

## MĀORI AI GOVERNANCE

A Framework for Ethical Governance of Al

## **Summary Report**

Artificial Intelligence (AI) involves technologies that mimic human intelligence by using large datasets, advanced algorithms, and computing power to analyse data and make decisions. These AI systems, including generative AI which creates new content, rely heavily on data, making robust data governance essential.

In Aotearoa New Zealand (Aotearoa), this means applying Māori data governance (MDGov) principles to ensure that Māori data – a taonga – is managed with cultural respect and care. The Māori Al Governance framework distinguishes between algorithmic systems, which operate on fixed rules, and Al systems that learn and adapt from data, emphasising the need for governance frameworks that address both.

This report provides summary excerpts from the full Māori AI Governance Framework Report, available at www.kahuiraraunga.io. These reports outline a framework designed to to help agencies assess and manage AI and algorithmic systems ethically and safely, providing contextual guidance aligned with the Māori Data Governance Model¹ (MDGov) that culminate into five key recommendations...

The framework makes it clear, AI systems must not be implemented in Aotearoa without fully realising Māori authority over Māori data. The path to ethical, innovative, and socially just AI begins with honouring Te Tiriti o Waitangi, embedding Māori leadership, and holding agencies accountable for safe and respectful data use. The AI transformative potential is greatest when technological advancement aligns with ethical frameworks that prioritise transparency, fairness and decision-making authority. By implementing the framework and recommendations, government agencies can ensure that AI technologies serve the wellbeing of all, uphold Māori data rights, and future-proof Aotearoa's digital landscape.

### Recommendations

### Recommendation 1:

Review the government's Algorithm Charter

### **Recommendation 2:**

Create a government Algorithms Register

#### Recommendation 3:

Set whole-of-government AI policy and Māori data standards

### **Recommendation 4:**

**Establish an Independent Monitoring authority** 

### **Recommendation 5:**

Invest in Māori-led AI development and infrastructure

More detail can be found below.

For a more in-depth guide see Te Kāhui Raraunga's Māori Al Governance Report via: kahuiraraunga.io/ aidatagovernance

# Pou 1 Al capacities and workforce development

Actearoa has strong potential to lead in developing sovereign Al models that reflect local contexts and uphold data sovereignty, particularly for Māori. However, realising this opportunity requires dedicated funding and a broad strategy to build Al skills across both government and Māori communities. While government IT systems currently have greater resources and capacity, significant knowledge gaps remain, especially in understanding Māori worldviews. Incorporating these perspectives into Al models could create systems better suited not only for Māori but for the nation as a whole.

To ensure culturally safe AI, Pou 1 emphasises implementing anti-racist data and algorithmic practices that avoid harmful biases summarised by the BADDR principles (Blaming, Aggregate, Decontextualised, Deficit, Restricted). Since many AI developers lack Māori knowledge, training and engagement with te ao Māori are essential to prevent cultural harm. Strategic investment in Māori AI expertise and leadership is critical, especially supporting rangatahi – who are digitally skilled and culturally aware – to drive AI initiatives that align with Māori values.

### Key actions as solutions for organisations under Pou 1 include:

- · Reviewing organisational IT practices for cultural safety
- Training staff in MDGov-compliant AI development
- · Fostering a diverse Māori digital workforce.

## Pou 2 IT Infrastructure

Al's transformative impact on workforces depends heavily on how well it is integrated into existing IT infrastructure,

requiring systems that are flexible, scalable, and aligned with Māori data governance principles. Effective infrastructure must support organisational workflows while safeguarding against AI-related risks. As Tiriti partners, iwi Māori should have shared decision-making authority over government IT infrastructure, ensuring it serves Māori purposes and enables rangatiratanga throughout its lifecycle. Investing in Māori-led IT infrastructure development is key to strengthening this partnership and ensuring AI technologies in use across the public sector in Aotearoa are fair and ethical.

Transparency, accountability, and sustainability are critical pillars for AI infrastructure. Due to AI's complex, evolving nature, establishing auditable systems is essential to build trust and uphold ethical governance. Infrastructure should be future-proofed and environmentally sustainable, leveraging Aotearoa's strong renewable energy resources to mitigate AI's high energy demands.

### Key actions as solutions for organisations under Pou 2 include:

- Fostering collaborative governance with Māori over AI and algorithmic systems infrastructure
- Funding distributed, decentralised IT systems that support Māori autonomy and ethical AI deployment.

