australia and Canada that aim to bring a sea change in the technology landscape with some evolutionary changes. Collaborations with the Industry and universities can also boost innovation in the sector.

37



Toi ā-Ringa - Art and design sector



As part of the creative industry, **art and design** have both contributed to economies across the globe. They generate jobs, attract investments, and provide creative insights to other industries. Toi- ā-Ringa also includes businesses in beauty and hairdressing. The billion-dollar hairdressing and beauty industry has 75% females and nearly 5,000 businesses (IBISWorld, 2023-2028 estimates). However, the sector has registered a 4.6 per cent drop in revenue over 2022-23 caused by domestic and global cutbacks in non-essential spending.

The businesses within this sector enrich the lives of communities and stimulate other sectors, mainly tourism, that reap benefits from art and design. A 2017 World Travel and Tourism Council study reported that art and culture can increase visitation and add significant economic value. The McMichael Canadian Art Collection, Canada's national art gallery is an example of how art can impact tourism and revitalise the area.

In its paper investigating factors enabling the creative industry, the World Economic Forum underscores several vital points. It emphasizes the significance of technology, innovation, and human capital in fostering the creative industry. It further discusses the role of collaboration, intellectual property protection, and cross-sector partnerships in driving sustainable development and success within the creative sector.

7.1 What is unique to New Zealand's art and design landscape?

1. Rich cultural influences

New Zealand's art and design sector is known for its rich Māori and Pacific influences, blending traditional and contemporary elements. The country strongly focuses on sustainability in design, with many artists incorporating eco-friendly practices into their work. The vibrant cultural scene and diverse landscapes also inspire unique artistic expressions in New Zealand.

2. Institutions that shape the industry

In New Zealand's art and design sector, several prominent individuals and institutions exist. The major ones include **Te Papa Tongarewa, Auckland Art Gallery Toi o Tamaki, and the Dowse Art Museum.** These focus on a wide range of art and artifacts and contemporary art and design. These players contribute significantly to shaping and promoting the artistic landscape in New Zealand.

39



3. The market is diverse.

The art and design market in New Zealand is relatively diverse, with a mix of established and emerging artists contributing to the scene. While there are prominent institutions and artists, the market is not as concentrated as in some more significant global art hubs. This diversity allows for various styles, influences, and perspectives to thrive, fostering the country's dynamic and varied artistic landscape.

7.2 Barriers to New Zealand arts and design sector

Several factors can act as deterrents to the growth of the art and design sector in New Zealand:

1. Distance and geographical Isolation:

New Zealand's geographical isolation poses challenges regarding exposure to international markets and global art trends. It results in limited opportunities for artists to connect with a broader audience and impact their visibility on the global stage.

2. Small local market and globally high competition:

The relatively small population of New Zealand means fewer sales opportunities and less revenue generation compared to larger countries with more extensive art scenes. New Zealand artists and designers also compete in a worldwide market. The global nature of the creative industry means that standing out and gaining recognition can be highly competitive.

3. Educational Resources:

New Zealand's government invests in institutions, arts education, and supporting institutions offering fine arts and design programmes. There is, however, a need for further investment in art education and resources to support the development of emerging talent.

4. Limited Government Funding and Support:

The New Zealand government provides funding for the arts through agencies like Creative New Zealand (CNZ). The government also supports public institutions like Te Papa Tongarewa and various public galleries that contribute to developing and promoting the arts by providing spaces for exhibitions and collections.

However, the availability of art galleries, design studios, and exhibition spaces can vary across regions, potentially limiting opportunities for artists and designers to showcase their work. Also, though CNZ is highly valued by creatives, the model of depending on funding rounds year to year is seen as challenging and, at times, unsustainable.



5. Promotion of Māori and Pacific Arts:

Recognizing the significance of Māori and Pacific influences, the government must support initiatives promoting and preserving indigenous art forms.

Export Barriers: Exporting art and design works to international markets can come with logistical and regulatory challenges, limiting international sales.

6. Economic Factors and Contingencies:

Economic conditions influence consumer spending on art and design, affecting the industry's financial health. COVID-19 and natural disasters have hit the already suffering industries.

7. Intellectual Property and Copyright:

Intellectual property protection and copyright issues can affect artists and designers, particularly regarding original creations. This has become a concern in the digitalization era, making it challenging to protect the integrity with which art is distributed, displayed, and sold while also offering itself as a larger platform that can help discover art.

7.3 Learnings from Abroad

Comparing the art and design industries in New Zealand, Australia, and Canada involves considering various factors:

1. Government funding and Support:

All three countries have government support for the arts, but the scale and focus of support programmes vary. Australia offers specific funding through agencies like the Australia Council for the Arts. They also run programmes to support the artists from Aboriginal and Torres Strait Islands. Various grants and subsidies are made available for the artists.

