Manatū Taonga
Ministry for Culture & Heritage

SUMMARY

Culture in the Digital Age
Long-term Insights Briefing 2025

Te Ahurea i te Ao Matihiko
He Whakamāramatanga mō ngā Tirohanga Wā Roa 2025

Use of Artificial Intelligence (AI) in this document:
Manatū Taonga Ministry for Culture and Heritage has used AI to develop aspects of this document in line with the *Government Chief Digital Officer's Responsible AI Guidance for the Public Service: GenAI* (Digital Govt), including with human oversight of any generated material. AI was used specifically to generate images for the future scenarios (Annex 3), and during the content development process to test ideas and summarise source material in some cases. AI was not used to write content for this briefing.

To view the full briefing, visit:
Long-term Insights Briefing 2025 (Manatū Taonga)

About this LTIB

The Long-term Insights Briefing (LTIB) is a think piece that considers important long-term issues and trends that may affect New Zealand society, and the related risks and opportunities. It does not recommend what action should be taken, instead offering diverse policy options to respond in a range of potential futures.

Manatū Taonga the Ministry for Culture and Heritage's *Culture in the Digital Age: Long-term Insights Briefing 2025* ("LTIB 2025") explores **how digital technologies will change the ways New Zealanders create, share and protect stories in 2040 and beyond**. Drawing from a review of national and international evidence as well as consultation with subject matter experts and sector stakeholders, LTIB 2025 highlights that by 2040, New Zealand's cultural system will be deeply intertwined with AI and other emerging technologies. While these technologies bring unprecedented opportunities for creating, sharing and protecting stories, they also introduce significant ethical, legal, cultural and governance challenges.

This document provides a high-level overview of the key findings of LTIB 2025. To access the full briefing, along with supporting materials on methodology, drivers and trends, and future scenarios, visit:

Long-term Insights Briefing (Manatū Taonga)

Key trends and drivers of change

Digital technology is rapidly changing the cultural and creative landscape, assisting in the creation and automation of artistic works and content, increasing productivity and efficiency, and providing new tools for people to create, share and protect their stories. Key technological trends include: Generative AI, robotic process automation and agentic AI, Web3 decentralised platforms, extended reality (XR) and immersive technology, wearable and implantable devices, enhanced connectivity (5G, 6G and Edge computing), quantum computing, and digital twins.

Looking ahead to 2040, there are many drivers of change that may influence the future. Some are broad, such as changing demography toward a more diverse and aging population, increasing geopolitical instability and economic shocks, more frequent and intense weather events, and challenges to social cohesion. Others are connected to our digital environment, including a widening digital divide, rapid expansion of 'Big Tech,' increasing cybersecurity risks, and the accelerating pace of digital innovation.

Te ao Māori and New Zealand's unique cultural context

New Zealand's unique cultural context, established by Te Tiriti o Waitangi the Treaty of Waitangi, is important to consider in shaping future responses to creativity, the protection of cultural intellectual property, control over digital taonga, and guidance on ethical innovation. Māori are at the forefront of harnessing digital technology to support the preservation and revitalisation of mātauranga and taonga, while increasing access to Māori content both locally and internationally. Models of trustworthy and culturally appropriate AI are emerging.

In line with international trends, there is also a focus on supporting appropriate and fair use of indigenous traditional knowledge and cultural expression, protecting this as intellectual property, and preventing commercial exploitation. Ongoing risks persist relating to misappropriation, misrepresentation, digital inequity and online harm. Looking towards 2040 and beyond, Māori data sovereignty and governance frameworks may offer a way forward.

Create—Evolving creative tools and cultural expression

Key insights

Digital technology will continue to shape New Zealanders' future stories

New Zealanders are actively using digital tools, with the vast majority of businesses expected to be using GenAI tools within the next few years. From virtual reality (VR) to gene editing to brain-computer interfaces, these tools offer the potential to radically alter how we participate in cultural and creative activities.

New Zealanders' stories will continue to shape our future digital tools

New Zealand content provides rich data for AI training and innovation. Many creators are against mass content scraping due to the harms they are experiencing, including reputational damage, economic loss, plagiarism and copyright infringement—issues that are currently being tested throughout legal systems worldwide. There are risks that AI could perpetuate biases present in society that are inherent in training data.

