The Future Impact of Artificial Intelligence on First Nations Communities: Opportunities and Risks

Dr Kyle Turner
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Acknowledgement of Country

I acknowledge the strength and spirit of Traditional Owners and Custodians of Country in sustaining the world's oldest living culture through their connection to land, waters, and community. First Nations People and their cultures have prevailed and endured despite experiencing systemic inequality, intergenerational trauma, and ongoing institutional racism. I pay my respects to all First Nations People and to their Elders past and present.

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Any enquiries about or comments on this publication should be directed to kyleturner24@gmail.com.

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Abbreviations

ABF	Australian Border Force
ABS	Australian Bureau of Statistics
ADHA	Australian Digital Health Agency
ADII	Australian Digital Inclusion Index
ADM	Automated Decision Making
AEDC	Australian Early Development Census
AI	Artificial Intelligence
AIHW	Australian Institute of Health and Welfare
ASR	Automatic Speech Recognition
ATSICPP	Aboriginal and Torres Strait Islander Child Placement Principle
BSL	Brotherhood of St Laurence
COAG	Council of Australian Governments
Coalition of Peaks	Coalition of Aboriginal and Torres Strait Islander Peak Organisations
CRS	Congressional Research Service
CTG	Closing the Gap
CV	Computer Vision
FNVEP	First Nations Visitor Economy Partnerships
GenAI	Generative AI
GPAI	General Purpose AI
ICIP	Indigenous Cultural and Intellectual Property
ICT	Information and Communication Technologies
IPA	Indigenous Protected Area
LLM	Large Language Model
MFM	Multimodal Foundation Model
ML	Machine Learning
National Agreement	National Agreement on Closing the Gap
National Commissioner	National Commissioner for Aboriginal and Torres Strait Islander Children and Young People
NATSIHA	National Aboriginal and Torres Strait Islander Housing Association
NCDs	Non-Communicable Diseases
NFRC	National Federation Reform Council
NIAA	National Indigenous Australians Agency
NIRA	National Indigenous Reform Agreement
NLP	Natural Language Processing
NOS	Nyoongar Outreach Services
PRF	Paul Ramsay Foundation
RJED	Remote Jobs and Economic Development
SNAICC	The Secretariat of National Aboriginal and Islander Child Care
The Partnership	Partnership Agreement on Closing the Gap
YBFS	Year Before Full Time Schooling

Foreword

Artificial intelligence (AI) is racing ahead. It feels exciting for most people, if not a bit unsettling. But for me, as a Wiradjuri man, I keep coming back to a core worry: What does AI mean for disadvantaged groups, and especially for First Nations People, who have so often been the last to benefit from new advances in technology, medicine, and education?

That question is what pushed me to apply for the PRF Fellowship. To be given the chance to spend twelve months digging into this huge, messy, important issue has been an incredible privilege. It says a lot about PRF's ambition and values that they are willing to back a project such as this.

Over the past year, it's been a privilege getting to know the other PRF Fellows: Shelley Mallett, Rachel Perkins, Mark Yettica-Paulson, and Jane Kohlhoff. They're all brilliant, but also fun, kind, and a joy to spend time with. Our days together on Minjerribah (North Stradbroke Island) included lots of laughs and deep conversations that helped shape my thinking about this project.

I also wish to thank the PRF team who made this experience what it was. Michelle Steele's positive leadership set the tone, Tess Stone kept us all moving in the right direction, Laura Bird made sure our work aimed to have impact, and Suzie Warrick brings it to life through storytelling. They're great people and I've loved getting to know them. And thanks also to the Brotherhood of St Laurence for hosting me, and to Dr Travers McLeod for his ongoing support and leadership. My sincere hope is that the Fellowship continues for many more years, so we can build a cohort of like-minded people willing to take on big, left-field, complex questions.

Executive Summary

AI will not affect all communities equally. For First Nations People, who have so often been the last to benefit from technological advances, this reality carries particular weight. The question is not whether AI will transform Australian society — it already is. The question is whether that transformation will deepen existing inequalities or help close them.

This report examines AI through the lens of Australia's seventeen Closing the Gap targets, asking a simple question for each: will this technology move us closer to or further from the outcomes that matter most? The analysis reveals an uneven landscape. In some areas, AI offers genuine potential to extend reach, reduce barriers, and strengthen what already works. In others, it threatens to hardwire yesterday's harms under the banner of efficiency.

Where AI shows clear promise — health, education, language preservation, and environmental management — the benefits emerge when communities control the terms. Telehealth systems designed with community-controlled organisations reach families who would otherwise go without care. Language technologies developed under community protocols help revitalise at-risk languages while respecting sacred knowledge. Rangers pairing traditional ecological knowledge with computer vision achieve better outcomes for Country than either approach alone.

But the same technology deployed without community governance tells a different story. Employment algorithms trained on biased data can exclude as efficiently as they match. Predictive policing systems fed on overrepresentation data produce faster injustice, not fairer outcomes. Child protection tools that confuse surveillance with safety risk deepening trauma rather than preventing it.

The difference is not the technology itself but who holds power over its design, deployment, and governance. Where First Nations communities shape the brief, set the boundaries, and retain the right to walk away, AI can amplify existing strengths. Where those conditions are absent, it becomes another vector for extraction and control.

Three structural barriers cut across every domain. The Digital Divide remains stark: in very remote areas, First Nations People score 34.1 for digital access compared to 67.9 for non-Indigenous Australians. Without connectivity, affordability, and digital skills, even well-designed AI tools cannot reach the people who might benefit most. Algorithmic bias is unavoidable when systems learn from data that carries the imprint of historical inequality. And data colonialism — the extraction and centralisation of community information without consent or benefit-sharing — threatens to reproduce colonial relationships through technological means.

The path forward requires different speeds for different domains. Some areas warrant acceleration: health systems that extend clinical reach, education tools that bridge distance while respecting culture, and environmental applications that combine traditional knowledge with technological capability. Other areas demand more careful adaptation: employment and housing tools that could help but need transparency, accountability, and community oversight built in from the start. And some areas — particularly justice and child protection — remain too risky until governance structures ensure First Nations communities hold real decision-making power.

Indigenous Data Sovereignty sits at the centre of all these considerations. It is not just a principle but a practical requirement: who controls the data, who benefits from its use, and who can say no when things go wrong. Without this foundation, even well-intentioned AI projects risk becoming exercises in digital colonialism.

AI's impact on First Nations communities is not predetermined. It will be shaped by choices we make now about governance, partnership, and respect for sovereignty. The opportunity is to ensure those choices are made with First Nations People, not for them.

Every AI initiative should pass a simple test: does this shift power, benefits, and decision-making towards First Nations communities? If the technology cannot clear that bar — no matter how sophisticated — then it has no place in closing gaps that colonisation opened.

What is Artificial Intelligence?

AI is a broad and ever-evolving field encompassing various domains, each with unique capabilities and applications. The field of AI began as early as the mid-twentieth century, with interest and investment fluctuating over different points in time.

AI refers to an engineered system designed to generate predictive outputs such as content, forecasts, recommendations, and decisions without explicit programming. These systems operate with varying levels of automation and are often employed to meet human-defined objectives. AI includes a range of techniques, from simple rules-based algorithms to more complex neural networks, creating systems capable of reasoning, problem-solving, and adapting over time.[1]

AI can be categorised into distinct groups. General Purpose AI (GPAI) systems have a range of applications across many different fields.[2] GPAI systems carry both intended and unintended consequences and their wide-ranging capabilities and large pre-trained models are valuable for commercial use. Conversely, Frontier AI Models are advanced systems "with capabilities that could severely threaten public safety and global security."[3] These systems can be used to target vulnerabilities in software systems enabling cyber-attacks or fraud, to create and disseminate disinformation at scale, or to design chemical weapons. As such, Frontier models pose particular regulatory challenges.

Figure 1. Domains within artificial intelligence[4]

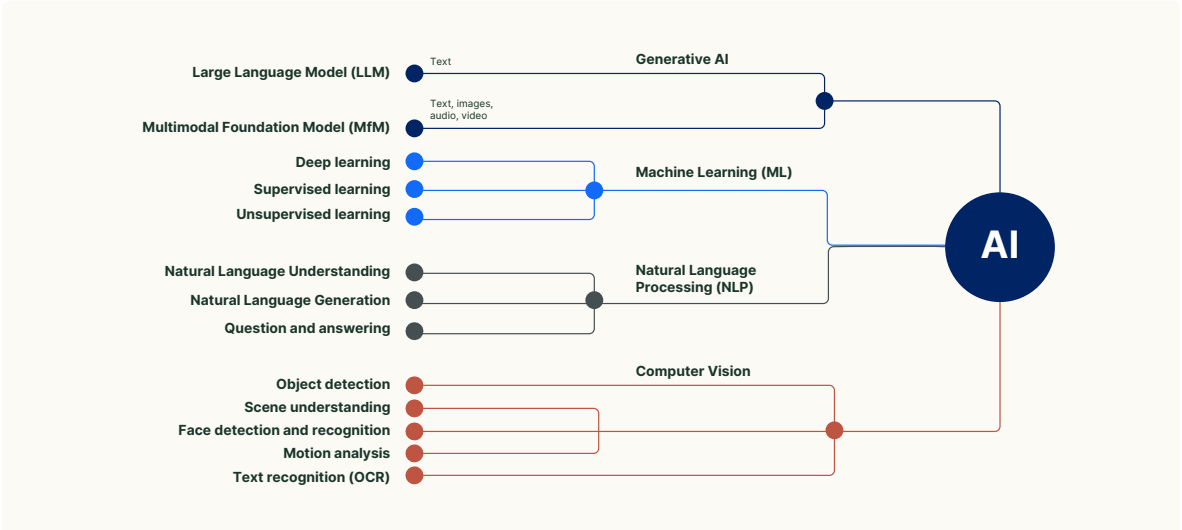

Table 1. Applications of artificial intelligence

Automated Decision Making (ADM)	Automated Decision Making describes the use of automated systems in decision-making processes. While not solely specific to AI, both systems face similar regulatory concerns. AI-driven ADM can be applied to different parts of the process, to make interim assessments, decision recommendations, automate fact-finding processes to influence decisions, or make final decisions.[5]
Computer Vision (CV)	Computer Vision is a branch of AI that deals with enabling machines to interpret and process visual information from the world, as humans do. By analysing images and videos, AI systems can recognise objects, track movements, and even make decisions based on visual data. It has found applications in fields such as facial recognition, autonomous vehicles, and medical imaging.[6]
Generative AI (GenAI)	Generative AI is a subset of AI that focuses on generating novel content such as text, images, music, and programming responses to prompts. These models are particularly prominent in creating content that mimics human creativity. GenAI applications, including Large Language Models (LLMs) and Multimodal Foundation Models (MFMs), have rapidly evolved in recent years and can process various types of data.[7,8]
Large Language Model (LLM)	LLMs are AI programs that apply machine learning to large sets of data. Predominantly used in the recognition and generation of human-like text.[9]
Machine Learning (ML)	Machine Learning is a key component of AI where systems learn patterns from vast data sets. These patterns are used to make predictions and decisions on new data. ML techniques involve training algorithms on data, allowing the model to identify patterns and generalise them for future use, with minimal human intervention. Applications of ML are widespread, from predictive models in healthcare to recommendation systems in e-commerce.[10]
Natural Language Processing (NLP)	Natural Language Processing is a field within AI and ML that focuses on the interaction between computers and human language. It enables machines to understand, interpret, and respond to text and speech inputs in a meaningful and useful manner. NLP systems are used in various applications, including speech recognition, translation services, and virtual assistants (e.g. chatbots).[11]