• Making a gross value-added contribution of 108 billion pounds annually, creative industries have been recognised by the UK government as a priority sector in 2023. The UK government has announced a significant investment in creative industries, aiming to create a million more jobs by 2030. "The Creative Industries Sector Vision", released in July 2023, will focus on driving innovation, building creative clusters, and attracting investment for the UK creative industry to be a world leader (Press release, 2023).

2. Art education and training:

Australia emphasises arts education and training through various institutions and programmes to prepare individuals for careers in arts and creative industries. Through its visionary strategy, the UK is on the path to nurturing the talent to create a world-class workforce and helping the sector.



New Zealand's art and design sector is vibrant and unique. Australia, Canada, and the UK, with their larger populations, more government funding and support, and more extensive art scenes, may have a broader impact on the global stage. However, each country has strengths and contributes distinct cultural elements to the international art and design landscape.

7.4 Conclusion

The art sector was one of the worst hit during COVID-19. The government has been supporting the sector by pumping funds into it. In the aftermath, the GLAMIR (Galleries, Libraries, Museums, Iwi and Records) sector, which include institutes in art and design, were supported through the Cultural Regeneration Fund, an initiative by the Manatū Taonga Ministry for Culture and Heritage. The recovery program aims to help these sectors thrive.

More such programmes are needed to foster growth and thriving in the sector. Efforts to support and promote local talent, improve access to funding and resources, and facilitate connections with international markets and audiences can be beneficial.

Addressing these challenges would require a collaborative effort from the government, the private sector, and the artistic community to enhance funding, international exposure, and educational resources within the art and design sector.



Toi Puaki - Expressive Arts Sector



The expressive art industry, including music, dance, and theatre, has a unique place in New Zealand, marked by a rich blend of indigenous Māori traditions and contemporary influences. The sector has the highest proportion of self-employed workforce. The country's commitment to supporting local artists through grants and cultural policies also shapes the distinct characteristics of NZ's expressive art sector.

The music industry alone contributed \$720m to GDP and generated 4,895 FTE for 2022 (PWC, 2023). The industry has witnessed a growth in revenue since 2021, driven by streaming and overseas earnings from live performances, recordings, and publishing.

Major players:

New Zealand's expressive art sector is characterised by diverse artists and organisations. These figures and institutions contribute to the diversity and vitality of the expressive art sector in New Zealand.

The industry in New Zealand has undergone various changes over the years, reflecting shifts in cultural, social, and economic landscapes. Some notable changes include:

1. Cultural Shifts:

Increased recognition and appreciation for indigenous Māori art and culture have become more pronounced. There is a growing emphasis on acknowledging and preserving cultural diversity within the art sector.

2. Integration of Technology:

The integration of digital technologies has influenced art creation, distribution, and consumption. Many artists now use digital platforms to showcase their work, reaching broader audiences locally and globally.

3. Contemporary Art Scene:

The contemporary art scene in New Zealand has evolved, with artists experimenting with new mediums, themes, and interdisciplinary approaches. This contributes to a dynamic and ever-changing cultural landscape.

4. Globalization:

New Zealand artists are gaining more international recognition, facilitated by globalization and increased access to global markets. This has led to a broader exchange of ideas and influences within the art community.

5. Government Policies:

Shifts in government policies and funding priorities have influenced the level of support provided to the arts, impacting the art sector's overall health and growth.



6. Community Engagement:

There is a growing emphasis on community engagement and public art projects, fostering a connection between artists and the broader public.

These changes indicate the adaptability and resilience of the expressive art industry in New Zealand as it responds to internal and external factors shaping the cultural landscape.

8.1 Structures that support the industry

The New Zealand government supports the expressive art sector through various initiatives and funding programmes. Some ways in which the government contributes to the growth and sustainability of the arts in New Zealand include:

1. Funding through Creative New Zealand (CNZ):

The businesses in performing arts are funded by local bodies, but a significant part of the funding comes from CNZ. This Crown Agency, established in 1994, provides funding and support to artists and arts organisations across various disciplines, including visual arts, performing arts, and literature.

It receives funding from the Ministry of Culture and Heritage and the Lottery Grants Board. Funding is offered through multiyear investment programmes - Toi Tōtara Haemata (Arts Leadership) and Toi Uru Kahikatea (Arts Development) and reviewed regularly. Toi Ake is a special CNZ fund supporting the protection, development, and retention of heritage ngā toi Māori.

- In 2019, CNZ announced its investment strategy in arts, "Te Ara Whakamua". The primary outcome was allowing the Arts Council to develop an investment portfolio that fits the future needs of NZ's arts sector.
- The government has been funding the restoration of theatres, such as St. James Theatre in Auckland, which received a \$15m contribution.

