

Action Plan for the Digital Strategy for Aotearoa — Executive summary

The Digital Strategy for Aotearoa (The Strategy) sets out a vision that Aotearoa New Zealand's people, communities, economy, and environment are flourishing and prosperous in the digital era.

The Strategy's Action Plan sets out actions that will advance the delivery of this vision over the next five years. The Plan will be refreshed every year.

The Plan outlines 11 flagship initiatives, along with examples of other activities from across the whole of government, that contribute to the Strategy's themes of Mahi Tika – Trust, Mahi Tahi – Inclusion and Mahi Ake – Growth.

The initiatives reinforce each other and many contribute to multiple outcomes.

The plan also signposts further areas of work that we know we must tackle into the future. These areas of work emerged during the engagement process on the Strategy and will continue to be fleshed out in the coming months.

Together, the initiatives and steps set out in this plan form an ambitious roadmap.

Their implementation should move us closer to achieving the nine high-level measures of success set out in the Strategy.

A first progress report will be prepared for mid-2023.

Advancing 11 flagship initiatives

Digital Identity Services Trust Framework

Digital identity is about verifying a person's identity online. This work will set out rules for the delivery of digital identity services, address gaps in regulation and assist the development of trusted, people-centred digital identity services. A Bill was introduced into Parliament in September 2021 and is currently progressing through legislative stages.

More information is online: https://www.digital.govt.nz/digital-go

Christchurch Call

Following the March 2019 terrorist attack on two Christchurch mosques, New Zealand and France brought together Heads of State and government, leaders from the tech sector, and civil society to adopt the Christchurch Call — a pledge to eliminate terrorist and violent extremist content online while preserving human rights and a free, open, and secure internet. 2022 will include a meeting of Call leaders to assess progress on 2021 work plans and affirm priorities for the next two years.

New Zealand's Cyber Security Strategy

New Zealand's Cyber Security Strategy was launched in 2019 to enable New Zealand to thrive online. Its priorities are to support cyber security aware and active citizens, build a strong and capable cyber security workforce and ecosystem, foster an internationally active, resilient and responsive New Zealand, and drive a proactive approach to tackling cybercrime. 2022 will see continued rollout of the Strategy and launch of a cyber security skills programme for intermediate and secondary schools.

More information is online:

https://dpmc.govt.nz/sites/default/files/2019-07/Cyber%20Security%20Strategy.pdf

Digital Boost

Small enterprises (those with 19 or fewer employees) make up 97% of Aotearoa New Zealand's firms and 29% of employment. The Digital Boost programme offers training and support to small businesses to help them improve their digital skills, as well as the Checkable diagnostic tool that reviews and advises on a firm's digital presence. Next phases include expansion of the Digital Boost Alliance, whose members develop commitments to collectively drive the uptake of digital technologies.

More information is online: Digital Boost website: https://digitalboost.business.co.nz

Improving Rural Connectivity

Being able to participate digitally is essential for inclusion in today's economy and society. This initiative will provide an additional \$60 million to improve connectivity to the most underserved regions who face challenging capacity and coverage constraints. 2022 will see the launch of the Remote Users Scheme and extension of the Rural Capacity Upgrade programme.

More information is online: <u>Accelerating our economic recovery -</u> <u>Budget 2022 - 19 May 2022</u>

Accelerating Māori Innovation

Digital technologies offer significant opportunities for Māori, from revival of te reo Māori, to harnessing mātauranga for innovative businesses, to job creation for rangatahi. This initiative seeks to work across a range of activity in the Māori digital economy and increase the participation of Māori in the digital sector as business owners, entrepreneurs and employees. Mapping the Māori-in-tech ecosystem is one of the priorities for 2022.

More information is online: https://digitaltechitp.nz/

Data as a tool for decision-making and wellbeing

Diverse perspectives on data methodologies and use of data can bring immense value to Aotearoa's wellbeing.

Te Whata is a data platform designed specifically by iwi, for iwi that allows Iwi Information Managers to configure indicators that can inform iwi strategies and investments and enables iwi Māori to share data narratives that more accurately reflect iwi values and realities. Pacific Data Fale o Aotearoa brings together data, research and reports on Pacific peoples in Aotearoa in the areas of demographics, health, education, economy and wellbeing. It also offers a directory of experts to help give context to the rich data available. Both resources will continue to expand in 2022.

More information is online here: https://tewhata.io and https://pacific.figure.nz

Digital Technologies Industry Transformation Plan

The digital technologies sector – activities like data processing, computer system design and software publishing – contributed over \$7.4 billion to the New Zealand economy in 2020 and employment in the sector is growing fast. The Digital Technologies Industry Transformation Plan will help to leverage the sector to accelerate New Zealand's economic recovery and move us towards the goal of a high wage, low emissions economy. 2022 will see the roll out of a "Tech Story" campaign, development of the Software as a Service ecosystem and advancement of the Digital Skills and Talent Plan.

More information is online: https://digitaltechitp.nz/

Te Ara Paerangi – Future Pathways

Te Ara Paerangi – Future Pathways programme aims to create a modern, future-focussed public research system for Aotearoa New Zealand. Digital technologies can play a role by strengthening data infrastructure that enables more frontier research, building greater connectivity across the system and supporting stronger deployment in regions, where mātauranga Māori experts and practitioners live and work, helping to honour The Treaty of Waitangi. Immediate steps in 2022 will be a White Paper strategy document.

