# AI BLUEPRINT FOR AOTEAROA

Update January 2025

**AI Forum**
New Zealand
Te Kāhui Atamai Iahiko o Aotearoa

# AI BLUEPRINT FOR AOTEAROA

# BACKGROUND

Since we published our AI Blueprint in July 2024, the teams involved, within the Blueprint Working Group, the AI Forum Executive Council and in other Working Groups, have continued to invest time and effort into building out their individual pathways, and how those pathways interconnect.

This paper is an overview of what has happened in the intervening six months, how our investments have borne fruit and what to watch out for in 2025.

# WE HAVE BEEN BUSY:

**Building strong foundations for our AI ecosystem:**

- **Supporting and encouraging** the Government in developing the AI Strategy for Aotearoa New Zealand; and partnering with non-government organisations to develop their own informed approaches to AI.
- **Making good governance** for responsible AI accessible and affordable for all, and supporting and encouraging organisations including Insitute of Directors (IoD) and TUANZ to provide informed support tailored for their audiences.
- **Encouraging upskilling** workshops, masterclasses, and courses to unlock the ability for our existing workforce to help fill the capability gap – and for senior decision makers to feel confident that they have the right controls in place and understand the opportunities and risks for their organisations. This included bespoke masterclasses, presentations at events and providing content and guidance to IoD for their AI Governance online course.
- **Kahui Māori:** Providing Māori with a voice and guidance for the intersection of Te Tiriti, Te Ao Māori and AI.
- **Telling the stories** that bring to life how we are using AI here in Aotearoa New Zealand.



*Minister Collins in conversation with Megan Tapsell, AI Forum Chair, at the Aotearoa AI Summit 2024*

**Harnessing the power of AI:**

In May 2024 we convened around six focus sectors, with each one producing a view of where they could be in 5 years and what should be achievable in the first year.

In November 2024 we asked them to provide an update against that plan of action; what has changed (recognising that this technology is advancing at pace), and an updated plan of activities for the following 12 months.

Those updates, summarised here, are available in full in Part 2 of this report, including:

- Contributing to **ISO AI Standards** as part of the national effort.
- Development of a comprehensive **action plan** for the Architecture, Engineering, and Construction (AEC) sector to leverage AI's potential for significant economic impact.
- A plan to create a new **Regulatory workstream** to run a sandbox, aimed at bringing tangible scenarios and creative sector experience to analyse both existing and future regulation.
- Garnering industry and government support for a **New Zealand AI Trust Mark** concept.
- Establishing a community of practice to improve visibility of AI use-cases in the **Creative Industries** sector.
- Rapidly expanding the **Education** sector's AI initiatives, including forming a **Community of Practice** for educators, which has grown to over 400 members.
- Expanding the use of AI in the **private Health sector**, notably AI scribes in primary healthcare, with emerging startups continuing to succeed, albeit with more success overseas.

**Growing our reputation and participation internationally:**

- Invited to review and comment on International AI Safety Report. One of only 80 organisations globally.
- In partnership with NZTech and the Ministry of Business, Innovation & Employment. (MBIE), we are active participants in formulating ISO AI Standards.
- In discussions with Singapore regarding a cross-border collaboration.
- Represented Aotearoa New Zealand at the Australian AI Leadership Summit.

**Encouraging momentum in AI in Aotearoa New Zealand:**

- **LLM Living white paper:** Telling the stories about how people and organisations in Aotearoa New Zealand are using AI
- Measuring, analysing and reporting on **the impact of AI on Productivity**
- **Strategic Statements of Intent:** Engagement and drafting with some of Aotearoa's largest and most influential organisations is underway
- **Encouraging participation:** Through events including our recent AI Blueprint Webinars, our in-person AI in Creative Industries symposiums and annual AI Summit.
- **Practical applications:** Promoting practical applications that are making or have the potential to make national and globally important impacts e.g. Ingenum in animal health and Aware Group in crop production, disease protection, and animal management.
- **Growing opportunities:** We are increasingly investigating prototyping opportunities as we look for practical ways to further encourage engagement, growth and adoption

# Refined Strategic Pillars

This growing body of work and collaboration with MBIE and the Department of Internal Affairs (DIA) is reflected in updates to our Strategic Pillars.

We have included a fifth pillar that reflects our increasing global reach and the international nature of this space, and we have extended our definitions to include new understandings that our work has produced.