2. Te Papa Tongarewa:

The national museum receives government funding and is crucial in preserving and showcasing New Zealand's cultural heritage, contributing to the overall cultural ecosystem.

3. Educational Support:

The government supports art education programmes and institutions, nurturing the development of emerging artists and fostering a creative environment. Raising investment in the Creatives in Schools Programme 2020-23 is an example of one such initiative.



4. Public Art Projects:

Initiatives that involve public art projects and installations receive support, contributing to the accessibility and visibility of art within communities. Under their Creative Community Scheme (CCS), CNZ funds about 1800 community projects annually through city and district councils. The government creates opportunities for local artists and talent to thrive and flourish through these initiatives.

8.2 Barriers to the expressive art industry's growth in New Zealand

The impacts of the pandemic on our sector are serious and long-lasting. Funding for the arts is shrinking, audience attendance is down worldwide, and practitioners are burning out and leaving the sector for better pay and greater security. The time for transformation is now".

AUCKLAND SILO THEATRE.

In the event of recent cancellations of theatre performances by NZ operators, it is essential to understand factors that influence or deter the growth of the expressive art sector in New Zealand. The following section discusses that:

1. Funding:

The creative sector is one of the worst hit sectors during COVID-19 and other disasters like floods in the country. Funding is required to break "the cycle of crisis". Though CNZ supports many organisations, the funding needs a boost. Insufficient funding constrains artists and cultural institutions, limiting the creation and promotion of art.

- Increased funding and resources are crucial for fostering a thriving art scene. More funding is required for Toi Māori, Pacific arts, the regions, accessibility initiatives, tamariki and rangatahi, and rainbow arts. Councils need to support local arts.
- Low wages are a long-standing structural issue facing the creative industry. This requires more funding to support the artists and performers.
- There are issues with operationalising the funds as well. The grants from CNZ have seen the success rate fall from 33 per cent to 20 per cent in 2022. Funding needs to be more equitable and fairer to ensure that all artists and organisations have a sustainable income and that people have sustainable access to the arts.
- · A fair and efficient funding process needs to be established.

46



2. Cultural Policies and Support for the Local Talent:

Government policies and cultural initiatives significantly promote and protect indigenous art, cultural diversity, and creative expression. However, years of under-investment by the ruling parties in New Zealand have compounded the problem.

 Top-up funds announced by the government repeatedly indicate the need for a long-term strategy from the Manatū Taonga Ministry of Culture and Heritage to build a resilient industry.

3. Digitalization

Fifty per cent of the respondents to CNZ's survey on New Zealander's attitudes and perceptions of art said that they would prefer to view online, thus indicating a change in service expectations of the audience (CNZ, 2020). Embracing digital platforms for art distribution and promotion can open new avenues, but adapting to technological changes might challenge some traditional artists or institutions.

4. Public Engagement:

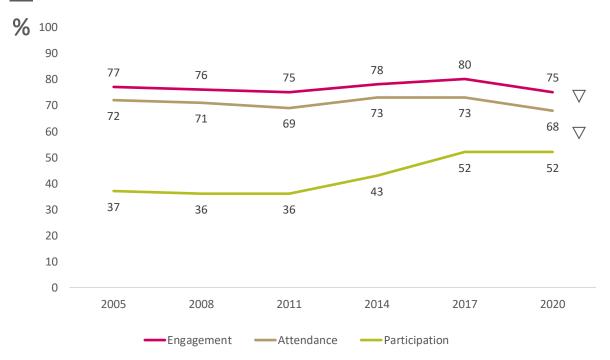
Increasing public awareness and engagement with the arts is essential. Encouraging a culture of appreciation and support for the arts within the community can enhance the sector's growth.

Three yearly research done by Creative NZ, which measures New Zealanders' attitudes towards engagement and participation in arts, reported a decline in performing arts attendance (CNZ, 2020).



Figure 6: New Zealanders and the Arts 2020: Attitudes, attendance, and participation





Source: CNZ 2020.

5. A lack of international visibility:

Collaborations with international players can facilitate connections with international markets and audiences. CNZ's partnership with the Australia Council for the Arts and Brisbane Powerhouse is a step in this direction, though many more are needed.

6. Educational Opportunities:

Access to quality art education is vital for nurturing the next generation of artists. Improving and expanding art education programmes can contribute to the sector's growth. Schemes such as "Creatives in Schools" aim to develop a creative talent pool from a young age. The schemes, however, were marred by the government's inadequate investment in Creative New Zealand.

Addressing these challenges through collaborative efforts between artists, institutions, and policymakers can contribute to the sustained growth of New Zealand's expressive art sector. While government support is evident, ongoing discussions and adjustments to policies are essential to address the evolving needs of the expressive art sector in New Zealand. The collaboration between the government, artists, and cultural institutions is crucial for sustaining and enhancing the vibrancy of the arts in the country.