The use of digital technology will significantly impact the cultural and creative workforce

While technology presents opportunities for new roles and productivity gains, it also poses risks of job displacement, skill gaps, digital inequity and disruptions to trusted information channels. Many creators are concerns about the lack of regulation and potential negative impacts. New skills and training are required, particularly for young New Zealanders, to harness the power of emerging digital technology and maximise the opportunities of a changing workforce.

By 2040, the concept of creativity will have changed

Digital tools are changing access to the creative process, enabling high quality independent content creation and production, and supporting innovative, new forms of expression. While creativity and technology have always been linked, recent developments in generative AI are calling into question what it means to be creative, and who has the power to create.

Government levers and potential policy options

Government levers	Potential policy options
Digital infrastructure and data innovation enablers	• Creative and cultural data sandboxes for workers to safely experiment with digital tools • A sovereign, publicly governed New Zealand AI system
Emerging technology literacy and upskilling	• A future technology apprenticeship programme for AI, blockchain and Web3 training • A 'connecting creators and coders' initiative to develop new digital tools • A national information campaign on digital rights, privacy and ethical AI use
Oversight, accountability, legislation and regulation	• A new regulatory regime for AI-generated cultural and creative content and cultural IP protection in virtual environments • Expanded privacy legislation relating to quantum-safe encryption, AI-driven fraud and deepfake detection systems
Funding and incentives for digital innovation and resilience	• A cultural technology investment fund for community-led technology projects and uptake of digital tools. • Tax incentives for private investment in sustainable technology, including sports and cultural application
Public-private partnerships and industry collaboration	• Smart cities and districts partnerships integrating wireless connectivity and digital innovation hubs • An 'AI for success' funding initiative for ethical AI applications in a range of areas
International cooperation, creative exports and cultural diplomacy	• A creative export strategy to guide investment in creative trade and boost New Zealand's creative exports

Share—Transforming content distribution and engagement

Key insights

New Zealanders' future stories will be shared faster and more widely

New technologies for content distribution and engagement are reshaping how stories are shared and consumed, ushering in a new era of digital distribution and increasing reach locally and globally. To maintain authenticity, it is important that AI is trained with data that reflects New Zealand's unique culture and stories.

New Zealanders' ability to share and consume stories in the future will be determined by their access to digital technology

There are many factors that influence access, including distribution, affordability and digital literacy. Without access, some communities may struggle to maintain and share their stories, leading to a loss of cultural identity and heritage over time.

Algorithms are becoming the content curators of the future

Algorithms are widely used to help navigate and moderate the unprecedented amount of content being generated online. While they are useful for enhancing personalisation and discovery, algorithms have the potential to reinforce biases, limit diversity and prioritise commercial interests over cultural relevance. Ensuring transparency in how content is produced and curated, especially where there is the risk of harm, is crucial for building trust in the stories being shared.

By 2040, we won't be able to tell which stories are real

Applications such as deepfake technology, and the increasing use of AI-generated synthetic content in mis- and disinformation, are making it harder for people to tell what is real and exacerbating existing socioeconomic inequalities. The ability to trust New Zealanders' stories is vital to social cohesion and democracy, as well as New Zealand's global brand and reputation. Here, public media plays an important role in helping to build confidence by providing verified information and fostering an informed citizenry.

Government levers and potential policy options

Government levers	Potential policy options
Emerging technology literacy and upskilling	• Expanded media and digital literacy education in schools and tertiary education • Intergenerational digital storytelling programmes linking older generations with younger people to preserve cultural heritage • AI and digital technology initiatives for all New Zealanders
Trust-building, digital rights and consumer empowerment	• A digital technology transparency index tracking the role of AI, blockchain and quantum computing • A 'right to reset or retrain algorithms' for New Zealanders to influence AI-driven content recommendations
Oversight, accountability, legislation and regulation	• Responsible AI and algorithmic bias standards relating to discrimination and racial or cultural bias in AI-driven hiring • Explainability audits for AI-powered journalism, virtual reality (VR) storytelling and automated sports decision-making
Funding and incentives for digital innovation and resilience	• A unified government pipeline for digital innovation investment
International cooperation, creative exports and cultural diplomacy	• Multilateral and regional international agreements to share expertise on AI-driven cultural preservation and ethical digital storytelling