**New Opportunities**

Understand new and evolving capabilities, expose new opportunities and support responsible adoption.

**Increasing Capabilities and Scaling Innovation**

Enabling innovation at scale by providing access to enabling tools, services and sustainable infrastructure.

**Enhancing Adoption and Managing Risks:**

Encourage responsible, inclusive and enabling AI regulation, governance, development and use – so we can build trust and societal confidence; and innovate without unnecessary barriers.

**Building Talent**

Ensure our people have the capabilities to design, develop and use AI effectively through inclusive education pathways that upskill our existing and future workforce.

**Global Reach**

International connectedness through standards, regulations and collaborations - and leading with our strengths

Markets – reinforce existing markets and build new ones.

# Pillars in detail

## New Opportunities
Understand new and evolving capabilities, expose new opportunities and support responsible adoption.

**Uncover and understand:**
- Understand the new and evolving capabilities – and foster responsible adoption
- Support organisations to understand and deploy AI
- Support and partner with other organisations helping their cohorts understand and deploy AI responsibly

**Expose new opportunities:**
- Prototyping new capabilities, e.g. LLM living white paper
- Sandboxing with industry and government
- Support access and inclusion initiatives

**Support responsible development:**
- Policy driven frameworks for Data and AI

## Increasing Capabilities and Scaling Innovation
Enabling innovation at scale by providing access to enabling tools, services and sustainable infrastructure.

**Building on existing work:**
- AIGovernance.nz
- Centre for Data Ethics and Innovation
- AI Accelerators and Communities
- Kāhui Māori Atamai Iahiko, Māori Tech Board and other groups focused on value for Māori and Pacific communities
- Digital Infrastructure programmes
- Sustainable Data Centres and compute power

**Building new capabilities:**
- Investment in Research and Development
- Programmes to attract investment

## Enhancing Adoption and Managing Risks

Encourage responsible, inclusive and enabling AI regulation, governance, development and use – so we can build trust and societal confidence; and innovate without unnecessary barriers

- Building trust and societal confidence
- Supporting government agencies' work on the ground
- Activation and Risk Models
- Digital inclusion and equality
- Data and AI ethics, standards and governance
- Support development of Aotearoa New Zealand Creative Industries' AI quality mark
- Regulatory enhancement: identify and investigate unnecessary complexity and counter productive regulations to improve our regulatory framework

## Building Talent

Ensure our people have the capabilities to design, develop and use AI effectively through inclusive education pathways that upskill our existing and future workforce.

**Education**
- School system
- Tertiary education

**Upskilling our existing workforce:**
- Tertiary led
- Industry led (e.g. Spark NZ)

**Talent attraction and retention that helps to build our capabilities:**
- Research and Development
- Build and deploy
- Implementation and integration

## Global Reach

International connectedness through standards, regulations, collaborations and markets. Leading with our strengths, reinforcing existing markets and building new ones

**Connectedness:**
- Tools to understand legislation and regulation across different markets
- Cross Border collaborations
- Knowledge sharing and collaboration, bringing our strengths as global leaders in indigenous AI and AI for the Environment
- Collaboration and participation in international AI standards development

**Markets:**
- Attract investment
- Build and support digital exports, reinforcing existing markets while attracting new markets and consumers

# Blueprint actions to watch for in 2025:

**Aligned Strategic Pillars:** We have aligned our strategic pillars with the new AI Framework recently published by the DIA, and will continue to support work that MBIE and DIA have commenced on the government's AI Strategy, due to be released later in 2025.

**Strategic Statements of Intent (SSI):** We are working with the first cohort of organisations to highlight and celebrate investments being made in Aotearoa New Zealand using the SSI framework outlined in our AI Blueprint.

**A sharper focus on opportunities:**

- **Building capabilities:** Encourage the development of better capabilities and controls, so that we can take advantage of the opportunities and address the risks effectively. In education, we are encouraging a Community of Practice where educators are collaborating and educating themselves.
- **Competitive advantage:** Foster opportunities to supercharge both our investment and talent.
- **Prototyping:** Use prototyping to demonstrate how new capabilities can work, building knowledge, confidence and trust at the same time. Creating safe places to play and try out new things, and bringing people from government and industry on the journey.
- **Accessibility:** Look more closely at the opportunities we have to address the digital divide, creating a fairer society and encouraging career mobility.
- **Sustainability:** Advance the opportunity AI affords us to use our limited resources more effectively, especially regarding energy and the environment.
- **Encouraging adoption:** Positive examples that help shift our mindset to accept systems that are significantly superior to our current ones, embracing incremental improvement rather than waiting for perfection.