8.3 Learnings from /comparisons with Abroad

While each country has its unique strengths and challenges, the success of its expressive art sector often depends on a combination of government policies, cultural diversity, market size, and global engagement. All these countries contribute significantly to the global cultural landscape, with artists from each nation impacting the international stage.

- A diverse and vibrant art scene, significant government support for the arts, and globally recognised contemporary artists are some of the strengths of these countries.
- The challenges include balancing indigenous and non-indigenous art and competition within a large and diverse cultural landscape.
- The Australian government announced that it is returning its art and culture sector to the centre stage with an investment of A\$286 million (NZ\$315 million) over four years under the Revive National Cultural Policy. The new national policy rests on five pillars: First Nations first, a place for every story; the centrality of the artist, strong institutions; and reaching the audience.
- Events like the Australian Performing Arts Market (APAM) allow artists to showcase their talent and network with international performers and organisers.
- England supports the sector through the Arts Council England (ACE). The Council received 943m pounds of funding from the government and the National Lottery (2021-22). Local public investment and sponsorships from companies and private trusts support the sector.
- Canada Arts Presentation Fund (CAPF) is the funding body for businesses in Canada. In Feb.2022 (Canadian Heritage), a program, "The Canada Performing Arts Workers Resilience Fund", was launched to support the live performance arts sector and artists facing economic hardships.



8.4 Conclusion

New Zealand's relatively small population can restrict the art market, making it challenging for artists to sustain themselves solely through their work. Expanding the reach and recognition of New Zealand art internationally could mitigate this challenge. The increasing cost pressures make creating sustainable models and supporting creative freelancers and the independent arts sector imperative.

Artists and institutions in the arts also need to adapt to technological changes to engage with the audience on different platforms. Connecting with a broader audience and leveraging its unique distinct art form can help New Zealand's expressive art sector create a place for itself in the international market.

This needs to be coupled with government support through a long-term strategy to make the sector self-sustaining. Taking cues from the Australian policy, New Zealand can develop its national strategy to help direct resources to benefit the art and creative sector. Funding and organising events to bring artists and organisers from across the world together could also be considered.



Toi Māori - Taonga works and the oral arts sector



Taonga works and oral arts in New Zealand encompass a rich and diverse range of cultural expressions and practices deeply rooted in the country's indigenous Māori culture and heritage. These traditions play a significant role in preserving and passing down knowledge, history, and values.

Oral traditions are a fundamental part of Māori culture. These traditions incorporate oral storytelling, waiata, whakapapa, iwi and hapū-specific kōrero and histories, whakataukī (sayings passed down through the generations), and te reo Māori in its regional forms. Various expressions of Taonga works and oral arts are essential to preserving Māori culture and identity. The figure below shows these:

Figure 7: Taonga work and oral art expressions



NEW ZEALAND'S UNIQUE INDIGENOUS ARTS SECTOR

While there are similarities with Indigenous arts in other countries, the unique cultural aspects and historical context of Māori art contribute to its distinctiveness within the global Indigenous arts landscape.

1. Cultural Emphasis:

New Zealand's Indigenous arts industry places a significant emphasis on Māori culture, including traditional arts such as carving (Whakairo) and weaving (Raranga), and the performing arts (Haka, Waiata). The integration of Māori language and cultural elements is a distinctive feature.



2. Whakapapa (Genealogy) Influence:

Māori art often reflects the concept of whakapapa, emphasizing the interconnectedness of all things and the importance of ancestral lineage. A connection to Whenua has also been identified, not just for the techniques and styles but for the materials involved - for example, earth for pigments and uku, rākau and pounamu for whakairo, harakeke and other plants for raranga. This influence is unique to Māori culture and contributes to its distinctiveness.

3. Contemporary Expression:

Like Indigenous art in Australia and other parts of the world, contemporary expression is a significant component of the Māori arts scene. Many Māori artists blend traditional forms with contemporary mediums, creating a dynamic and evolving artistic landscape.

9.1 Barriers that impact Taonga works and oral arts in New Zealand

While Taonga works and oral arts are integral to New Zealand's identity, several factors contribute to the perception that they are not thriving to their full potential. The major ones are:

1. Intellectual property and Copyright laws:

The findings of a survey by MBIE, 2016, indicate that copyright issues are affecting the creative industry, which also includes Taonga works and traditions. Technology, on one hand, has facilitated a more extensive distribution of creative work, new challenges in the form of piracy, and new forms of unauthorized use, such as stream ripping that allows any streamable content to be downloaded, have all resulted in damaging the integrity of access and use of artwork. The impact is felt more by the already struggling Taonga works sector.