The deployment of AI technologies requires significant infrastructure, energy and resources, including large-scale, high-performance data centres. There are several data centres located across Australia, which consume roughly 5% of the country's electricity supply, with some projections estimating this will grow to between 8-15% by 2030.[12] These data centres also require significant amounts of water for cooling, which raises concerns around environmental sustainability. These environmental impacts highlight the need for more sustainable approaches to AI deployment. Rather than defaulting to large, general-purpose AI models that consume excessive energy and water, adopting smaller, specialised models could dramatically improve efficiency without compromising capability.

The push towards responsible AI adoption should not only consider technological potential but also resource constraints. This includes implementing water-saving cooling technologies, powering data centres with renewable energy, and establishing clear efficiency standards for AI systems. Such measures will help align Australia's AI ambitions with environmental sustainability goals and ethical innovation principles, focusing on developing frameworks and encouraging efficient resource use, while maintaining competitiveness in AI development. This can help to ensure technological progress does not come at unsustainable environmental cost, along with the many additional risks and opportunities analysed in the remainder of this report.

What is the current state of AI in Australia?

The proliferation of AI is set to profoundly impact various sectors across Australia and around the globe, from education and healthcare to industry and governance. And as these technologies rapidly develop, they promise to bring significant benefits, including increased efficiencies, improved service delivery, and new economic opportunities.[13] However, the widespread integration of AI into processes also presents significant sociocultural challenges, particularly in their implementation, to ensure it is ethical, inclusive and does not exacerbate existing inequalities.[14]

The increasing prominence of AI has fuelled widespread debate about its transformative potential and its future impact on industry and society at large. Governments, businesses, and researchers are increasingly reporting the impact that AI will have on redefining industries, reshaping economies, and shaping our daily lives, through the increased prevalence of self-driving cars and personalised healthcare, to predictive government services and smarter cities. Public discourse has frequently highlighted AI's ability to solve complex challenges at unparalleled speed, generating buzz about a future where automation and intelligent systems will streamline operations and offer new opportunities for innovation. More businesses are adopting AI, while media coverage amplifies the narrative that AI will usher in a new era of prosperity and human progress. Even more, AI is increasingly becoming part of popular culture, adding to the perception that it is this inevitable force driving us toward a hyper-connected, more efficient future. And it is this relentless optimism that fuels expectations that AI will deliver rapid breakthroughs, creating a sense of urgency within governments and organisations, and for individuals, to engage with it before falling behind in the global race for technological supremacy.

The Australian Government has already introduced AI and automation into various departments, which has reported mixed results. The Australian Digital Health Agency (ADHA) now utilises AI-driven data analyses in the My Health Record system to improve healthcare delivery.[15] By allowing healthcare providers to access patient records more efficiently, it reduces administrative burden, enhances patient care, and promotes more accurate diagnoses through data sharing and automated processes.

Elsewhere, the government has employed AI-driven tools in border security, especially in customs and biosecurity inspections.[16] Automated systems help identify risks by analysing large volumes of data and scanning luggage and cargo. This reduces the need for manual inspections, expediting the processing of travellers and goods, while maintaining high-level security.

On the flip side, AI implementation has created significant challenges in other departments, notably in immigration visa processing and the Robodebt scheme.[17] In 2016, the Department of Home Affairs implemented automation in visa processing to enhance "efficacy and efficiency."[18] However, critics have argued that this approach oversimplifies complex cases, particularly in humanitarian and refugee visas, where nuanced judgment is essential. Such oversights have raised concerns about fairness and accountability in managing sensitive immigration matters. Within Centrelink and the ATO, the Robodebt scheme employed automated systems to calculate and recover welfare debts by matching income data with welfare payments. This process produced numerous false debt claims, causing significant distress and financial hardship to thousands of Australians, which was ultimately ruled unlawful.

According to a 2023 report from the Congressional Research Service (CRS) on Australian and US relations, Australia is investing a considerable amount into AI technologies to "modernise defence capabilities" across areas including autonomous systems, surveillance and decision-making in military operations.[19] The report identified AI as a key area of interest in the US-Australia alliance, in which Australia seeks to leverage AI to bolster its influence in the Indo-Pacific region, fund research institutions and partnerships with global tech companies, and develop new technologies to optimise the nation's critical mineral extraction and supply chains.[20] As such, it is already clear that the investment into and development of AI within Australia is largely shaped by national interests and alliances, which may have the potential to override the interests of marginalised groups, such as First Nations communities.

On 26 March 2024, the Senate resolved that a select committee, known as the Select Committee on Adopting Artificial Intelligence, be adopted. The committee was designed to research and report on the opportunities and impacts of AI technologies adopted within Australia, which culminated in a Senate Inquiry and subsequent interim report.[21] The report called for a risk-based regulatory framework to ensure high-risk AI applications were subject to oversight. It highlighted the need for transparency, accountability, and ethical safeguards to mitigate discrimination, bias, and improper use of AI systems and ensure fairness, human oversight, and privacy in Government use and deployment.[22] The committee emphasised the importance of future international collaboration on AI governance to align Australia with global standards. While finally, the report addressed the importance of First Nations data sovereignty to ensure that developments in AI respect the rights and wellbeing of First Nations People.[23]

While AI offers numerous benefits, its future deployment must be guided by ethical considerations and risk-based governance frameworks to reduce negative impacts associated with 'black box' AI systems. This can help to mitigate concerns around transparency, privacy and security, bias, discrimination and error. The Australian Government is continuing with its policy development to ensure that AI is deployed in ways that respect human rights and uphold privacy standards. By establishing a culture of transparency, accountability, and inclusivity, the Government is aiming to build public trust in AI deployment while also ensuring that its development aligns with societal needs and expectations. The impact of AI on First Nations communities in Australia remains of particular concern as they have historically been marginalised in the economic and social fabric of the nation, and AI technologies pose the risk of further entrenching such inequalities.[24]

First Nations-led AI: An overview

There are several examples of First Nations-led research into, and practical application of, AI technologies. It has been actively researched and applied by First Nations People and deployed in ways that align with their knowledge systems, cultural values, and self-determined principles.

Key applications include linguistic and cultural preservation, environmental management, and healthcare and diagnostics. Research has also focused on regulation and the development of culturally-safe frameworks. For instance, there is currently a push for the use of AI in helping to revitalise critically endangered First Nations languages through Automatic Speech Recognition (ASR) systems and machine translation tools, with research being conducted globally by Indigenous Peoples in collaboration with universities and companies, such as Google's Project Euphonia, Mozilla's Common Voice, and the National Research Council of Canada's Indigenous Languages Project.[25]

Back home, similar initiatives have been seeking to document and analyse First Nations yarning circles and linguistics. For example, the Yarning Corpus on Aboriginal English in Southwest Western Australia is studying identity and linguistics through First Nations epistemologies and culturally-safe medical communication to better recognise Aboriginal English.[26] The project emphasises decolonised methodologies and close collaboration with First Nations communities to ensure ethical data collection and usage. This work has underscored the need for inclusive AI development that respects First Nations language practices and avoids data colonialism.[27]

Across Australia, First Nations People are increasingly adopting innovative applications of AI that integrate traditional knowledge systems. In the Kimberley region, the 'Megadetector' project combines ML with Traditional Owners' ecological expertise to monitor threatened species through camera trap imagery, while maintaining First Nations data governance.[28] This has demonstrated how AI systems can achieve greater ecological accuracy when incorporating First Nations knowledge systems.

Similarly, Microsoft's North Australia Environmental Resources initiative has partnered with First Nations rangers to co-design AI tools for landscape management.[29] In the Kakadu National Park, Bininj Traditional Owners are now working with CSIRO researchers to develop AI-assisted fire management systems that respect cultural burning protocols.[30,31]

These projects showcase the potential of First Nations-led AI applications. When developed through equitable partnerships that prioritise First Nations data sovereignty, such initiatives show how AI can amplify sustainable, long-practised stewardship while creating new opportunities for First Nations-led research and innovation.

Another example of AI adoption comes from myself (forgive me) via innovation in digital health that aimed to solve a problem faced by many First Nations People.[32] In 2019, I built a free smartphone application that used world-first Computer Vision technology to scan dental photographs taken to check for common dental problems. The app provided more than 200,000 free dental check-ups, as well as free oral health education tailored to individual results,[33] and later acquired by an international health insurer.

These projects only scratch the surface of the potential opportunities that AI could bring to First Nations People. Academic consensus supports the understanding that AI systems achieve safer outcomes when incorporating culturally-specific frameworks and community governance models.[34] However, with this rapid expansion of AI also raises urgent questions about First Nations rights and data governance.

For instance, Angie Abdilla has argued in *Out of the Black Box* that AI systems must move beyond Western epistemological frameworks to embrace transparency and adopt Indigenous protocols that centre relationality, reciprocity, and kinship with technology.[35] Abdilla stresses First Nations-led governance as a key strategy to mitigate the ways in which AI's 'black box' opacity mirrors and perpetuates colonial structures of exclusion.