**Continuing our original research on the impacts of AI**
First published in September 2024, this research is exploring the impact of Artificial Intelligence on Aotearoa New Zealand's productivity.

We partner with Victoria University Wellington to run the survey, analyse the data and provide the insights to ensure independence and empirical soundness. Callaghan Innovation produced the first report, ensuring a high quality, accessible information.
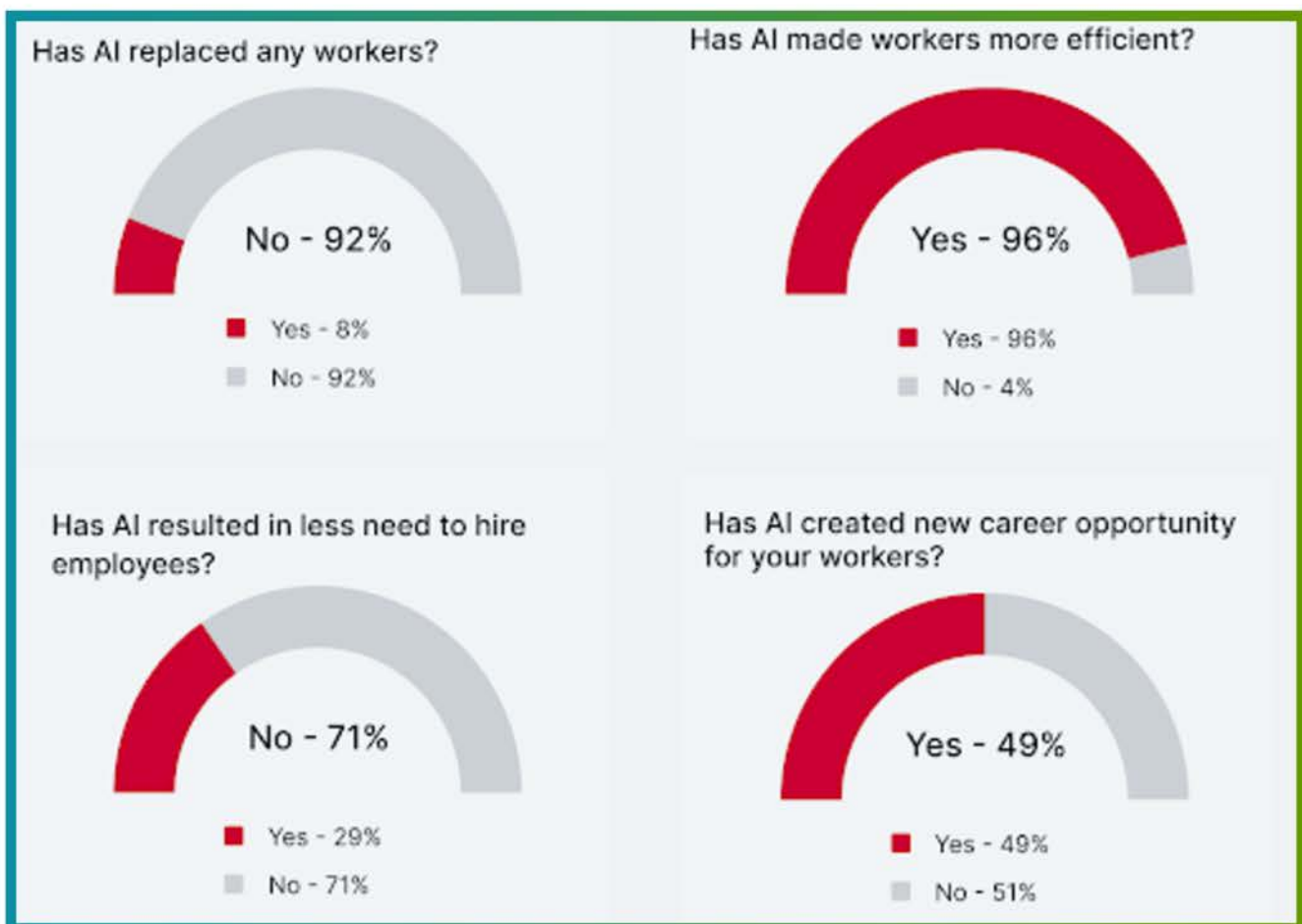
This initiative marks a significant step in understanding the adoption and impact of AI across all sectors of industry in an era where AI is rapidly transforming industries worldwide.