- The current New Zealand law allows registration or granting of a patent only if the design is new and original. In the current situation, some aspects of Māori traditional knowledge passed over generations and centuries old, are susceptible to unauthorised use and transfer and thus need to be protected through well-founded systems and processes in place.
- High enforcement costs to stop misuse of contemporary taonga creations have resulted in many Māori writers and illustrators not publishing their work (MBIE, 2019). Enforcement processes need to ease up and be made less costly.



2. Government Support, funding:

Initiatives, such as Creative New Zealand's Toi Ake - Māori Arts Strategy, are there to promote and help the indigenous arts industry sustain itself. In its 2023 budget, the government has announced an investment of \$34 m in Kapa haka over two years, recognising its place in New Zealand's cultural landscape. However, the support is not enough to uplift the Taonga industries. In its long-term insights brief, the Ministry of Culture and Heritage has discussed how fragmented and limited government funding is.

3. Policies and regulations:

Preserving and accessing Taonga works and oral arts is essential for the industry's growth. This requires resources for documentation, archiving, and conservation. A lack of legal protection for the Taonga work within the country and internationally is affecting the industry. Nelson region's Taonga Tuku lho Heritage Strategy (2022-2032) is a step in this direction. The strategy is guided by guardianship principles towards Taonga and uniqueness in every community's culture, engaging with the community, recognising a collective duty of care and relation with the natural world.

4. Cultural Displacement and Urbanization:

The industry leverages an intergenerational transmission of knowledge of skills such as weaving, carving, and tattooing. Events such as colonisation and Māori migrating to urban areas (about 80%) have resulted in cultural displacement and loss of traditional knowledge, affecting the transmission of Taonga works and oral arts. There is also an erosion of traditional oral storytelling and oral history practices because of a shift to written and digital communication. Cultural appropriation, which undermines authenticity and cultural significance, is another industry challenge.

5. Limited access to Education:

Access to education and training in traditional arts and oral traditions is limited, particularly for younger generations. The passing of elders and knowledge holders can result in the loss of crucial cultural knowledge and practices.

6. Small-scale operations:

Māori businesses incorporate Tikanga at their core. However, some Māori businesses, such as those in the fashion industry, struggle to thrive in "Maoriness". The small scale of their operation hampers their profitability and sustainability, and they need even more support from the government.

7. Economic Factors:

Economic conditions, COVID-19 and natural calamities have influenced the financial support for Taonga works and oral arts initiatives, making it challenging for artists and practitioners to sustain themselves.



8. Recognition and Awareness:

The recognition and appreciation of Taonga works and oral arts may be limited, affecting their social visibility and value. Improved recognition and awareness about taonga work and rules around usage can also stop their unauthorised use.

9.2 Learnings from Abroad

The indigenous work and oral arts sector in Australia and Canada

Australia's Indigenous art and oral traditions are diverse and dynamic. Indigenous Australian art, including visual arts, music, dance, and oral storytelling, continues to thrive and gain national and international recognition. Many Indigenous artists use traditional forms alongside contemporary expressions, contributing to a rich cultural tapestry.

Efforts are being made to support and promote indigenous artists and their work, fostering a deeper appreciation for the cultural significance of these expressions. However, to enable the indigenous art sector to thrive, the artists in both countries have advocated stricter copyright and intellectual property rights. Anticounterfeiting laws in the US and the Indian Arts and Crafts Act of 1990, which punishes any misrepresentation in the marketing of native art and craft products in the country, are considered ways to improve the situation.

The Australian government has implemented various initiatives to support and promote the thriving of Indigenous arts and cultural practices. Some keyways the government is involved include:

1. Funding Programmes:

The government provides funding through the Indigenous Visual Arts Industry Support program and the Indigenous Languages and Arts program. These initiatives aim to support Indigenous artists and cultural practitioners.

2. Cultural Preservation:

Efforts are made to preserve and revitalize Indigenous languages and cultural practices. The government recognizes the importance of maintaining these aspects of Indigenous identity.

3. Arts Festivals and Events:

Support for Indigenous arts festivals and events helps showcase and promote the richness of Indigenous culture. This exposure contributes to the broader recognition and appreciation of Indigenous artistic expressions.



4. Partnerships with Indigenous Communities:

Collaborative efforts with Indigenous communities are emphasized to ensure that government initiatives align with the needs and aspirations of these communities. This includes engaging with Indigenous leaders and organisations.

9.3 Strategies to support this sector

To make the Taonga works and oral arts sector flourish in New Zealand, several strategies and efforts can be undertaken to support and promote these essential aspects of the country's culture. Some key considerations are as follows:

1. Cultural Preservation and Recognition:

Acknowledge the cultural significance of Taonga works and oral arts, ensuring they are recognized as essential components of New Zealand's cultural heritage.

2. Invest in Education:

Integrate the teaching and preservation of Taonga and oral traditions into the education system, from primary schools to higher education, to ensure that younger generations can access these cultural practices.