This strategy is also reflected in Lorenn Ruster and Gavin Brown's proposal for a legal "termination for cultural misalignment" clause — a contractual mechanism ensuring AI development aligns with Indigenous cultural values, knowledge, and wellbeing.[36] Ruster and Brown's research understands the dual potential of AI and its ability to either enhance community wellbeing or exacerbate inequalities through biased algorithms. Thus, through a legal framework, they identified key areas of concern, including in policing, predictive justice systems that disproportionally target First Nations People, and 'data colonialism' whereby multinational corporations extract and exploit First Nations data without their explicit consent.

The *Termination for Cultural Misalignment* mechanism operationalises these insights through a formal Cultural Advisory Committee, and termination clause, which would empower First Nations People to withdraw from projects that threaten community wellbeing.[37]

These concerns manifest in Briggs and Pledger's *Tomorrow's Pasts* project, a 'Study-In' between the International Sami Film Institute and Art + Australia on '*AI + Race + Art*', confronting AI's colonial biases. The study's attempt to generate Indigenous characters using Midjourney yielded only Eurocentric stereotypes of Indigenous cultures. Abdilla attributes failures like this to AI's reliance on racist data sets that erase Indigenous ontologies.[38,39] And the *Tomorrow's Pasts* project emphasises the importance of First Nations data sovereignty as a fundamental safeguard, calling on communities to "dive into the matrix" that shapes AI's potential in order to avoid recolonisation.[40] Through *Tomorrow's Pasts*, Briggs and Pledger insist on the necessity of First Nations People retaking and retaining control over Indigenous Cultural and Intellectual Property (ICIP).

Furthermore, and in alignment with the above approaches, is the framework proposed by the Maiam nayri Wingara Indigenous Data Sovereignty Collective, which asserts First Nations' rights to control, access, and govern data from and about their communities.[41] The Maiam nayri Wingara Collective conducts research and holds summits to develop protocols and principles around Indigenous Data Sovereignty and Governance. Their document *Principle of Responsibility* mandates Indigenous people's rights to exercise control and access of contextual data ecosystems and have accountable data structures that empower sustainable self-determination.[42]

This scholarship underscores a shared imperative: AI development must be governed by First Nations-led protocols, whether through contractual safeguards, creative praxis, or increased transparency to prevent harm and ensure technology serves First Nations futures.

The Digital Divide and First Nations People

The Digital Divide in Australia refers to the gap between individuals and communities who have access to modern Information and Communication Technologies (ICTs) and those who do not.

Historically, minority groups have faced systemic obstacles in accessing emerging technologies, often stemming from entrenched socio-economic inequalities and discriminatory practices. These barriers include limited access to quality education and training, inadequate infrastructure in marginalised communities, and the prohibitive costs associated with new technological advancements. The Digital Divide further exacerbates these inequalities, limiting access to opportunities in education, employment, and healthcare for those without access to sufficient digital infrastructure and resources. Addressing this is essential to ensure equitable access to technologies and its many benefits, particularly for First Nations People who have historically been overwhelmingly marginalised.

During the late 20th and early 21st centuries, as technology began to play a more central role in the Australian economy, wealthier urban populations benefited from early access to personal computers, the internet, and mobile phones. Marginalised communities, however, were typically the last to see such benefits, and often lagged far behind, especially those living in rural and remote parts of Australia. This disparity was not only a matter of infrastructure, it was also directly tied to social, cultural, and economic exclusion, with these communities being overlooked in state and national policy-making.

The Digital Divide is defined and measured across three key dimensions: 1) access, 2) affordability, and 3) digital ability.[43] Access refers to the physical availability of digital services, such as internet connection and mobile networks. Affordability refers to the costs associated with obtaining and maintaining digital services. And digital ability encompasses the skills and confidence required to effectively use ICTs.[44]

According to the 2023 Australian Digital Inclusion Index (ADII), there remains a significant gap between First Nations People and non-Indigenous Australians in all three dimensions of the Digital Divide. The report highlighted that First Nations People were among the most digitally excluded groups of people in Australia. Once again, the causes of this exclusion are multifaceted and rooted in historical, geographical, and socio-economic factors.[45]

While digital access has improved nationwide, the gap between First Nations People and non-Indigenous Australians remains evident as many remote and regional First Nations populations continue to experience poor access to digital infrastructure, high costs of usage, and significant barriers to digital literacy.

As shown in Table 2 below, the overall ADII for First Nations People is consistently lower across all categories, with the gap only widening in remote areas. In Very Remote Australia, the access score for First Nations People is 34.1 compared to 67.9 for non-Indigenous Australians, underscoring the large disparity in digital access.

Furthermore, affordability and digital ability reveal notable gaps, with First Nations People facing significantly higher costs for digital services and lower levels of digital confidence.

Table 2. ADII scores and dimensions by remoteness and First Nations status

Remoteness Category		Index score (gap)	Access score (gap)	Affordability score (gap)	Digital Ability score (gap)
Major Cities of Australia*	Non-First Nations	74.7	73.4	96.3	66.9
	First Nations	71.6	69.2	89.0	69.6
	Relative Gap (National Gap)^	3.1 (1.8)	4.2 (3.0)	6.3 (6.1)	-2.7 (-4.6)
Outer Regional Australia*	Non-First Nations	66.7	66.2	94.3	55.0
	First Nations	61.4	70.4	85.0	48.3
	Relative Gap (National Gap)^	5.3 (12.0)	-4.2 (1.7)	9.3 (10.1)	6.7 (16.7)
Remote Australia	Non-First Nations	70.6	67.9	95.3	62.0
	First Nations	49.0	34.6	94.7	42.2
	Relative Gap (National Gap)	21.6 (24.4)	33.3 (37.6)	0.6 (0.4)	19.8 (22.7)
Very Remote Australia	Non-First Nations	71.5	67.9	97.0	63.0
	First Nations	48.0	34.1	88.7	46.1
	Relative Gap (National Gap)^	23.5 (25.3)	33.9 (38.1)	8.3 (6.4)	16.9 (18.9)
Total	Non-First Nations	73.4	72.1	95.1	65.0
	First Nations	65.9	64.0	89.0	60.7
	National Gap	7.5	8.2	6.1	4.3

A history of colonisation, dispossession, and marginalisation from Australia's broader economic development has left a legacy of socio-economic disadvantage for First Nations People.[46] In some cases, technological advancements have further exacerbated the socio-economic exclusion of First Nations People, with access to digital technology increasingly necessary to societal participation. This is particularly apparent when considering the digital access necessary to secure employment, housing, and government support programs, and the fact that First Nations People represent 1 in 5 homeless people in Australia.[47,48]

Socio-economically, the lack of access to reliable and affordable digital services has reduced opportunities for employment, education, and healthcare, perpetuating cycles of poverty and disadvantage. AI-driven platforms are increasingly critical for job searches, skills development, and workforce participation. Yet, without equitable access to digital tools and infrastructure, First Nations People face heightened barriers to employment, contributing to persistently higher unemployment rates compared to non-Indigenous Australians. Similarly, AI-powered educational tools and online learning platforms have the potential to bridge learning gaps, but their effectiveness is diminished for First Nations students without access to the necessary technology, reinforcing educational disparities.

Healthcare is another domain where AI could deliver significant improvements, such as enhancing telehealth services and predictive healthcare models. However, during critical periods like the COVID-19 pandemic, many First Nations communities struggled to access these technologies, deepening health inequities.[49] So, once again, to harness AI's potential to close these gaps, investment in digital infrastructure, culturally-sensitive systems, and inclusive governance frameworks are needed to ensure First Nations communities are supported and not further marginalised by AI developments. Digital connectivity offers a way to bridge distances and maintain connections with family, community, and culture. But the lack of digital access has often meant that First Nations People are cut off from these networks, exacerbating feelings of disconnection.

The Digital Divide is also threatening the transmission of cultural knowledge. In a world where digital platforms increasingly serve as repositories for cultural content and history, First Nations communities without access to, or control of, these platforms may find it increasingly more difficult to preserve and share their stories, languages, and traditions with younger generations.

Digital exclusion limits participation across many aspects of society, where online platforms have become essential for advocacy, activism, and the preservation of First Nations rights. The cultural and social isolation brought about by the Digital Divide is a significant barrier to both individual and collective empowerment for First Nations communities. Addressing this divide is not only about providing technology but also fostering inclusion in all aspects of Australian life.

Closing the Gap

Professor Tom Calma, then Aboriginal and Torres Strait Islander Social Justice Commissioner, played a pivotal role in the creation of this initiative, through his 2005 Social Justice Report which challenged governments to bring about health equality and led to the creation of the first Close the Gap (CTG) campaign in 2006.[50]

In 2007, the CTG's Steering Committee released a Report for the Review of Government Service Provision, highlighting the stark inequalities faced by First Nations People. Through these efforts, the CTG initiative was officially launched in 2008 under the Rudd Government, in response to the significant and persistent 'gaps' in health, education, and employment outcomes between First Nations People and the general Australian population.[51]

The National Indigenous Reform Agreement (NIRA), established as part of the Council of Australian Governments (COAG) framework, was later introduced to formalise a comprehensive national effort aimed at addressing the socio-economic disparities faced by First Nations People. This landmark agreement established six key targets encompassing health, education, and employment. These included, 1) closing the gap in life expectancy between First Nations People and non-Indigenous Australians, 2) halving the gap in child mortality, 3) ensuring universal access to early childhood education, 4) halving the gap in reading, writing, and numeracy scores, 5) halving the gap in Year 12 attainment, and finally 6) halving the gap in unemployment.[52]

Despite these commitments, by 2019 it had become clear that progress was severely lacking in most focus areas, which had now expanded to seventeen CTG targets.

Annual reports were highlighting that while some targets, particularly those related to education, showed modest improvements, others — most notably those concerning life expectancy, child mortality, and employment — were far from being achieved. The life expectancy gap remained stubbornly wide, with First Nations People experiencing significantly lower lifespans than their non-Indigenous counterparts, often due to higher rates of non-communicable diseases (NCDs) and poor access to healthcare.[53] Additionally, while there have been significant efforts to improve First Nations employment and education, high levels of poverty remain.