AI in Action Report: September 2024. View here.

# AI in Action research and reports

Have New Zealand organisations been slower than their international counterparts in adopting AI? While other surveys have highlighted a lack of confidence and capability in our firms as holding back uptake of AI, we set out to test assumptions about adoption – and barriers like lack of confidence and capability - by tracking adoption across businesses of all sizes, the applications of AI, impacts on the workforce, and the financial consequences of implementing AI.

It is imperative that we have a clear, evidence-based understanding of how these technologies are being used and their impacts on productivity within our own country. By conducting this survey regularly we plan to provide a robust, data-driven foundation for decision-making.



Has AI replaced any workers?
No - 92%
Yes - 8%
No - 92%

Has AI made workers more efficient?
Yes - 96%
Yes - 96%
No - 4%

Has AI resulted in less need to hire employees?
No - 71%
Yes - 29%
No - 71%

Has AI created new career opportunity for your workers?
Yes - 49%
Yes - 49%
No - 51%

*Extract: Key findings in the AI in Action Report, published September 2024*

We ran the second survey in November / December 2024 and are scheduled to launch the second report in early March 2025

# KEY SECTOR PROGRESS UPDATES

# Sector Updates

Each of the six workstreams in the AI Blueprint has provided updates on their progress in the second half of 2024.

**Webinars:**
At the end of 2024, we hosted two lunchtime webinars where each of the six sector leads had the opportunity to provide an update from their workstreams on progress since the foundation work for the AI Blueprint for Aotearoa was completed in May 2024:

Agriculture, Environment, Health - view here

AEC, Creative Industries, Education - view here

The following are summaries provided by each of the sectors:

| SECTOR | SECTOR LEAD |
|---|---|
| Agriculture | Craig Pattison |
| Architecture Engineering & Construction | Maria Mingallon |
| Creative Industries | Paula Browning |
| Education | Dr Geri Harris |
| Environment | Prof Albert Bifet (David Knox) |
| Health | Kevin Ross |

# Agriculture

**Where will we be in five years?**
What the world will look like in 2030…
*(from AI Blueprint for Aotearoa, July 2024)*
*In 2030, Aotearoa New Zealand will be a world-leading hub for responsible AI innovation, recognised globally for harnessing AI to enable a prosperous, inclusive, and equitable future. Our ambitious goals for the next five years include being in the top 30 of the Government AI Readiness Index, top 25 of the Global AI Index, and top 10 in OECD productivity rankings. To achieve this, we must start now and move at speed, implementing specific actions and policies that drive us towards these targets. Achieving these milestones will significantly boost New Zealand's GDP, create high-value jobs, and position us as a global leader in AI innovation.*

**What we have learned:**
- "Data is the new fertiliser—growing smarter decisions, healthier soils, and stronger farms"
- "When farms thrive, communities prosper—AI brings us forward together"
- "Doubling primary sector GDP starts with connecting paddocks and empowering farmers"

**What we have achieved**
We have laid the groundwork for significant change:
- Building industry collaborations across the agricultural sector putting in place the foundation for a "daisy chain of success"
- Global leadership in Standards: New Zealand is now a voting member in the ISO Artificial Intelligence Committee, allowing us to influence global AI standards that meet local needs.

- We are responding to the opportunity to build prototype with the potential to enhance agricultural exports in a cross-border collaboration with Singapore.

**Preparing for the future**
To seize the opportunities AI presents, we must prepare now. This involves:
- **Digital infrastructure and connectivity**: Ensuring comprehensive internet coverage across rural areas to support AI and digital technologies. Enhanced digital infrastructure will enable widespread adoption of AI, leading to increased productivity and economic growth.
- **Upskilling workforce**: Investing in training and development for farmers and agribusiness professionals to leverage AI tools effectively. This will create high-value jobs and foster an inclusive, tech-savvy workforce, supporting job creation and economic development.