3. Public Awareness and Education:

Raise public awareness about the significance of Taonga and oral arts and their role in New Zealand's identity and history. Educational campaigns and community outreach can be valuable. MBIE's user guide titled "Protecting intellectual property with a Māori cultural element" is aimed at helping Māori and other communities in New Zealand understand intellectual property rights to manage these works while respecting the spiritual, cultural, and economic values associated with Māori knowledge.

4. Cultural Centres and Museums:

Providing platforms to showcase the Taonga works can help improve the situation. This would entail establishing and maintaining cultural centres, museums, and institutions dedicated to preserving and showcasing Taonga works and oral arts.

5. Documentation and Archiving:

Invest in the documentation, archiving, and digitization of oral traditions and Taonga works to ensure their preservation and accessibility for future generations.



6. Enforcing copyright laws and licenses:

This can resolve the unauthorized and unethical use of traditional work and protect these works' cultural and commercial value. It is equally important to spread awareness about how these works can be used with proper registration and licensing requirements.

7. Cultural Events and Festivals:

Organise cultural events and festivals that celebrate Taonga and oral arts, providing a platform for artists and performers to showcase their work and connect with audiences.

8. Support for Artists and Practitioners:

Offer financial and logistical support for artists and practitioners in the Taonga and oral arts sector, including grants, residencies, and funding for research and creative projects.

9. Collaboration and exchange:

Between indigenous communities and diverse cultural groups would result in sharing knowledge and promoting cross-cultural understanding.

10. Community Engagement:

Involving communities in preserving and promoting their cultural heritage.

11. Integration with Tourism:

Integrate Taonga and oral arts experiences into New Zealand's tourism industry, allowing visitors to learn about and appreciate the cultural heritage.

12. Media and Technology:

Leverage modern media and technology to reach wider audiences, such as creating digital platforms for storytelling and making oral traditions and Taonga works accessible online.

13. Government and Policy Support:

Establish government policies and initiatives that support the preservation and promotion of Taonga and oral arts, which includes funding for cultural programmes.

14. Interdisciplinary Initiatives:

Promote interdisciplinary collaborations between artists, scholars, and cultural practitioners to explore new ways of expressing and preserving these traditions.

By implementing these strategies and fostering a strong sense of cultural pride and preservation, the Taonga works and oral arts sector in New Zealand can flourish, ensuring the continued vitality of these important cultural traditions.



In Conclusion



Research shows that each sector uniquely influences the country's economic and social landscape. Their importance can vary based on criteria, including economic output, employment, and cultural influence. Some challenges are common to the less thriving sectors of New Zealand, which include factors such as the smaller scale of operation, geographical isolation, skill gap and changing consumer behaviour.

- There is evidence suggesting that the government supports these subsectors through funding; however, more support is required from central and local bodies for the industries to thrive. Funding should be provided for industry-led training and apprenticeships. Support at the regional level from regional Councils, communities and private bodies is also sought, particularly for businesses in arts and Taonga works and traditions, which are built on knowledge and participation at a regional level.
- Overcoming challenges due to access to a smaller market in New Zealand would require these businesses to reach out to foreign markets. This can be achieved through collaborations with international businesses, artists, and organisers.
- Integrating with and leveraging the infrastructure of the established industries in New Zealand, such as agriculture and tourism, should be considered. This can be particularly useful for industries like enabling technologies, recreation, and all art forms.
- Copyright laws need to be reviewed considering the loopholes in the
 existing ones. This must be coupled with vigorous enforcement of laws to
 stop unauthorised use and inappropriate work presentation. This would
 strengthen traditional art and works businesses by increasing participation
 and instilling confidence in the creators and the market.
- **Diversifying revenue streams and content** is crucial to the success of industries such as broadcast and screening. Collaborating for international projects would bring more revenue, help businesses and artists sustain and result in an influx and exchange of skills and techniques.
- A long-term strategy is required to catapult the performing arts sector from
 its current debilitating state. The sector was hard hit by COVID-19 and floods
 in New Zealand. Providing platforms that would bring artists together would
 help.
- These industries must acknowledge and restructure their business models
 while considering evolving consumer needs and purchase behaviour.
 Leveraging new technologies for their product and service offerings, their
 interaction with consumers and other businesses will give them an edge,
 improve cost efficiencies, and improve their reach. All these factors are
 currently impeding their growth.



- Developing a domestic talent pool is the key to a self-sustained economy. Retaining talent is another issue that can be addressed by providing better opportunities for growth and support for the self-employed, who make up most of the workforce in industries such as art and design. Currently, certificate programmes and diploma studies are offered in sports management, art, and design, with a few in Māori arts, run mainly by polytechnics. Their success rests on the income prospects of the graduates, which in turn depends on how well-aligned industry needs are with graduate outcomes. Facilitating that would also increase the broader demographic's uptake of these courses.
- Finally, the industries must exploit New Zealand's global reputation of producing high-quality goods and services. Anything coming from New Zealand is seen as authentic and clean. Environmentally friendly and sustainable production methods must be adopted and highlighted in the marketing campaigns.