The reasons behind the slow progress in meeting the CTG targets are complicated. Inadequate access to culturally-appropriate services, systemic racism, socio-economic disadvantage, and geographic isolation all contributed to ongoing disparities. Recognising that the existing approach under NIRA has not yet yielded the desired outcomes, the Federal Government, in collaboration with First Nations leaders and organisations, has acknowledged the need for a fundamental shift. This change has led to a reassessment of the CTG strategy, together with a greater emphasis on genuine partnership with First Nations communities, greater local decision-making, and a stronger focus on addressing the underlying determinants.

The 2020 signing of the National Agreement saw the establishment of a formal 'Partnership Agreement on Closing the Gap' (the Partnership), coordinated through the National Federation Reform Council (NFRC).[54] This National Agreement was a product of a partnership between Australian Governments and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations (Coalition of Peaks). It sought to introduce a more collaborative approach, emphasising shared decision-making, strengthening the First Nations community-controlled sector, transforming government organisations, and improving access to data and information.[55]

The National Agreement introduced Four Priority Reforms, focused on formal partnerships and shared decision-making, building the community-controlled sector, transforming government systems, and improving data accessibility. Progress on these reforms is tracked through the 'Closing the Gap Implementation Tracker', developed by the Productivity Commission, which has identified delays in structural changes, particularly in shifting funding and power to First Nations organisations, underscoring the need for stronger execution across jurisdictions.[56]

Why focus on CTG Targets?

This report has leveraged the CTG targets because they represent the most pressing areas of inequality between First Nations People and the general Australian population. Addressing these targets is essential not only for improving the lives of First Nations People but also for ensuring that Australia becomes a more equitable and inclusive society. The 2024 Closing the Gap Annual Report highlighted progress in key areas such as early childhood education and adult incarceration rates, yet it underscored persistent challenges, with only five of the seventeen targets "on track".[57]

As highlighted in the book *Indigenous Data Sovereignty: Toward an agenda*, the CTG framework has major limitations.[58] It relies on deficit-based metrics that struggle to capture the diversity of First Nations cultures, nor does it include concepts of wellbeing centred on connection to Country, Spirit and Land and Waters, sovereignty, and self-determination. As such, it risks overlooking community-defined priorities, cultural differences, and the unique strengths of First Nations People.[59,60]

The 2024 report acknowledged the need for "shared decision-making" and "culturally-safe data," echoing calls by scholars for First Nations-led statistical capacity to ensure policies reflect lived realities.[61] And without these reforms, AI interventions could replicate past failures, applying technocratic solutions to systemic inequities while excluding the communities they aim to serve.

This report explores how AI can be harnessed to support the achievement of the CTG targets, while also identifying potential risks and proposing strategies to mitigate them. By aligning with the broader goals of the CTG framework, this focus ensures that technological advancements deliver benefits to all Australians, especially those who have historically been marginalised.

Ensuring that AI contributes to closing the gap requires a focus on equity, cultural safety, and community engagement in technology initiatives. AI holds immense potential to either widen or lessen the gap between First Nations People and non-Indigenous Australians. It could offer new opportunities for economic participation, health interventions, and education, and if applied with consideration, may assist in meeting the CTG targets more effectively. However, if not carefully managed, AI could exacerbate existing inequalities, particularly if First Nations communities are not included in the design, development, and deployment of these technologies. And as Australia's government institutions make progress in the application of AI and automation, ensuring these technologies are implemented with the intent to foster a fairer and more inclusive society is essential.

CTG Targets: Risks and opportunities posed by AI

AI will not affect all communities equally. To move beyond general statements, this report looks at AI through the lens of the 17 CTG targets.

These targets were chosen because they already represent nationally-agreed priorities for improving outcomes for First Nations People. Analysing AI in this way makes it possible to see whether the technology is likely to support or undermine progress on goals that matter most.

For each target, I asked three questions:

1. What opportunities could AI unlock?
2. What risks could it create? and
3. What interventions may be needed to tip the balance towards positive outcomes?

This approach grounds AI in real-world priorities rather than in abstract speculation. It also forces a focus on both sides of the ledger — the promise of AI to transform services, and the danger that it might widen existing inequities if left unchecked.

Because this analysis works systematically through each of the 17 CTG targets, it is necessarily detailed and sometimes repetitive. That is intentional. Each target is considered in its own right, but the recurring themes — digital access, cultural safety, and data sovereignty — matter precisely because they cut across so many areas. Readers who want the synthesis rather than the finer details can move to the Discussion chapter, where cross-cutting insights are drawn together.

The following analysis draws on a mix of sources: published research, case studies of AI already in use, and policy frameworks. It is not a prediction of the future, but a structured way to test AI against a framework already embedded in government policy and First Nations advocacy.

Importantly, this approach highlights that AI's impact is not neutral. Its future impact on First Nations communities depends on how it is designed, governed, and deployed — and whether those decisions are shaped with cultural safety, data sovereignty, and First Nations leadership at the centre.

AI's impact is not predetermined. It will be shaped by the choices we make now, and whether First Nations voices are at the centre of those choices.

CTG 1: Everyone enjoys long and healthy lives

Target 1 focuses on ensuring that by 2031, the life expectancy gap between First Nations People and non-Indigenous Australians is reduced to parity. This target reflects the Government's commitment to achieving health equity for First Nations People and addressing the socio-economic and cultural factors that affect life expectancy. Progress towards this goal builds on the inherent strength, resilience, and cultural wealth of First Nations People, recognising their deep connection to land, community, and culture as vital components of wellbeing.

The health and wellbeing of First Nations People are deeply connected to their cultural practices, community bonds, and connection to Country. Target 1 is underpinned by a recognition that improving life expectancy is not only about addressing physical health, but also about promoting social, emotional, and spiritual wellbeing.

Culturally responsive healthcare services are essential to this approach, as they create environments where First Nations People feel safe, respected, and empowered to engage with health services. This approach acknowledges the importance of cultural continuity and seeks to support First Nations People in maintaining their languages, traditions, and practices while accessing high-quality healthcare.

We know that community-led initiatives such as the development of local health services and the empowerment of First Nations health professionals are contributing to better health outcomes.[62] These initiatives place First Nations knowledge at the heart of healthcare, promoting trust and engagement with the health system. The strength of First Nations cultures and communities is central to this success. Elders, leaders, and health practitioners must continue to work together to ensure that health initiatives are relevant, culturally-appropriate, and effective.

While the progress towards Target 1 is encouraging, the pathway to achieving life expectancy equality requires sustained focus on culturally-appropriate solutions. In 2024, the Government invested $100 million into 33 First Nations health infrastructure projects across Australia to construct new clinics, renovate existing clinics and build housing for workers in partnership with the Aboriginal and Torres Strait Islander Community Controlled Health Service Sector. This investment was vital to improving services for clients and conditions for staff. An additional $46.5 million was also provided in 2025 to support the delivery of Aboriginal Community Controlled Health Service infrastructure projects established under Closing the Gap Major Capital Works grant opportunities. By building on the success of community-led initiatives and strengthening culturally-safe healthcare, the goal of achieving health equality remains within reach.

Table 3. Summary of opportunities and risks of AI on life expectancy

Future impact of AI on general Australian population's life expectancy	**Opportunities**	• Early diagnostics, personalised treatments • Continuous monitoring and preventative intervention • Research and development of treatments • Public health data analysis and intervention strategies
	Risks	• Data security and privacy • Job displacement / economic inequality • Dependence on AI systems • Ethical frameworks for use • Mental health aspects
Key drivers of the gap	• Systemic inequalities including infant mortality, access to healthcare and nutritious foods • Socio-economic conditions including racism, employment opportunities, access to housing, and lifestyle factors	
Targeted interventions for First Nations People	**Opportunities**	• Enhance healthcare delivery through telemedicine, predictive analytics, and personalised treatment plans for preventative care, early detection, and chronic disease management • Education and awareness around risk factors during pregnancy and childbirth (in language)
	Risk mitigation strategies	• Invest in culturally-safe healthcare • Address social determinants of health • Improve access to AI-powered services, especially in remote areas • Involve community leaders in the development of AI tools to ensure cultural relevance • Establish data sovereignty protocols, so that communities have control over their data, and ensure their data are not shared with, or sold to, third parties or used for other purposes

CTG 2: Children are born healthy and strong

Target 2 is a pivotal commitment by the Government aimed at ensuring 91% of First Nations babies are born with a healthy birth weight by 2031. This target is not just a measure of birth outcomes but a reflection of the broader socio-economic and cultural strengths that underpin the health of First Nations communities. The CTG framework acknowledges the importance of starting life healthy, which sets the foundation for long-term positive health outcomes and the overall wellbeing.

A healthy birth weight is strongly correlated with better health outcomes throughout life, including reduced risks of NCDs and improved infant survival rates.[63] The ability to achieve Target 2 is closely linked to culturally-informed healthcare practices that integrate traditional knowledges with modern healthcare, creating an environment that supports the physical, emotional, and cultural wellbeing of mothers and babies alike.

Culturally-safe and community-led health services, such as those promoting Birthing on Country, are critical to fostering this environment and ensuring the continuity of care respects the cultural identity of First Nations families.

In 2022, 89.6% of First Nations babies were born at a healthy birth weight indicating progress towards Target 2 aided by community-led health solutions. To continue this positive trend and reach the 91% target by 2031, improved access to antenatal care and culturally-appropriate services are key. We must embed vital protective factors through connection to Country, traditional knowledge systems, and kinship systems supporting maternal and child health. Initiatives like Birthing on Country, which integrate modern care with cultural practices, not only improve birth outcomes but also strengthen community and cultural ties.[64]

Table 4. Summary of opportunities and risks of AI on healthy birth weight gap

Future impact of AI on general Australian population's healthy birth weight	**Opportunities**	• Early detection of at-risk pregnancies • AI-driven personalised maternal health monitoring • Automation in healthcare to improve quality and consistency of support for patients
	Risks	• Perpetuate existing biases if training data is only representative of non-Indigenous Australians • Over-reliance on technology with limited human oversight • Unequal distribution of access to technology
Key drivers of the gap	• Socioeconomic conditions such as access to prenatal care and health literacy • Maternal health and cultural barriers to health services	
Targeted interventions for First Nations People	**Opportunities**	• Enhance the precision of prenatal care • Early detection of risk factors and enabling more effective interventions
	Risk mitigation strategies	• Increase support for maternal health programs • Ensure access to quality prenatal care • Provide education on healthy lifestyles • Ensure AI systems are trained on diverse data sets that include First Nations populations • Provide digital literacy education to healthcare workers and expectant mothers

CTG 3: High-quality, culturally-appropriate early childhood education

Target 3 focuses on ensuring that 95% of First Nations children are enrolled in early childhood education the Year Before Full-Time Schooling (YBFS) by 2025. This target recognises the crucial role that early childhood education plays in shaping the long-term social, emotional, and cognitive development of children, providing a strong foundation for lifelong learning and success. Central to this target is the acknowledgement that culturally-appropriate and high-quality early childhood education supports children in forming positive connections to their cultural identities, families, and communities, fostering a sense of belonging and resilience that will benefit them throughout their lives.