# Architecture Engineering and Construction Sector (AEC)

**What the world will look like in 2030…**
(*from AI Blueprint for Aotearoa, July 2024*)
*By the year 2030, the Architecture, Engineering, and Construction (AEC) sector in New Zealand aspires to be at the forefront of developing, adopting and implementing innovative solutions that streamline the delivery of critical infrastructure projects, contributing to healthy, consistent GDP growth and positively impacting the nation's economy.*

*This vision will be supported by a fully defined AI innovation ecosystem, which is expected to expedite the awareness, adoption, and innovation of AI within the sector across the nation. This vision includes the establishment of a national framework of Data and AI Governance, Standards, and Policies that enable the steady development and implementation of responsible AI solutions. It is anticipated that AI will play a substantial role in the AEC sector's research and development initiatives, with this vision setting out the ambition for over 40% of all projects to involve AI. This integration of AI into the sector signifies the country's commitment to embrace advanced technology responsibly to boost productivity in the sector, thereby adding value for money for all taxpayers.*

This is a summarised version of the full report available here.

### What have we achieved since May 2024?

- The establishment of the AEC Working Group was a significant milestone, marking a pivotal step in promoting the integration of artificial intelligence within the AEC sector.
- The group aims to tackle industry challenges, enhance productivity, and foster climate resilience through innovative AI solutions. Bringing together experts and stakeholders, the group aims to drive meaningful change, supporting the development of best practices and educational resources.

### New Blockers / Challenges
**People/Skills/Talent:**

- The rapid advancement of AI tools is outpacing the capacity of individuals and organisations to learn and effectively utilise them for value realisation.

- Human oversight remains crucial to the accuracy, relevance, and integrity of AI output.
- There is insufficient support available for organisations within the AEC sector to develop the necessary AI-related skills, including definitive AI company policies and strategies.

### Research/Innovation:

- Technologies are evolving and converging at a pace that outstrips businesses' ability to adapt and develop capabilities for creating commercial value.
- The sector needs more responsive and agile strategic business planning and investment decision-making processes.

### Commercial Environment:

- The cost of running AI models is escalating, with open-source alternatives often failing to meet requirements.
- Rising expenses for cloud computing, combined with increasing energy costs and limited data storage and data centre options in New Zealand, further exacerbate these challenges.
- Uncertainty in project pipelines and infrastructure capital investment, along with a lack of long-term vision for infrastructure projects impedes strategic investment in innovative AI solutions.
- This hinders the ability to scale AI's value in addressing repeatable problems, ultimately affecting the commercial viability and growth potential within the industry.

### Regulatory & Business Environment:

- Regulatory guidance: There is a need for appropriate baseline regulatory guidance to streamline compliance without it becoming burdensome.

- Though New Zealand is opting for a less regulated approach, solutions developed for overseas clients still need to comply with international regulations.
- Clearer roles and responsibilities among government bodies, consultancies, academia, and industry associations are needed.
- Progress on data standards and frameworks within the AEC industry in Aotearoa New Zealand has been minimal, with only isolated adoption by some councils.
- There is a notable absence of specified digital engineering, information management, and data management requirements in public contracts or legislation.

## New Opportunities
### People/Skills/Talent:

- Prompt engineering is emerging as a crucial skill in generative AI.
- Potential to create effective language models from desktop setups at relatively low cost and effort, enabling the development of foundation models tailored to specific verticals.
- Upskilling for board members of AEC firms is essential to enhance their understanding of AI's potential and challenges, empowering them to make informed decisions.
- Upskilling AEC businesses on agile business model innovation is crucial, enabling them to respond more effectively to rapidly evolving AI-based solutions.

### Research/Innovation:

- The rapid advancement in AI technology presents increased business value and access through low-code and no-code solutions.
- Combining AI with advanced technologies like quantum computing and IoT can lead to

further exponential gains, with synergies unlocking new possibilities and significant improvements.

- Advancements in user interfaces make it easier for businesses to adopt and integrate AI into their operations.
- AI foundation model ownership is becoming more feasible, leading to the "Own your own AI movement," which encourages organisations to develop and control their AI models.
- Development of an **AEC foundation model benchmark** could help validate the use of AI in the AEC sector through an AEC knowledge base powered by AI. Taking relatively low effort to establish, provided sponsors cover the costs of fine-tuning models and running a chatbot.
- Continuously updating the knowledge base would provide valuable information, enabling collaboration between building materials manufacturers and organisations like MPI, Scion, NZCIC, and EECA to amplify investment in AI initiatives.