References



- 1. https://jfsdigital.org/articles-and-essays/2023-2/vol-28-no-1-september-2023/the-future-of-sport-and-recreation-in-new-zealand/
- 2. https://www.skillsactive.org.nz/assets/0-ALL-DOCS/Research-and-projects/51999676de/Sport-and-Rec-Sector-Workforce-report-final-April-2013.pdf
- 3. https://www3.weforum.org/docs/WEF_2016_WhitePaper_Enabling_the_ Creative Economy.pdf
- 4. https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/technology-media-telecommunications/deloitte-uk-future-creative-economy-report-final.pdf
- 5. https://www.frontiersin.org/articles/10.3389/fspor.2022.1087182/full
- 6. https://www.aptn.ca/media-centre/press-releases/
- 7. Nauright, John. (2016). The Organisation of Sport in the United Kingdom.
- 8. Agricultural Policy Monitoring and Evaluation 2022: Reforming Agricultural Policies for Climate Change Mitigation. OECD. Retrieved from https://www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2022_7f4542bf-en
- 9. https://www.clearinghouseforsport.gov.au/ data/assets/pdf
 file/0020/1082333/The-Future-of-Australian-Sport-Second-MegatrendsFull-Report.pdf
- 10. https://www.mbie.govt.nz/assets/527e65d882/copyright-and-the-creative-sector-december-2016.pdf
- 11. https://www.iponz.govt.nz/assets/pdf/Māori-ip/protecting-ip-with-a-Māori-cultural-element.pdf
- 12. https://www.theartnewspaper.com/2022/07/14/indigenous-artists-canada-demand-regulation-counterfeit-first-nations-art
- 13. https://www.rnz.co.nz/news/business/498720/tech-sector-needs-government-support-and-plan-industry
- 14. https://nztech.org.nz/2022/08/09/biggest-nz-tech-challenge-is-access-to-skills/
- 15. Mazurkiewicz, A., & Poteralska, B. (2017). Technology transfer barriers and challenges faced by R&D organisations Procedia Engineering, 182, 457-465.
- 16. https://economics.mit.edu/sites/default/files/publications/institutions-as-the-fundamental-cause-of-long-run-.pdf
- 17. www.gov.uk/government/news/uk-unveils-world-leading-approach-to-innovation-in-first-artificial-intelligence-white-paper-to-turbocharge-growth
- 18. Acemoglu, Daron and Johnson, Simon and Robinson, James A., Institutions as the Fundamental Cause of Long-Run Growth (June 2004). Available at SSRN: https://ssrn.com/abstract=571052



- 19. (2021) The Service and Digital Target Enterprise Architecture is an enabler for the Policy on Service and Digital.
- 20. The Government of Canada's Digital Ambition: 2022–23 Year in Review Canada.ca
- 21. https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/press-releases/ca-national-ai-report-2023-aoda-en.pdf
- 22. https://www.canada.ca/en/government/system/digital-government/
 digital-government/system/digital-government/
- 23. https://issuu.com/ene.hub/docs/e_3029_digital_twin_report
- 24. wp2023n01.pdf (unimelb.edu.au)
- 25. https://www.globalaustralia.gov.au/news-and-resources/news-items/australian-budget-commits-major-funding-boost-technology-capabilities
- 26. https://www.industry.gov.au/news/australias-vision-and-priorities-critical-technologies
- 27. https://www.standards.org.au/engagement-events/strategic-initiatives/critical-and-emerging-technologies
- 28. https://apo.org.au/node/312247
- 29. https://www.unimelb.edu.au/_data/assets/pdf_file/0010/4508956/caide-reponse-to-senate-inquiry.pdf
- 30. https://www.sportaus.gov.au/_data/assets/pdf_file/0005/677894/
 Sport_2030 National Sport_Plan 2018.pdf
- 31. https://www.newswire.ca/news-releases/support-for-recreational-and-sports-infrastructure-the-governments-of-canada-and-quebec-invest-in-15-recreational-and-sports-projects-in-the-lanaudiere-region-847566448.
 <a href="https://www.newswire.ca/news-releases/support-for-recreational-and-sports-infrastructure-the-governments-of-canada-and-quebec-invest-in-15-recreational-and-sports-projects-in-the-lanaudiere-region-847566448.
 <a href="https://www.newswire.ca/news-releases/support-for-recreational-and-sports-infrastructure-the-governments-of-canada-and-quebec-invest-in-15-recreational-and-sports-projects-in-the-lanaudiere-region-847566448.
- 32. https://jfsdigital.org/articles-and-essays/2023-2/vol-28-no-1-september-2023/the-future-of-sport-and-recreation-in-new-zealand/
- 33. https://sportnz.org.nz/funding/how-we-invest/
- 34. https://www.mbie.govt.nz/business-and-employment/economic-development/screen-sector/the-benefits-of-the-new-zealand-screen-industry/
- 35. https://www.mbie.govt.nz/dmsdocument/1079-evaluating-screen-production-grant-pdf
- 36. https://www.nzfilm.co.nz/sites/default/files/2022-07/Economic%20 lmpact%20of%20the%20New%20Zealand%20Screen%20Production%20 Sector%20-%20Finales.202022-07-06.pdf
- 37. https://sportnz.org.nz/resources/evolution-of-government-agency-for-sport-and-recreation/
- 38. https://www.great.gov.uk/international/content/investment/sectors/sports-economy/