Early childhood education is a vital foundation for academic success and overall wellbeing, particularly for First Nations children. Participation in YBFS programs helps to develop essential language, literacy, and numeracy skills, while also fostering social and emotional growth through positive interactions with peers and educators. When culturally relevant, these programs empower First Nations children by incorporating traditional knowledge systems, language, and practices into the curriculum. Integrating culture not only preserves traditions and languages but also strengthens identity, pride, and self-esteem. Involving Elders, families, and communities creates enriching environments where children see their culture respected and reflected, deepening their sense of belonging and connection to heritage.

Progress toward achieving this target has been promising, with enrolment rates steadily increasing over recent years. As of 2023, 101.8% of First Nations children were enrolled in YBFS early childhood education, surpassing the expected national average due to the inclusion of children who were not counted in population projections.[65] This increase reflects the growing availability of culturally-safe and responsive early childhood services across the country. The role of community-controlled organisations in delivering these services has been integral to this improved outcome, with many programs placing a strong emphasis on First Nations knowledge systems, storytelling, and kinship ties as central parts of the curriculum.

In 2024, the Australian Government maintained progress with $2.1 million committed over three years to the First Nations Playgroup Pilot. The pilot program funded thirteen community-controlled organisations to provide accessible and affordable spaces, resources and opportunities for First Nations children to play together and for parents and carers to gain social and parenting support.[65] This was achieved by working in partnership with the Secretariat of National Aboriginal and Islander Child Care (SNAICC) to support the development and implementation of the Pilot, in alignment with Priority Reform One.[66]

Continued progress relies on increasing enrolment and maintaining high-quality, culturally relevant early childhood education that supports holistic development. Central to this success is the active involvement of First Nations communities in shaping and delivering programs that celebrate cultural identity and lay strong foundations for lifelong achievement.

Table 5. Summary of opportunities and risks of AI on culturally-appropriate childhood education

Future impact of AI on general Australian population's engagement in high-quality, culturally-appropriate early childhood education	**Opportunities**	• AI tools can provide personalised learning resources and monitor developmental milestones • AI can identify areas with low enrolment rates for targeted interventions
	Risks	• Not all families may have access to AI-driven educational tools • Collection of children's data poses privacy concerns
Key drivers of the gap	• Limited availability of early childhood education services in First Nations communities • Mainstream education systems may not align with First Nations cultural values	
Targeted interventions for First Nations People	**Opportunities**	• Development of early learning programs that incorporate First Nations languages and cultures • Digital resources supporting bilingual education in English and First Nations languages
	Risk mitigation strategies	• Engage with First Nations communities to ensure educational content is culturally-appropriate • Provide necessary technology and internet access to remote communities

CTG 4: Children thrive in their early years

Target 4 focuses on ensuring that First Nations children are developmentally on track in their early years, recognising that early childhood development is fundamental to long-term health, education, and socio-economic outcomes. The target aims for 55% of First Nations children to be developmentally on track in all five domains of the Australian Early Development Census (AEDC) by 2031.[67] These domains cover physical health, social competence, emotional maturity, language and cognitive skills, and communication skills.

As of 2021, 34.3% of First Nations children were developmentally on track, a decline from 35.2% in 2018, indicating a regression. However, this assessment is based on limited data points, and recent years have seen a lack of comprehensive data reporting, necessitating cautious interpretation of these trends.

The importance of early childhood development is widely recognised as a determinant of long-term outcomes. Culturally-informed early childhood programs that embed First Nations knowledge and practices into their frameworks have been shown to significantly improve children's development. Programs such as community-led early learning centres and integrated services that involve community leaders in shaping the learning environment are proving successful in promoting healthy childhood development.[68] These programs allow children to thrive while maintaining strong connections to their heritage, language, and culture, which are critical to overall wellbeing.

Despite the continuing and significant impacts of colonisation, First Nations families continue to draw on cultural strengths to nurture their children. Initiatives like the *Birthing on Country* model and *Connected Beginnings* program improves access to culturally-appropriate early childhood, health, and family services for First Nations children, increasing the proportion of children assessed as developmentally on track.[69]

Table 6. Summary of opportunities and risks of AI on early childhood development

Future impact of AI on general Australian population's early childhood development	**Opportunities**	• Early identification of developmental delays through AI assessments • AI can recommend tailored activities to support child development • AI can identify families with young children who require additional support or finances
	Risks	• Potential reduction in human observation and interaction • AI may misinterpret data without proper contextual understanding
Key drivers of the gap	• Policies that overlook cultural differences regarding development and child-rearing • Lack of access to appropriate and culturally-safe services, support, healthcare and education	
Targeted interventions for First Nations People	**Opportunities**	• AI assessments that consider cultural and linguistic contexts • AI-enabled platforms providing guidance to parents in remote areas
	Risks mitigation strategies	• Work with First Nations educators to create appropriate assessment tools • Ensure teachers are trained to use AI tools effectively and interpret data correctly

CTG 5: Students achieve their full learning potential

Target 5 is aimed at ensuring that First Nations People achieve their full learning potential by increasing the proportion of those attaining Year 12, or equivalent qualification, to 95% by 2031.[70] This target reflects the Australian Government's commitment to addressing educational inequities and promoting the strengths and cultural resilience of First Nations communities. It acknowledges the importance of education as a critical pathway for improving socio-economic outcomes, empowering individuals, and strengthening communities.

The historical and cultural context of First Nations education in Australia is integral to understanding the significance of this target. First Nations communities have long upheld sophisticated systems of knowledge and learning, deeply rooted in cultural traditions, oral histories, and connection to Country. Despite colonisation, these knowledge systems continue to thrive, demonstrating the resilience of First Nations People. Today, educational attainment, such as Year 12 qualifications, is recognised as essential for unlocking opportunities in further education and employment within both First Nations communities and broader Australian society.

Educational attainment for First Nations students has showed progress.[71] Many First Nations students are achieving high levels of academic success, particularly when learning environments respect and integrate their cultural identities.[72] Community-led educational measures such as on-Country learning, which embed culturally-relevant learning practices, are playing an important role in this progress.[73]

In very remote parts of central Australia, attendance results and enrolments improved in 2024 compared to 2023. Further, the average number of disengaged students from very remote Government schools reduced by 80 students on average in Term 2, 2024. Additionally, more than 210 staff were employed through the measure in 2024, of which 43% were First Nations.[74] These approaches enhance engagement and success by creating culturally-safe spaces where First Nations students feel valued and supported in their learning journeys.[75]

Target 5 is on track to make significant gains, though continued focus on culturally-appropriate educational strategies remains crucial.[76] Ensuring that First Nations students are supported to complete their education is not just a matter of providing academic resources, it also involves recognising the strengths inherent in First Nations cultures and communities.

By building on these strengths, Target 5 can help to foster a generation of First Nations leaders who are equipped with the knowledge, skills, and confidence to contribute meaningfully to their communities.

Table 7. Summary of opportunities and risks of AI on High School Completion

Future impact of AI on general Australian population's high school completion	**Opportunities**	• Personalised tutoring to enhance literacy and numeracy skills • AI identifying struggling students early and offering targeted interventions
	Risks	• Unequal access to AI resources, which may widen achievement gaps • Reduced emphasis on traditional teaching methods and interpersonal interactions
Key drivers of the gap	• Fewer educational facilities and support in rural and remote First Nations communities • Mainstream curriculum can fail to engage First Nations students	
Targeted interventions for First Nations People	**Opportunities**	• Development of learning tools that reflect First Nations cultural contexts • AI-powered virtual classrooms, specifically enabling access for students in rural and remote areas
	Risk mitigation strategies	• Ensure learning tools incorporate First Nations perspectives and languages • Provide internet and device access to students in rural and remote areas

CTG 6: Students reach their full potential through further education pathways

Education is one of the most powerful tools for fostering both individual and community change, contributing to improved health, wellbeing, and economic prosperity. It holds a central place in the lives of First Nations People, with traditional systems of learning and knowledge-sharing deeply embedded in culture.[77] Historically, these systems have sustained communities, building resilience and adaptability through oral traditions, cultural practices, and intergenerational teaching. For many, pursuing tertiary education enables them to better navigate today's socio-economic landscape while maintaining strong connections to community and identity.

Target 6 focuses on ensuring that by 2031, 70% of First Nations People aged 25–34 years attain a tertiary qualification (Certificate III or above).[78] This target is a key element in promoting educational equity, social empowerment, and economic opportunity for First Nations communities.

The progress made towards achieving Target 6 reflects the determination and capabilities of First Nations students, as well as the increasing availability of supportive programs designed to foster success.[79] Culturally-responsive education initiatives, tailored to the unique needs and experiences of First Nations learners, have proven effective in enhancing student engagement and academic achievement.[80]

Universities, vocational education institutions, and other educational bodies have taken significant steps towards embedding cultural competency into their curriculum and support services. These efforts include offering culturally-safe spaces, engaging First Nations staff and mentors, and providing specialised scholarships and support systems that boost retention and completion rates.

A critical element of success in achieving Target 6 is the recognition of the holistic needs of First Nations students. Many balance educational commitments with community responsibilities, cultural obligations, and often greater socio-economic challenges. Educational institutions that actively acknowledge and accommodate these realities are better positioned to support students through to graduation.

Moreover, the role of community-driven solutions in education cannot be understated. First Nations-led organisations and initiatives play an essential role in providing mentoring, tutoring, and culturally-aligned support that bridges the gap between mainstream education and traditional First Nations knowledge systems.