### Commercial Environment:

- The is an opportunity to expand on the successful of public-private partnerships raising awareness and adoption of AI, including a global construction business interested in establishing an AI construction Centre of Excellence in New Zealand for AI.
- Encouraging global businesses to create new AEC AI partnerships here, will inspire exemplary New Zealand AEC innovators to scale in multiple markets.
- Utilising AI to optimise resources and improve project outcomes is especially important in the current economic climate, ensuring value for money in infrastructure projects.

**Regulatory & Business Environment:**

- Aotearoa New Zealand is now a voting member in the ISO Artificial Intelligence Committee, allowing us to influence global AI standards that meet local needs.
- Incorporating AI into government procurement for large AEC projects can drive innovation and efficiency, further enhancing the sector's capabilities.

## Our Action Plan

Key outcomes are organised by the workstreams within our AEC Working Group: Assess, Inform, Upskill, Innovate, and Governance. Through this comprehensive structured approach, we aim to empower stakeholders and drive meaningful advancements in our industry.

## Assess Workstream

- **Q1 2025:** Conduct Research Reports - Analyse the current state of AI and future trends to inform strategic decisions.
- **Q2 2025:** Develop AEC Post-AI Roadmap - Create a strategic roadmap to guide stakeholders in AI integration within the AEC sector.
- **Q3 2025:** Publish Comprehensive White Paper - Outline practical recommendations for AI integration in the AEC sector.

## Inform Workstream

- **Q1-Q4 2025:** Create AI Use Cases Portfolio - Compile diverse success stories and case studies that highlight AI applications in the AEC sector.
- **Q2 2025:** Implement Pilot Programs - Demonstrate the use of AI tools to enhance access to AEC knowledge bases for productivity gains.

- Q3 2025: Integrate AI in Standard Contracts - Add AI considerations to existing NZ construction contracts for improved adaptability.

## Upskill Workstream

- **Q1-Q4 2025:** Conduct AI Awareness Sessions - Host AI awareness sessions with industry members to discuss rapid technological changes.
- **Q2-Q4 2025:** Develop Value Proposition Board Presentations - Create materials for AEC board members that outline the benefits and risks of AI.

## Innovate Workstream

- **Q1-Q4 2025:** Support AI Start-up Connections for AEC Businesses - Facilitate partnerships between AI start-ups and AEC businesses to drive innovation.
- **Q2 2025:** Establish Implementation Framework - Create templates and frameworks to facilitate AI integration into existing processes.
- **Q2-Q4 2025:** Launch AI in AEC Centre of Excellence with Global AEC Business - Establish international treks to create new global partnerships and to inspire exemplar AEC innovators to scale in multiple markets, e.g. AI in AEC Centre of Excellence.
- **Q2 2025:** Define and Implement AEC Cross-Sector Initiatives - Scope initiatives in partnership with the 'Agriculture' and the 'Environment' Working Groups to support high-value wood product manufacturing & export and construction & demolition waste-to-value.
- **Q3 2025:** Enable AI Knowledge Sharing Ecosystem - Enable a platform for technical training, best practices sharing, and collaborative forums to accelerate AI adoption.

**Governance Workstream**

- **Q2 2025:** Curate Comprehensive Policy Guidelines - Create guidelines addressing the legal and ethical aspects of AI deployment in the AEC sector.
- **Q3 2025:** Curate Risk Management Frameworks - Provide tools to help organisations identify and mitigate AI-related risks.
- **Q3-Q4 2025:** Encourage AI in Government Procurement - Advocate for the integration of AI criteria in procurement processes for large AEC projects.
- **Q4 2025:** Establish AEC Data Governance Framework - Implement standardised data sharing policies and security protocols to ensure compliance and enable innovation.

# Creative Industries – Trusted and Unique AI

**What the world will look like in 2030…**
*(from AI Blueprint for Aotearoa, July 2024)*
*By 2030, Tiaki AI, the New Zealand Creative Industries' AI quality mark, will be recognised around the world for AI systems and outputs that are:*

1. *Trusted - ethical AI models, built on foundations of transparency and respect, are distinguishable as having been 'created in NZ', growing Aotearoa's existing international reputation for our creativity and innovation.*

2. *Unique - we'll produce creative outputs that celebrate what makes us different, with a focus on Te Ao Māori. Rather than trying to compete on size and scale, we'll focus on being creatively and culturally distinctive.*

**What will change the game for us by 2030?**
Education – for everyone, but particularly creative professionals. Knowledge of AI – how to use it in creative practice/business and what to avoid - will be critical for productive creative careers.