# Pou 3 Data collection and generation

Pou 3 raises critical concerns about the unchecked use of Māori data in the development of generative AI. While most data used in algorithmic systems is collected and managed by government agencies, generative AI models often rely on massive datasets scraped from the internet without consent. This practice creates serious risks for Māori data sovereignty and intellectual property, particularly when it involves the unauthorised use of te reo Māori and mātauranga Māori. Such data must be protected under the MDGov principles, and any generative AI tools that are built using Māori data but not created by Māori should be prohibited!

To ensure data practices are ethical and respectful, agencies must involve iwi and Māori communities meaningfully in decisions about what data is collected, how it is defined, and how it is used in algorithmic systems. This means actively working to ensure that Māori identities, values, and lived realities are accurately and appropriately reflected. How data is collected is just as important as how it is used—practices must be grounded in full, prior, and informed consent (FPIC), and uphold Māori rights and dignity. Passive and opaque data collection methods, common in digital environments and AI systems, increase the risk of misuse and must be addressed with strong governance and transparency. In addition, while synthetic data is often used to train AI as a way to avoid privacy issues, it can fail to capture the complexity of Māori experiences and may reinforce bias or produce misleading outcomes. Pou 3 calls for a clear shift from extracting data to upholding relationships, from one-size-fits-all AI to systems that reflect Māori aspirations, and from minimal compliance to meaningful partnership.

### Key actions as solutions for organisations under Pou 3 include:

- · Aligning data collection with MDGov outcomes
- · Securing collective Māori consent
- · Ensuring Māori input in data classification
- Prohibiting use of generative AI tools built without FPIC to ensure data sovereignty, fairness, and benefit for Māori communities.

# Pou 4 Data protection

Pou 4 emphasises the **critical importance of data protection** in AI and algorithmic systems, given their heavy reliance on data. This includes addressing privacy, security, and jurisdictional challenges, especially when Māori data is stored or processed offshore, which can undermine Māori data sovereignty and expose culturally significant information to foreign legal systems. Māori privacy extends beyond individual rights to collective privacy, encompassing shared cultural knowledge like whakapapa that requires protection beyond standard personal data laws. Current privacy frameworks, including the Privacy Act 2020, lack specific provisions for Māori tikanga or collective rights, creating gaps in safeguarding Māori data in AI contexts.

Security measures must incorporate Māori leadership and ensure that data storage and processing comply with principles of Māori data sovereignty, recognising risks from cloud services and global AI providers. Jurisdictional issues are complex: data stored or accessed across borders can be subject to foreign laws like the U.S. CLOUD Act, which threaten Māori control over their data. Synthetic data, often perceived as inherently private, carries risks of information leakage and requires rigorous verification.

#### Key actions as solutions for organisations under Pou 4 include:

- · Identifying data with collective privacy aspects
- Assessing sovereignty risks related to offshore or global Al data use
- Maintaining transparency about synthetic data use to protect Māori rights and ensure ethical Al governance.

# Pou 6 Data use and reuse for Al implementation

Pou 6 emphasises the powerful role that algorithmic systems and AI can play in government—but only when Māori perspectives and data governance principles are placed at the centre of their design and use. To use AI ethically with Māori data, the principle of Free, Prior and Informed Consent (FPIC) must be applied. This means data should only be used or shared with clear and informed consent, and in ways that respect the original conditions under which it was collected.

## Government agencies need to ask whether reusing Māori data:

- Aligns with Māori priorities,
- Avoids reinforcing bias or causing harm,
- Supports Māori wellbeing, cultural identity, and self-determination.

This also requires shifting away from deficit-based approaches to data (which focus on problems and gaps) and instead designing systems that empower Māori as active partners and decision-makers in how data is used.

Al systems rely on algorithms—so ensuring governance over algorithms is transparent, accountable, and grounded in Māori values is critical. It's not enough to have broad principles; we need practical actions that uphold those values. Right now, Māori involvement in Al governance is limited. This increases the risk of harm, such as biased or unjust outcomes.

Pou 6 calls for specific changes, including clear documentation showing how algorithms are developed and used, and for mechanisms that allow Māori to understand, question, or challenge AI decisions, and public registries of algorithms that could affect Māori.

### Pou 6 also highlights the importance of:

- Ongoing engagement with Māori communities
- Regular testing and evaluation of AI systems
- Ensuring these systems genuinely support Māori aspirations and uphold tino rangatiratanga and the principles of Te Tiriti o Waitangi.