Attainment of higher education qualifications contributes directly to the broader goal of economic self-determination for First Nations People. Graduates with tertiary qualifications are more likely to access higher-paying jobs, leadership roles, and entrepreneurial opportunities, which in turn strengthens First Nations economies. This empowerment aligns with the broader objectives of the *CTG* strategy to create sustainable, long-term improvements in social and economic outcomes.

Table 8. Summary of opportunities and risks of AI on tertiary education attainment

Future impact of AI on general Australian population's tertiary education attainment	**Opportunities**	• AI-driven platforms can offer personalised learning experiences, helping students succeed in tertiary education • AI can identify students at risk of dropping out and provide targeted support
	Risks	• Unequal access to technology may prevent some students from benefiting from AI-enabled tools • Reduced human interaction in learning processes may affect students' emotional and social development
Key drivers of the gap	• Limited access to quality secondary education and career counselling affects First Nations students' transition to tertiary education • Socioeconomic disadvantage makes it difficult for many First Nations students to afford tertiary education • Tertiary institutions often lack programs and environments that reflect First Nations cultures and values, reducing engagement and retention	
Targeted interventions for First Nations People	**Opportunities**	• AI can develop learning materials that reflect First Nations histories, perspectives, and cultural knowledge • AI-powered virtual learning environments can improve access to tertiary education for students in remote areas
	Risk mitigation strategies	• Ensure that tertiary institutions integrate First Nations perspectives and offer culturally-safe learning environments • Provide targeted financial assistance to support First Nations students in tertiary education • Work with First Nations leaders to develop pathways into tertiary education, including mentoring programs and preparatory courses

CTG 7: Youth are engaged in employment or education

Target 7 is grounded in a commitment to ensuring that young First Nations individuals are equipped with the skills, knowledge, and opportunities necessary to thrive in modern Australia, while maintaining a strong connection to culture and community. Education, employment, and training are key drivers of positive change, and this target acknowledges the importance of culturally-appropriate programs and services in achieving meaningful outcomes. First Nations youth bring valuable perspectives, creativity, and cultural knowledge, which are crucial to Australia's future.

Target 7 focuses on increasing the proportion of First Nations youth fully engaged in education, employment, or training to 67% by 2031.[81] This target is essential for supporting the long-term wellbeing and economic participation of First Nations People, as youth engagement in these areas has a direct impact on health, social, and economic outcomes throughout life. Progress on this target is trending positively (61% nationally in 2021 up from 57.2% in 2016), reinforcing the need to foster pathways for young people.

Progress towards this target has been visible in several areas. There has been a steady increase in the participation of First Nations youth in education, particularly in early childhood programs and higher education pathways. The inclusion of culturally-relevant content in education, alongside the growing number of First Nations-led initiatives and community-driven training programs, is playing a significant role in encouraging participation and retention.[82]

These programs not only provide academic and vocational training but also affirm First Nations identities, creating environments where young people can feel valued and supported.

Across the employment sector, there have been notable improvements in opportunities for First Nations youth, with more initiatives focused on creating pathways into meaningful and sustainable careers. Community-driven approaches have been particularly successful.[83] Such initiatives, which integrate cultural values and local knowledge, are crucial in helping young people navigate both traditional and contemporary work environments.

This dual focus allows First Nations youth to contribute to the economic development of their communities while preserving their connection to culture. And cultural continuity remains at the heart of Target 7, recognising that strong identities are key to the success of First Nations youth. Programs that embed cultural knowledge into education and employment pathways help to foster resilience, pride, and confidence among young people. In turn, these qualities translate into higher engagement levels and better outcomes in both schooling and career settings. Cultural practices, such as connection to Country and community, are increasingly being integrated into youth development programs, reinforcing a sense of belonging and purpose.

Table 9. Summary of opportunities and risks of AI on teenage and young adult professional development

Future impact of AI on general Australian population's teenage and young adult professional development	**Opportunities**	• AI Job Matching Tools to facilitate better alignment between job seekers and employment opportunities • Online courses using AI to tailor training to individual needs
	Risks	• Risk of AI replacing traditional roles, leading to higher unemployment • Workers without digital literacy may struggle in AI-driven environments
Key drivers of the gap	• Isolation of rural and remote First Nations communities from urban job markets • Limited suitable opportunities for First Nations individuals in mainstream job markets	
Targeted interventions for First Nations People	**Opportunities**	• AI tools fostering First Nations businesses and industries • Platforms connecting First Nations workers with culturally-safe workplaces
	Risk mitigation strategies	• Offer training in technology and AI-focused roles • Develop job platforms catering to First Nations values and practices

CTG 8: Strong economic participation and development of people and communities

Target 8 focuses on increasing the employment rate of First Nations People aged 25-64 to 62% by 2031.[84] Employment continues to play a critical role in maintaining a sense of purpose, family connections, sustaining cultural practices, and contributing to the broader Australian economy. Achieving the employment target would not only reduce economic inequality but also strengthen the capacity of First Nations People to lead within their communities.

Nationally, there has been progress towards the employment target, with an increase in the proportion of First Nations People aged 25-64 who are employed. In 2021, 55.7% of First Nations adults were employed, up from 51% in 2016, signalling a positive trend. The employment target is on track to be met by 2031, reflecting the partial successes of community-driven employment programs, partnerships with industry, and government policies that support culturally-safe workplaces and economic participation.[85]

The focus on community-led initiatives and culturally-appropriate employment strategies is central to continued progress. The Remote Jobs and Economic Development (RJED) program established in 2024 has been instrumental in providing remote communities with meaningful jobs with fair pay and conditions.[86] These programs integrate traditional knowledge and practices, fostering meaningful work that aligns with community values. For example, land management and conservation programs allow First Nations People to maintain their connection to Country while contributing to environmental sustainability and economic development.[87]

Further, the emphasis on self-determination has been a driving force in creating employment opportunities that are responsive to the unique needs and aspirations of First Nations communities. By enabling communities to take ownership of employment initiatives, these programs empower individuals to thrive in the workforce while preserving their cultural identity. While government-supported initiatives have improved access to training, education, and mentoring, helping First Nations workers develop the skills necessary for long-term employment.[88]

A key factor contributing to the success of these employment strategies is the recognition that First Nations Peoples' wellbeing is deeply connected to their social and cultural environments. Employment programs that respect cultural obligations, provide flexible work arrangements, and offer pathways to leadership within organisations have seen higher engagement and retention rates.[89] These culturally-informed approaches to employment ensure that First Nations workers feel valued and supported in their roles, which in turn strengthens their connection to the workforce.[90]

In rural and remote areas, employment opportunities are often limited by geographical isolation and the lack of infrastructure. However, innovative programs that leverage digital inclusion and remote working options are helping to overcome these challenges.[91] The new First Nations Visitor Economy Partnership (FNVEP), announced by the Government on 30 October 2024, aims to support greater participation and economic opportunities for First Nations People and businesses in Australia's tourism industry. The FNVEP is designed to provide leadership and guidance on respectfully embedding Australia's rich cultural heritage. By improving access to technology and creating jobs that can be performed from remote locations, First Nations communities can find new ways to participate in the broader economy while staying connected to their lands and cultural practices.

While the employment landscape for First Nations People is evolving, the progress made so far demonstrates the strength and resilience of First Nations communities in navigating emerging challenges. The CTG framework, underpinned by community leadership and culturally-safe employment strategies, provides a foundation for achieving the 62% employment target by 2031. This approach not only addresses employment disparities but also celebrates the contributions of First Nations People to the Australian economy.

Table 10. Summary of opportunities and risks of AI on increasing the employment rate of First Nations People

Future impact of AI on general Australian population's employment rates	**Opportunities**	• Advanced algorithms can align job seekers with roles that suit their skills and experience, streamlining the hiring process • AI can provide personalised training programs to address skill gaps, making individuals more employable in emerging industries
	Risks	• Certain roles may become obsolete due to advancements in AI and automation, disproportionately affecting those in lower-skilled jobs • Rural and remote populations may have less access to AI-driven employment tools
Key drivers of the gap	• Racism and biases in hiring practices and workplace environments • Poor access to suitable, quality education and training	
Targeted interventions for First Nations People	**Opportunities**	• AI platforms can match First Nations job seekers with employers offering culturally-safe workplaces and flexible arrangements • AI can help First Nations entrepreneurs optimise business operations, access funding, and scale their ventures
	Risk mitigation strategies	• Develop AI-supported pathways that integrate culturally-relevant training, internships, and mentorship opportunities tailored to First Nations workers • Collaborate with First Nations leaders to identify industries and employment strategies that align with local priorities and traditions

CTG 9: Appropriate, affordable housing aligned with priorities and needs

Target 9 is focused on ensuring that First Nations People have secure, appropriate, and affordable housing that meets their needs, with a particular focus on reducing overcrowding. By 2031, Target 9 aspires to increase the proportion of First Nations households living in appropriately sized homes, recognising that adequate housing is fundamental to health, education, and economic participation outcomes.[92]

Current trends reflect a commitment to progress in this area, with improvements observed, yet significant opportunities remain to address regional disparities and enhance the cultural appropriateness of housing solutions.

The intent behind Target 9 is grounded in the understanding that housing is more than shelter — it is central to maintaining cultural and community connections, providing stability, and supporting overall wellbeing. Secure and appropriate housing enables First Nations families to foster intergenerational bonds, maintain cultural practices, and create supportive environments for children.

This holistic view of housing aligns with the CTG framework's broader focus on empowerment and self-determination, positioning First Nations communities as active participants in designing solutions that best suit their unique needs and aspirations.

Historically, First Nations People have encountered systemic barriers to accessing appropriate housing, particularly in rural and remote areas, where infrastructure may be more limited. However, through collaborative efforts under the CTG framework, there has been a strengthened focus on understanding and addressing these challenges through culturally respectful policies and community-led initiatives.[93] These efforts are underpinned by the recognition that First Nations Peoples' housing needs can differ from mainstream perspectives, with a preference for community and kinship-based living arrangements that reflect a deeper connection to land and Country. The commitment to increasing the availability of housing that respects these values represents a shift towards culturally-responsive solutions that affirm the strengths of First Nations communities.

In recent years, the introduction of community-controlled housing organisations has become an essential strategy in progressing towards the Target 9 goals. These organisations are led by First Nations communities, ensuring that housing solutions are designed with cultural integrity and respond to local priorities.[94] By placing decision-making authority in the hands of First Nations leaders, these organisations have been working to create housing that meets both practical needs and cultural aspirations, embodying a holistic approach that strengthens communities from within.