**What have we achieved?**

- **Regulation Tool proposal:** Progress with a Regulation tool that would help to sandbox existing, and potential new regulation relating to AI systems, inputs and outputs
- **Tiaki "trust mark" proposal:** Industry and government agency support for the concept of a NZ trusted-AI mark
- **Intellectual property:** Deeper understanding of the IP and value-loss risks of AI

**What has changed - new opportunities and challenges?**
**Sector Environment:**

- The sector's perspectives have moved on to include discussion on the IP in AI outputs, in addition to the issues with permissionless and unremunerated use of IP in AI inputs.
- Multiple lawsuits have been launched against many of the AI companies that started business with web and data-set scraping
- Creative professionals need protection of their Human Rights that are not currently available, namely Personality Rights (voice, likeness etc)
- Sector organisations don't have the bandwidth to look at the future while there are unresolved issues with regulation, both locally and internationally

## Government influences:

- The government has moved its position on AI regulation from "no" to "some", but how do we support its development in a way that provides different levels of braking - a set of brakes that can be applied for slowing down or avoiding danger, rather than stopping?
- NZ has signed the Bletchley Declaration - committing to international collaboration on AI development
- Amplify – the draft creative and cultural strategy. This is an opportunity for an all-of-government approach to AI development and regulation in Aotearoa.

## What are our plans for 2025?

- Support the establishment of a new AI Blueprint workstream for **Regulation**. An industry-informed group to bring tangible scenarios and creative sector experiences to regulation development.
- Supporting the government to inform AI regulation, using the locally available **RegTech tool**.
- Announcing the **Aotearoa New Zealand AI Trust Mark**
- **Community of Practice**: We have limited visibility into what's happening with AI in our sector – who's developing it, who's using it, what for? We plan to improve visibility of AI use-cases in our sector through building a community of practice

# Education

## What the world will look like…
*(from AI Blueprint for Aotearoa, July 2024)*
*The future of education in New Zealand is one where learners are equipped, educators are empowered, and our nation excels in educational innovation, harnessing Artificial Intelligence (AI) capabilities.*
*We urge the Ministry of Education to lead the way in championing AI integration to foster excellence in learning and teaching; ensuring measurable progress towards our 5-year vision through immediate actions; and securing New Zealand's position as a global leader in innovative education.*
*This is a summarised version of the full report here.*

## What have we achieved?

- Taskforce Establishment: Successful creation of AI in Education workstream within AI Forum
- Community of Practice: 400+ members, meet fortnightly (online) to share best practices
- Educator Training: Some AI literacy training happening; Roundtable discussion at the AI Summit highlighted that more work is needed to work out how to address this

## Key challenges

- Clear Guidelines Needed: Educators require mandates & policies for AI experimentation
- Education is Split: Divided between those experimenting with AI and those banning it!
- Curriculum Integration: AI workstream outputs to feed into K-12 digital literacy refresh

## Key recommendations

- Clear Guidelines & Policies: Develop guidelines for school leaders to encourage AI experimentation
- Curriculum Integration: Align AI workstream outputs with national educational goals
- Professional Development: Support Address time and budget constraints for AI literacy training

## Updated Actions for Next 12 Months

- **Self-Diagnostic Tool** Develop a tool for educators to self-assess AI literacy and guide integration steps
- **Official AI Experimentation** Support MoE and NZQA endorsement for responsible AI use
- **Centralised AI Tool Repository** Accessible database of tested teaching and learning tools
- **Expanded Community of Practice** Regional network of AI experts for educator support; learn from Australia's innovation in education

## Next Steps

- **Implement Updated Actions:** Education workstream to review 5-year vision & roll-out action plan
- **Expand Collaboration:** Grow community of practice, establish school clusters, look to Australia's experiences integrating AI into education
- **Continuous Evaluation:** Regular progress reviews and strategy adjustments; deliver on actions

# Environment

## What the world will look like…
(from AI Blueprint for Aotearoa, July 2024)

*By 2030, the cost of obtaining additional data for AI systems will be reduced, allowing for better-informed environmental decisions. AI will assist in addressing various environmental challenges, such as measuring biodiversity, and will support more effective forward planning. Data will be made accessible through AI, enabling people to make informed environmental decisions, and global connections will be strengthened by benchmarking environmental data against international standards. Systems of data collection will respect Māori data sovereignty and our unique cultural environment.*
*Our goal is to maximize our global environmental contribution rather than compete against it.*