## Key actions as solutions for organisations under Pou 6 include:

- Ensure ethical data use by upholding FPIC, and never sharing data where consent was not given for reuse or integration
- Align data use with Māori priorities, asking questions that advance the goals of the MDGov Model
- Evaluate the value and equity of data reuse, ensuring benefits are fairly shared with Māori communities and data contributors
- Establish governance structures that support the responsible design, deployment, and oversight of algorithms and AI systems.

## Pou 7

# Al quality and system integrity

Pou 7 underscores the foundational role of high-quality data in ensuring accurate, culturally safe, and reliable algorithmic systems and AI tools. With increasing data volumes and new technologies, maintaining quality goes beyond accuracy to include relevance, timeliness, accessibility, and consistency – always judged by fitness for purpose. For Māori data, achieving quality requires not only sound technical frameworks but also active engagement with Māori knowledge holders and culturally appropriate standards. Establishing Māori-led data and algorithmic standards enhances interoperability, supports iwi-led data sharing, and ensures systems reflect tikanga and Māori aspirations.

Effective system integrity also demands ongoing monitoring and accountability. Monitoring must assess data quality, track biases, and detect harms – especially those impacting Māori communities. Issues like poor ethnicity data in health systems highlight the consequences of neglecting this. Algorithmic systems must be registered, provenance detailed and auditable to maintain transparency and trust. Accountability mechanisms should be mandatory, not voluntary, requiring all agencies (including private contractors) handling Māori data to implement the MDGov Model. These responsibilities ensure that Al development and use are not only technically sound but also uphold tino rangatiratanga and culturally safe data stewardship.

## Key actions as solutions for organisations under Pou 7 include:

- Monitor and report data harms, both potential and actual
- Demonstrate safe data practices, ensuring Māori data is handled in technically and culturally appropriate ways
- Ensure transparency, with clear explanations of algorithmic systems in use.

## Pou 8 Data classification

The importance of incorporating this Pou centres on the identification and classification of Māori data. It is essential to examine the data utilised by any algorithmic system of Al technology to determine whether it contains Māori data.

If you are unsure if your system will be using Māori data please refer to page 51 of the MDGov Model Pou 8 Data classification section in the report at **kahuiraraunga.io/maoridatagovernance** 

### Recommendations

These recommendations form a critical foundation for building fair, future-ready governance of data and AI across Aotearoa's public sector. These five steps are essential to uphold Māori data sovereignty, respect Te Tiriti o Waitangi, and ensure safe, transparent, and equitable AI development, deployment and use.

## Recommendation 1: Review the government's Algorithm Charter

The current Algorithm Charter lacks clear operational guidance for implementing te ao Māori perspectives. A full review is urgently needed to align it with the Māori Data Governance Model – *Tuia te korowai o Hine-raraunga* – and to ensure it properly incorporates Māori rights, sovereignty, and ethical data governance.

## Recommendation 2: Create a government algorithms register

Establish a transparent, publicly accessible register of all algorithmic systems used by government. This register should document each algorithm's whakapapa (origins), including the data it was trained on (real or synthetic), to support accountability, transparency, and traceability in A governance.

## Recommendation 3:

# Set whole-of-government AI policy and Māori data standards

Develop and implement comprehensive AI policies and standards that embed Māori data governance principles across the public service. These must define roles, responsibilities, and consequences for non-compliance, and be co-developed with Māori to ensure tikanga and tino rangatiratanga are upheld.

## Recommendation 4: Establish an independent monitoring authority

Form an independent authority to oversee the use of algorithmic systems and AI across government. The authority would monitor data quality, track algorithmic harms, audit compliance with the AI and related standards and maintain the algorithms register. This helps ensure government systems are trustworthy, fair, and culturally respectful.

### Recommendation 5: Invest in Māori-led AI development and infrastructure

Support iwi Māori to develop their own AI systems and data infrastructures. This includes funding for Māori AI workforce development, local infrastructure to address jurisdictional risks, and design of systems aligned with Te Tiriti o Waitangi, FPIC, and Māori governance principles Investing directly in Māori innovation ensures meaningful benefit for the māori and national economy.

Together, these recommendations establish a strategic framework for implementing AI in a way that is ethical, inclusive, and aligned with Te Tiriti o Waitangi. They ensure Māori rights and data sovereignty are upheld, while guiding the public sector toward a more equitable and trustworthy digital future for Aotearoa.