In June 2024, the Commonwealth entered a Partnership Agreement with the Northern Territory Government, Aboriginal Housing Northern Territory and four Aboriginal Land Councils (Northern Land Council, Tiwi Land Council, Central Land Council and Anindilyakwa Land Council) to share decision-making on long-term Northern Territory housing funding arrangements.[95] The delivery of much-needed housing for First Nations families, across remote Northern Territory communities accelerated significantly throughout 2024, supported by the joint Australian and Northern Territory Governments $4 billion investment in remote housing from 2024-2034. These houses are designed to meet liveability standards and supported by a cyclical repair and maintenance program.[95]

Table 11. Summary of opportunities and risks of AI on First Nations communities securing appropriate housing

Future impact of AI on general Australian population's housing	**Opportunities**	• AI can analyse data to optimise housing policies, ensuring better affordability and accessibility for vulnerable groups • AI can identify housing maintenance issues early, reducing long-term costs and improving living conditions • AI data technologies developed to identify unfair or illegal housing practices
	Risks	• Collecting and analysing personal housing data creates concerns around privacy and the storage and sharing of personal information • AI-driven housing initiatives relying on existing data may unintentionally favour urban populations over rural and remote areas, or privileged populations over marginalised peoples
Key drivers of the gap	• Chronic underinvestment in appropriate and affordable housing programs targeting First Nations communities • The lack of infrastructure, connectivity, and access to necessities and services across remote communities • Disproportionate levels of homelessness and housing instability among First Nations People • Many First Nations households experience overcrowding due to insufficient housing availability	
Targeted interventions for First Nations People	**Opportunities**	• AI can model housing solutions that incorporate traditional First Nations values and community needs • AI can help ensure that social housing programs prioritise First Nations families most in need, particularly in remote areas
	Risk mitigation strategies	• Engage First Nations leaders and communities to ensure housing solutions meet cultural and social expectations • Ensure housing-related AI systems incorporate First Nations data and respect data sovereignty and privacy

CTG 10: Adults are not overrepresented in the criminal justice system

First Nations People in Australia are the most imprisoned people in the world. This record is consolidating rather than receding. And the aim of Target 10 is to ensure that by 2031, the rate of First Nations adults incarcerated is significantly reduced, moving towards parity with non-Indigenous Australians.[96]

Target 10 acknowledges the systemic issues contributing to the high incarceration rates among First Nations populations, including socio-economic disadvantage, intergenerational trauma, and discriminatory practices within the justice system. According to the Australian Bureau of Statistics (ABS), as of June 2023 First Nations adults made up 32% of the national adult prison population, despite constituting only about 3% of the adult population in Australia.[97] This represents a disproportionate incarceration rate that is a key indicator of systemic inequality. In 2022, the Australian Institute of Health and Welfare (AIHW) reported that First Nations adults were 12 times more likely to be imprisoned than non-Indigenous Australians.[98] This overrepresentation is further exacerbated by higher rates of re-offending and longer sentences for First Nations People.

Historically, First Nations People have maintained complex systems of law, interwoven with their cultural and spiritual identities. These systems governed community life and were characterised by their ability to support social harmony and wellbeing. Colonisation disrupted these systems, leading to significant shifts that affected community autonomy and created cycles of social disadvantage.

Yet, the resilience and strength of First Nations communities have remained evident, as they continue to advocate for self-determination, justice reform, and culturally-grounded responses to justice issues. The goal of Target 10 is not just about numbers — it is about recognising and supporting First Nations Peoples' rights to a justice system that reflects their values and addresses the underlying drivers of incarceration.

Community-led diversion programs are offering First Nations adults alternatives to incarceration, allowing them to engage in culturally-supportive pathways. For example, the Nyoongar Outreach Services (NOS) is a community-led initiative dedicated to reducing the risk of offending among First Nations youth and young adults, and increasing their engagement with education and employment.[99] These types of programs, rooted in traditions and supported by Elders and other community leaders, aim to address behaviour through culture, connection and restoration, while offering rehabilitation within the context of their community and identity. Such initiatives provide powerful examples of strength-based justice practices that are prioritising healing and community integration over punitive approaches.[100]

Furthermore, access to culturally-appropriate health, social, and legal services are playing an essential role in supporting First Nations People within the justice system. Justice reinvestment approaches, which redirect resources from incarceration to community services, are increasingly being implemented across the country. These initiatives support First Nations-led organisations in developing and delivering essential services, from housing and education to employment and health, creating pathways that strengthen individual and collective resilience. By investing more in the above types of programs, the CTG framework recognises that justice cannot be separated from the broader social determinants of health and wellbeing.

Table 12. Summary of opportunities and risks of AI on reducing overrepresentation of First Nations individuals in the justice system

Future impact of AI on reducing overrepresentation of First Nations individuals in the justice system	**Opportunities**	• Reducing bias in sentencing • Personalised rehabilitation programs • Efficiency in legal processes
	Risks	• Predictive policing and crime prevention capabilities • Bias and discrimination through AI's use of historical data and the overrepresentation of First Nations People in the justice system • Exacerbation of racist policing • Over-reliance on AI technology with limited human oversight • Lack of recognition of First Nations cultural practice • Lack of transparency behind AI algorithms and the potential outsourcing of technologies from multinational corporations
Key drivers of the gap	• Systemic discrimination and racism, socio-economic disadvantage, mental health inequities, policing practices within the community	
Targeted interventions for First Nations People	**Opportunities**	• Predictive analytics for early intervention strategies • Enhanced legal support for First Nations communities • Opportunity to identify instances of injustice and unfair treatment of First Nations legal cases
	Risk mitigation strategies	• Developing inclusive AI & data integrity policies • Community-led justice reforms

CTG 11: Young people are not overrepresented in the criminal justice system

Target 11 is dedicated to reducing the overrepresentation of First Nations youth in the justice system by addressing its root causes and supporting culturally relevant solutions. The target seeks to reduce the rate of youth in detention by at least 30% by 2031, recognising the importance of keeping First Nations youth connected to their families, communities, and cultural identity as part of a holistic approach to justice.[101]

Historically, First Nations People have governed their communities through systems of lore and custom that emphasised social cohesion, respect, and the wellbeing of all community members. These systems provided mechanisms for conflict resolution and social order grounded in cultural knowledge and practices developed over thousands of years.[102] However, colonisation disrupted these governance systems, and the imposition of Western legal frameworks often disregarded or misunderstood the underlying values of First Nations customs.

Despite these incursions, First Nations communities have retained and revitalised aspects of their traditional systems, which continue to play a crucial role in supporting the social and emotional wellbeing of their youth.

The strength of First Nations identity and connection to community and Country are protective factors for youth, contributing to positive self-esteem, resilience, and wellbeing. Similar for adults, research indicates that culturally-grounded approaches to criminal justice, such as youth diversion programs and community-led initiatives such as NOS are effective in reducing recidivism and improving outcomes for First Nations youth.[103]

Such programs aim to keep young people out of the formal justice system by supporting them within a framework that respects their culture and includes Elders, mentors, and family members. This model of care not only reduces contact with the justice system but can also foster a sense of responsibility, belonging, and pride in First Nations communities.

In achieving Target 11, the Australian Government has emphasised the need to work collaboratively with First Nations organisations and communities. This approach is embedded in the priority reforms of the CTG framework, which call for shared decision-making, investment in community-led solutions, and the creation of culturally-safe environments in all aspects of service delivery. One in particular involves supporting the role of First Nations-controlled organisations, which provide culturally-safe services that address the unique needs of First Nations youth. Such organisations integrate cultural knowledge and practices into their work, helping to build trust and ensure that young people feel respected and understood.

Addressing the social determinants of health, such as housing, education, and economic opportunity, is also key to achieving Target 11. Evidence shows that stable housing, access to education, and meaningful employment significantly reduce the likelihood of youth engagement with the justice system.[104] By prioritising these areas and working to reduce socio-economic disparities, CTG initiatives can support First Nations youth in developing skills, confidence, and aspirations that empower them to thrive within their communities.

Community-led initiatives such as justice reinvestment projects exemplify the strengths-based approach, redirecting resources away from punitive responses to preventative measures that benefit the community. These projects recognise that First Nations communities hold valuable knowledge and solutions for reducing youth contact with the justice system.

The Maranguka Justice Reinvestment Project in Bourke, NSW, is a notable example where the community has driven initiatives to improve youth engagement and reduce crime.[105] Through this approach, First Nations communities are not merely participants but leaders in justice reform, building solutions that reflect their values, aspirations, and the collective wellbeing of their people.

Table 13. Summary of opportunities and risks of AI on First Nations youth being overrepresented in the criminal justice system

Future impact of AI on First Nations young people being overrepresented in the justice system	**Opportunities**	• Support at-risk youth through targeted interventions • Use AI to identify early signs of criminal tendencies and provide support
	Risks	• Stigmatisation due to over-reliance on AI predictions may label youth unfairly • Inaccurate data inputs resulting in misinterpretation of risk factors
Key drivers of the gap	• Poverty and lack of opportunity drive youth involvement in crime • Justice systems fail to understand and accommodate First Nations youth	
Targeted interventions for First Nations People	**Opportunities**	• Restorative justice models to enhance culturally-relevant diversion programs for First Nations youth • Family support programs that engage families in preventive measures
	Risk mitigation strategies	• Customised diversion strategies which incorporate traditional practices into AI tools for juvenile justice • Collaboration with Elders in developing intervention programs

CTG 12: Children are not overrepresented in the child protection system

Target 12 focuses on reducing the overrepresentation of First Nations children in Australia's child protection system by 45% by 2031.[106] The target reflects a broader commitment to ensuring that First Nations children can grow up in safe, nurturing environments connected to their families, communities, and cultures. It acknowledges the importance of strong family and kinship systems and the protective benefits of cultural continuity for the health, wellbeing, and resilience of First Nations children.

The CTG framework recognises that, for First Nations People, family can extend beyond immediate relatives and includes broader kinship networks that offer stability and support. These kinship structures are deeply embedded in cultural practices, which foster a collective sense of responsibility towards raising children. First Nations communities have historically demonstrated resilience and resourcefulness in nurturing their young within extended family networks, which serve as a foundation for children's identity and cultural knowledge. Supporting these connections and protecting the role of family and kin in raising children is essential to the success of Target 12, as it aligns with community values and provides a holistic approach to child wellbeing.