## What has changed – new challenges

- Decreasing data costs remains critical, but New Zealand is lagging behind international efforts in piloting and commercialising AI techniques due to limited research access to remote sensing products.
- Overseas innovation impacts New Zealand's R&D and commercialisation potential, underscoring the need for improved global collaboration.
- While Microsoft delivered their carbon-neutral NZ datacenter in December 2024, many have begun to backtrack from previous environment commitments. Environmental harm from energy use from datacenters running AI needs to be understood and balanced against the benefits.

## What will change the game?

- Upskilling environmental scientists: High-level computer science understanding among environmental scientists is necessary to evaluate AI outcomes and resource investments.

- Cost-benefit: Societies must carefully consider the cost-benefit of resource-intensive AI against practical predictive needs, like sea level rise or storm accuracy. This is an opportunity to drive more environmentally friendly and efficient ways to generate and use energy.

**What Is Our Plan for the Next 12 Months?**

- The Government has acknowledged the importance of environmental data access, but progress is on hold pending the science sector review completion.
  https://ssag.org.nz/
- Key decisions depend on insights from the ongoing science and university reviews, which should guide the refinement of strategic priorities.
- Conduct an initial assessment of needs between environmental and technology specialists to set clear priorities.
- AI Hackathon 2025: Our annual NZ-wide festival running from 14-17 August promotes using AI to help solve real world problems from protecting water resources, fighting climate change, reducing pollution, managing land use, and preserving biodiversity to improving the ways we experience our own environments. These events provide a safe place to play and experiment with AI – and begin to understand its potential.

# Health

**What the world will look like in 2030…** *From AI Blueprint for Aotearoa, July 2024*

- *Citizens and healthcare staff will expect AI-driven solutions for both functional (e.g. find,*

*book, order, share) and clinical (e.g. AI driven diagnostics and imaging, advanced symptom analysis and clinically accurate self-reporting) treatment, recovery and continued wellbeing. There is a real risk that if they don't find this locally, they will access global services, compromising visibility and oversight. Aotearoa New Zealand will spawn innovative health AI companies who are creating superior health outcomes and attracting global investment to New Zealand. Public and private interests will enthusiastically support responsible, ethical and transparent AI innovation.*

**Current: Aotearoa New Zealand's Health Sector, empowered by AI**

Today, New Zealand faces challenges in its pressured health system as it navigates the complexities of adopting AI. However, there are several foundational assets ready to be leveraged:

- Comprehensive national health data sets and a well established health identifier.
- Recent reviews and government recommendations on AI in Healthcare in New Zealand [insert link]
- Internationally successful health technology companies

As the public health system continues its reform, significant innovation continues across the wider sector including private providers, technology companies and academic institutions.

Empowering the broader community to invest in locally developed innovative responsible AI will have flow-on effects, improving trust, health outcomes, equity and productivity.

AI has the potential to help alleviate healthcare costs by assisting with increasingly complex tasks and empowering patient agency.

## Challenges and opportunities identified in H2 2024

The group has been mapping out and tapping into the various groups and work already underway in this sector.

**Landscape:** Health reforms dominated the conversation in the second half of 2024 holding up AI progress, though at the same time presenting great potential for AI to be part of the solution.

**AI in Health organisations:**

- The national AI advisory group at Te Whatu Ora was working well
- A new Researchers in Health AI academic group was launched.
- The MoH are following through on an action plan related to the report by the chief science advisor, with this workstream planning to work with them to take ownership of the actions appropriate for industry.

**AI adoption:** There are a growing number of examples of AI use in the private sector, including primary care use of AI Scribes.

**HealthTech Startups:** There are also successful emerging startups in NZ, although they continued to have more success in deploying overseas. Amongst these, Aged care has emerged as a theme, including for the recent MBIE Singapore collaboration program.

*AI is disrupting healthcare globally - New Zealand cannot afford to be left behind.*

## AI Forum
### New Zealand
Te Kāhui Atamai Iahiko o Aotearoa

**AI BLUEPRINT FOR AOTEAROA**

January 2025

AI FORUM NEW ZEALAND

Te Kāhui Atamai Iahiko o Aotearoa

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