Protect—Safeguarding culture and heritage

Key insights

How we protect New Zealanders' stories will shape our future history

New tools are emerging for the preservation and revitalisation of knowledge, culture, heritage and language. However, there are some concerns that communities have already lost control over their data and cultural narratives, and how they are represented. Without adequate oversight, AI could reshape history or erase significant cultural stories. Communities whose stories have historically been excluded from dominant narratives are particularly vulnerable to this risk.

Protecting New Zealanders' stories will require stronger digital infrastructure

Ensuring that digital storage solutions are both scalable and secure is essential for safeguarding New Zealand's cultural heritage. Digital infrastructure must also be sustainable and resilient to change as new developments make previous technologies obsolete at an increasing speed. With the growing influence of Big Tech, some governments and communities are considering how decentralised or local digital solutions may be harnessed to achieve greater data sovereignty.

Policy and legislation will need to be flexible and adaptive to keep up with the pace of technological change

The global community continues to grapple with how intellectual property, copyright and other legislation can keep up with developments in AI, and a general consensus has not yet been reached. New Zealand is similarly exploring how it can protect its stories from misuse or misappropriation in the digital age.

Data sovereignty principles and cultural values may help to safeguard future stories in New Zealand's unique context

Emerging frameworks are providing leadership on how data can be governed responsibly and how communities can assert greater control over their data and cultural knowledge. Embracing tools such as decentralised platforms and blockchain supports this goal, by creating more robust and dynamic systems for cataloguing, preserving and sharing cultural knowledge in ways that align with local values and practices, for example grounded in te ao Māori.

Government levers and potential policy options

Government levers	Potential policy options
Emerging technology literacy and upskilling	• Māori-Led AI Design Training for Culturally Grounded Innovation
Trust-building, digital rights and consumer empowerment	• Community-led digital heritage trusts which secure historical records using blockchain and decentralised storage
Oversight, accountability, legislation and regulation	• A legally binding digital sovereignty framework supporting Māori data governance and sovereignty • Expanded privacy regulation relating to biometric data AI-driven monitoring, and digital identity protection • Updated public records regulation requiring institutions to meet data transparency and authenticity standards • A legal framework for digital twin heritage sites • An 'emerging tech' regulatory authority overseeing AI, blockchain and extended reality (XR) applications • Expanded AI and sports integrity protections relating to the use of biometric data and AI- driven analytics
Funding and incentives for digital innovation and resilience	• A digital safety fund investing in blockchain authentication, decentralised digital asset storage and cyber-resilience for AI- generated content
International cooperation, creative exports and cultural diplomacy	• AI and emerging technology diplomacy and regional collaboration to protect digital assets in the Pacific and beyond

Conclusion

Based on the analysis presented, LTIB 2025 concludes by suggesting that any future policy approach to address the risks and opportunities of digital technology in New Zealand's arts, heritage, media and sports sectors will need to consider key factors including:

- **Protecting rights and reducing harm while enabling innovation and discovery**—supporting effective AI and digital technology oversight without stifling culture, creativity and the pursuit of new possibilities.
- **Increasing equity and inclusion**—investing in reaching underrepresented or vulnerable communities (e.g., youth, older people, disabled people, Māori, Pacific peoples, migrants, rural and LGBTQ+ communities) to ensure all parts of society benefit from technology-driven opportunities and tools.
- **Leveraging private investment**—using government investment to attract industry co-investment and enable limited public funds to be maximised and meet New Zealand's emerging technology aspirations.
- **Strengthening cyber and privacy protections**—safeguarding New Zealand's digital cultural knowledge systems, data, infrastructure and taonga.
- **Future-proofing the workforce**—helping AI and digital technologies to enhance (not replace) cultural, creative and sports professionals and practitioners.
- **Building on Māori digital innovation and leadership**—ensuring that digital transformation reflects New Zealand's unique cultural foundations and protects cultural intellectual property while guiding ethical innovation for all communities.