More information is online: https://www.mbie.govt.nz/have-your-say/future-pathways/

Māori Data Governance

Data governance policies and frameworks shape the way in which we can unlock the potential of data. The Māori Data Governance initiative aims to develop and implement guidance about a data governance approach that reflects iwi and Māori interests and embeds Te Tiriti o Waitangi / the Treaty of Waitangi and its principles. A key action in 2022 is to develop Te Ohu Raraunga governance model using the waka hourua concept, with testing and implementation by early 2023.

More information is online: https://data.govt.nz/toolkit/data-governance/maori/

Ārohia Innovation Trailblazer Grant

Innovation is increasingly data-driven, collaborative and service-oriented, and does not necessarily involve dedicated research and development activities. The Ārohia Innovation Trailblazer Grant for non-R&D innovation, being introduced from mid-September, will broaden the type of innovation support offered to those companies whose innovation activities are not always eligible under the Research and Development Tax Incentive.

More information is online:

https://www.mbie.govt.nz/about/news/new-grants-to-boost-business-innovation/

Reinforcing our efforts – other selected activities

 The Digital Safety Group: This group responds to violent extremist content and child sexual abuse material online.
 Digital Child Exploitation Inspectors work with local and overseas agencies, swapping intelligence about people using the Internet to share objectionable material.

Website: https://www.dia.govt.nz/Online-Safety

 Ngā Tikanga Paihere Guidelines: These guidelines focus on how data about Māori and other under-represented subgroups is used for research purposes. It draws on 10 tikanga, including pūkenga (knowledge and expertise) and tapu (sensitivity and risk), to propose a framework to guide safe, responsible and culturally appropriate use of data. Website: https://data.govt.nz/assets/data-ethics/Nga-Tikanga/Nga-Tikanga-Paihere-Guidelines-December-2020.pdf

• Digital inclusion through skills development: The Office for Seniors is leading a digital literacy initiative to support older people to be online and carry out online transactions safely, enabling them to live a good quality life as they age. The government is also working with the Pacific community to develop Pacific Community Digital Hubs to support improved digital access and skills growth, and build Pacific science, technology, engineering and mathematics futures through the Toloa programme.

Website: https://officeforseniors.govt.nz/our-work/digital-inclusion/ and https://www.mpp.govt.nz/programmes/toloa/

• Te Pae Tawhiti Transformation Programme: This large multiyear change programme will make it easier for New Zealanders to get help and support through the welfare system when they need it, including a fully digital service for those who want to use it and the ability to seek more personalised assistance when needed.

Website: https://www.msd.govt.nz/about-msd-and-our-work/about-msd/strategies/te-pae-tawhiti/index.html

 Government cloud adoption: The government is supporting agencies to adopt cloud technologies, to help enhance customer experiences, support continuity of services and security improvement, and enable better collaboration between Māori and the Crown on cloud adoption. Website: https://www.digital.govt.nz/digital-government/programmes-and-projects/cloud-programme

 Harnessing digital technologies for health system transformation: A planned uplift in data and digital infrastructure and capability will enable improved health system performance in Aotearoa. Investment over the next few years will include digital infrastructure required for the New Dunedin Hospital and efforts on population health and disease management.

Website: https://www.health.govt.nz/our-work/digital-health

• **5G rollout programme:** 5G is expected to deliver faster and more reliable cellular mobile services, with opportunities to support innovation and productivity. The government is working on allocating new long-term rights to radio spectrum to effectively roll out 5G in New Zealand.

Website: http://www.rsm.govt.nz/projects-and-auctions/current-projects/preparing-for-5g-in-new-zealand/

 Digital Commerce programme: New Zealand Trade and Enterprise provides advice and support to interested exporters to enable global sales in digital marketplaces and can connect businesses to one-on-one support to help access specific markets.

Website: https://www.nzte.govt.nz/page/digital-commerce

• **Digital Trade**: Digital trade policy facilitation can support the growth of Aotearoa New Zealand businesses and boost innovation and productivity.

Work includes implementing and expanding the Digital Economy Partnership Agreement and negotiating digital provisions in trade agreements and at the World Trade Organisation.

Website: https://www.mfat.govt.nz/en/trade/nz-trade-policy/trade-for-all-agenda/

Looking ahead

There are four areas where we do not yet have dedicated resources but where we want to do the groundwork for future initiatives. They are:

- Data ethics and Artificial Intelligence The ability to advance ethical and innovative development and use of AI depends heavily on building a trustworthy and ethical data ecosystem. We could be a leading global voice in data governance, promoting trust, addressing risks to privacy, embedding te ao Māori perspectives and supporting networking and coordination across industry, research bodies and the wider community. Initial steps will include building data ethics capability in the public sector.
- Cyber security Cyber-enabled threats to our security
 continue to grow in scope and scale. We need to continue to
 invest in making the networks we rely on more resilient to
 cyber threats, from those faced by individual home users
 through to those on critical infrastructure, and build capability
 and awareness throughout the economy and society.

Creating a cyber resilience measurement framework will be one contribution to this.

- Developing a multi-year, cross-agency Digital Inclusion Action plan to close the digital divide — Aotearoa New Zealand has made progress on digital inclusion, including through broadening our internet infrastructure network and supporting children to learn from home. To advance on the Strategy's vision of inclusion for all, the Department of Internal Affairs is leading work alongside relevant agencies, industry, Iwi Māori and other community groups to develop a plan to close the digital divide.
- **Digital twins** Virtual representations (or "digital twins") of real-world objects and systems such as hospitals and electricity grids can drive better decision-making through use of data. To support a future national-level conversation on the potential of digital twins and inform reflection on the role of government policies, we will map the current landscape of digital twins in Aotearoa New Zealand and develop an inclusive process for engagement.