- 39. https://www.recordedmusic.co.nz/portfolio/2021-2022-economic-contribution-of-the-nz-music-industry-report/
- 40. https://www.recordedmusic.co.nz/wp-content/uploads/2023/07/PwC-NZ-Music-Economic-contribution-report-2021-2022.pdf
- 41. https://www.theatrescenes.co.nz/everything-you-ever-wanted-to-know-about-creative-new-zealand-and-arts-funding-in-aotearoa/
- 42. https://dcanz.com/report-highlights-dairys-economic-contribution/
- 43. https://www.mbie.govt.nz/about/who-we-are/crown-entities-statutory-and-non-statutory-boards/
- 44. GROWING INNOVATIVE INDUSTRIES IN NEW ZEALAND: Agritech in New Zealand, towards an industry transformation plan, July 2019.NZTE.
- 45. DRAFT STRATEGY FOR THE AGRITECH SECTOR.
- 46. Agriculture in New Zealand, Ahuwhenua i te Atamai lahikow-zealand-towards-an-industry-transformation-plan. Retrieved from https://aiforum.org.nz/wp-content/uploads/2019/10/Artifical-Intelligence-For-Agriculture-in-New-Zealand.pdf
- 47. https://aiforum.org.nz/our-work/publications/
- 48. https://ruralleaders.co.nz/harnessing-social-media-in-agriculture-sophie-stanley/
- 49. https://www.beehive.govt.nz/release/china-and-new-zealand-strengthen-forestry-cooperation
- 50. New Zealand embraces its Aotearoa identity in new marketing, Sep.2022. Retrieved from https://skift.com/2022/09/08/new-zealand-embraces-its-aotearoa-identity-in-new-marketing/
- 51. Creating businesses that adapt and flourish in a changing world: Resilient by design. Joseph Fiksel (2015).
- 52. Getting serious about diversity, Harvard Business Review, Dec.2020. Retrieved from https://students.tippie.uiowa.edu/sites/students.tippie.uiowa.edu/sit
- 53. From brawn to brains: the impact of technology on jobs in the UK.Deloitte (Retrieved from https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/Growth/deloitte-uk-insights-from-brawns-to-brain.pdf
- 54. New Zealand Fitness Industry Overview. NZIHF (2009). Retrieved from https://nzihf.ac.nz/personal-training-careers/new-zealand-fitness-industry-overview/
- 55. Retrieved from https://nzihf.ac.nz/personal-training-careers/new-zealand-fitness-industry-overview/
- 56. Retrieved from https://www.nzherald.co.nz/whanganui-chronicle/news/ proper-funding-needed-to-break-cycle-of-crisis-in-aotearoa-new-zealands-arts-and-culture/SZKFUPXSQRBF5FMQCV70L3FL3U/



- 57. Retrieved from https://creativenz.govt.nz/news-and-blog/2022/06/15/02/25/55/largest-performing-arts-delegation-to-apam
- 58. Government of Canada Launches Program to Provide Additional Support for Cultural Workers in the Live Performing Arts Sector, Canadian Heritage (2022). Retrieved from https://www.canada.ca/en/canadian-heritage/news/2022/02/government-of-canada-launches-program-to-provide-additional-support-for-cultural-workers-in-the-live-performing-arts-sector.html
- 59. https://teara.govt.nz/en/urban-maori/print
- 60. https://shape.nelson.govt.nz/whakatu-nelson-heritage-strategy
- 61. https://www.mbie.govt.nz/assets/notes-from-taonga-works-and-copyright-korero.pdf
- 62. https://www.nzherald.co.nz/nz/how-art-tourism-could-put-whanganui-on-the-map/QQOVBFB7NO2EA47PSUEVXR3ZDI/



Research First Ltd Level 1, 21 Carlyle Street Sydenham, Christchurch 8023 New Zealand 0800 101 275 www.researchfirst.co.nz