Achieving this target requires a strengths-based focus on community-led, culturally-safe approaches to child protection. First Nations communities have been instrumental in advocating for culturally-appropriate child welfare policies, with organisations such as Community First Development family services taking a lead role in offering holistic support.[107] These organisations are uniquely positioned to understand and respond to the needs of First Nations children and families, as they work within a framework that respects cultural practices, identity, and connections to Country. This approach has proven successful in keeping children safely within their communities, reducing the trauma of separation and promoting positive long-term outcomes.[108]

While challenges remain, especially in ensuring equal access to culturally-safe services across different regions, the focus of Target 12 is on amplifying the strengths within First Nations communities. By empowering First Nations-led organisations to design and implement child protection strategies, the government is aiming to reinforce its commitment to self-determination and equity for First Nations People.

Table 14. Summary of opportunities and risks of AI on First Nations children over-representation in the child protection system

Future impact of AI on First Nations over-representation in the child protection system	**Opportunities**	• Predictive analytics for early intervention to identify at-risk families and provide targeted support • Enhanced resource allocation using data-driven tools to optimise family support services
	Risks	• Sensitive family information could be mishandled • Over-reliance on algorithms reducing human oversight in child protection decisions
Key drivers of the gap	• Historical policies of family separation continue to impact communities • Disproportionate intervention rates in First Nations families	
Targeted interventions for First Nations People	**Opportunities**	• Family preservation programs using AI tools in supporting culturally-appropriate interventions to keep children with their families • Community-based care models using AI to enhance support for kinship care arrangements
	Risk mitigation strategies	• Engage community leaders in designing AI-based family support systems • Culturally-safe data practices to ensure data collection and use align with community expectations

CTG 13: Families and households are safe

Target 13 aims to reduce violence, particularly against First Nations women and children by 50%, supporting a future where safety and wellbeing are central to the lives of First Nations families.[109] Violence reduction is fundamental not only to individual wellbeing but also to the social and cultural strength of First Nations communities. First Nations women have long led initiatives to create culturally-safe support systems, which draw on community strengths to foster healing, protect families, and reduce family violence. These community-driven solutions support healthier, more resilient family units and communities by addressing the underlying social determinants of violence and disadvantage.

In February 2024, the government announced the establishment of a legislated, independent, and empowered National Commissioner for Aboriginal and Torres Strait Islander Children and Young People (the National Commissioner). This was said to mark a significant step forward in empowering First Nations children and young people. While in September 2024, the government and the Office for Youth co-hosted a landmark First Nations Youth Roundtable on Ngunnawal Country in Canberra. This event also represented a major milestone, providing the first formal opportunity for engagement and dialogue between young First Nations leaders, community members, and policy-makers regarding the creation of the National Commissioner.[110]

Improving data collection is also a vital part of achieving Target 13. Reliable data that respects the principles of Indigenous Data Sovereignty empowers First Nations communities by providing insights into the prevalence and types of violence affecting them, allowing for more responsive and locally-informed solutions. Culturally respectful data also enables better decision-making for community-led interventions and ensures that policies are tailored to meet the specific needs of First Nations families across different regions.

A safe environment for First Nations People requires addressing broader social determinants of family violence, such as housing stability, employment, and access to healthcare. Holistic, community-based approaches that integrate these factors have been shown to support family safety and reduce violence by addressing the root causes of socio-economic disparities.[109] Through empowering families economically, ensuring stable housing, and providing access to culturally-safe healthcare, First Nations communities can strengthen protective factors that build resilience and reduce vulnerability to family violence.

Table 15. Summary of opportunities and risks of AI on family violence in First Nations communities

Future impact of AI on general Australian population's home safety	**Opportunities**	• Crime prevention tools to identify and address patterns of abuse early • Virtual support systems for victims
	Risks	• Privacy concerns regarding mishandling sensitive abuse data • Systemic bias in tools: AI may replicate biases in law enforcement data
Key drivers of the gap	• Legacy of colonisation leading to systemic inequalities • Under-resourcing of support services resulting in limited culturally-relevant services for survivors	
Targeted interventions for First Nations People	**Opportunities**	• Culturally-safe solutions for reporting and preventing violence • Enhanced access to support services enabling better resource allocation for remote areas
	Risk mitigation strategies	• Community training programs to empower First Nations leaders to use AI in violence prevention • Culturally tailored resources addressing community-specific needs

CTG 14: People enjoy high levels of social and emotional wellbeing

Target 14 aims to achieve significant and sustained reductions in suicide rates among First Nations People, working towards a future where social and emotional wellbeing is upheld across all communities.[111] This target reflects a commitment to not only reducing suicide rates but also promoting mental health and wellbeing through culturally respectful and community-led approaches.

First Nations communities embody profound cultural knowledge, family connections, and a holistic view of health that encompasses physical, emotional, and spiritual dimensions. This perspective is integral to understanding wellbeing within these communities and has shaped the development of Target 14. By fostering approaches that align with cultural values, such as connection to Country, kinship networks, and traditional healing practices, this initiative aims to harness these strengths in promoting positive mental health outcomes.

Cultural resilience and community networks are valuable resources for addressing mental health challenges, and Target 14 is designed to build on these assets, emphasising the role of community in supporting individuals and creating environments where mental health is prioritised.

The CTG framework acknowledges that social and emotional wellbeing for First Nations People cannot be separated from the broader socio-economic and cultural determinants of health. Historical factors such as colonisation have had lasting impacts, yet the resilience and adaptability of First Nations People continue to drive progress toward healing and improved wellbeing. Recognising the importance of culturally-safe services, Target 14 supports community-controlled organisations that deliver mental health and support services tailored to the specific needs of First Nations communities. These organisations, often led by First Nations leaders and practitioners, play a pivotal role in building trust and providing culturally-aligned care, which is essential for achieving long-term reductions in suicide rates.

Additionally, the focus on social determinants of health under Target 14 acknowledges the role that housing, employment, education, and access to culturally-appropriate healthcare play in mental wellbeing. Addressing these determinants through community-centred and culturally relevant programs fosters a supportive environment where mental health can thrive. For instance, initiatives that promote economic participation and educational attainment among First Nations youth are instrumental in reducing vulnerabilities linked to poor mental health. By fostering pathways that reinforce self-determination and empowerment, these programs can create a foundation for wellbeing that extends beyond individual health, contributing to the collective resilience of communities.

The community-led approach supported by Target 14 also emphasises the integration of traditional healing practices with contemporary mental health support. Practices such as connection to Country, storytelling, and ceremony are essential for maintaining mental wellbeing and restoring balance in times of distress. The Birthing on Country model, for example, has proven effective in maternal and infant health, demonstrating the strength of culturally-grounded approaches that can also be adapted to support mental health initiatives.[111]

Current data indicates that while there has been some progress, regional variation in suicide rates among First Nations People persists, highlighting the importance of community-specific approaches. The National Agreement on CTG underscores the need for data that accurately reflects the experiences of different communities, supporting localised strategies that align with each community's unique strengths and challenges. By ensuring that progress assessments are grounded in culturally relevant metrics and community priorities, Target 14 reinforces its commitment to self-determination, allowing First Nations communities to lead the way in mental health solutions.

Table 16. Summary of opportunities and risks of AI on reducing suicide rates in First Nations communities

Future impact of AI on general Australian population's suicide rates	**Opportunities**	• AI Mental Health Tools allowing early identification of individuals at risk of suicide • Virtual counselling platforms providing accessible mental health support
	Risks	• Privacy concerns surrounding mental health information • Algorithmic misinterpretation of AI misidentifying mental health risks
Key drivers of the gap	• Higher rates of intergenerational trauma and stigma around mental health • Inadequate services resulting in limited access to culturally-appropriate mental health care	
Targeted interventions for First Nations People	**Opportunities**	• Incorporate traditional healing practices into AI-driven mental health tools • Community-centric support tools connecting individuals with local mental health resources
	Risk mitigation strategies	• Co-designed solutions in collaboration with First Nations health workers to create culturally sensitive tools • Ensure First Nations communities control their mental health data

CTG 15: Distinctive cultural, spiritual, physical and economic relationship with land and waters

As an essential aspect of the CTG framework, Target 15 recognises the unique cultural, spiritual, and physical relationship that First Nations People have with their Country, as well as the role this connection plays in fostering individual and community resilience, wellbeing, and self-determination. The target aims to increase the area of land and sea under First Nations legal rights and interests, with the goal of a 15% increase in land coverage by 2030 and a substantial expansion of sea areas under recognised rights.[112]

First Nations Peoples' relationship with Country is foundational, providing a wellspring of cultural identity, community strength, and resilience that has withstood generations. Maintaining connection to land and waters allows First Nations communities to uphold their heritage, engage in traditional practices, and sustain economic and social structures that support community wellbeing. Efforts under Target 15 acknowledge the ability to practise, protect, and promote cultural traditions on Country as key to fostering a holistic sense of health, wellbeing, and identity.

Historical dispossession and disconnection from traditional lands and waters have presented challenges for First Nations People, but ongoing initiatives such as land rights legislation, Native Title determinations, and the recognition of Indigenous Protected Areas (IPAs) demonstrate positive progress.[113] The expansion of IPAs, which are co-managed with the Australian Government, has allowed First Nations communities to exercise stewardship over significant areas, blending traditional knowledge with conservation practices. Through these initiatives, communities continue to build sustainable frameworks that respect ecological values while supporting cultural practices and economic opportunities.

The implementation of Target 15 is grounded in recognising and supporting Indigenous governance, legal rights, and interests in land and water. Native Title, for instance, provides First Nations People with specific rights to access land for cultural activities, such as ceremonies, hunting, and fishing, as well as to manage and protect natural resources. The increasing area of land recognised under Native Title, alongside initiatives like the expansion of IPAs, is an affirmation of the strength and resilience within First Nations communities to maintain and pass on traditional knowledge and practices.

Key to the success of Target 15 is a strengths-based approach that celebrates the autonomy, knowledge, and leadership of First Nations People in managing and protecting Country. Community-led initiatives that empower First Nations People to co-manage lands and waters not only reinforce cultural continuity but also offer meaningful pathways for economic development, employment, and environmental conservation. For instance, ranger programs and land management roles funded under Indigenous land use agreements have created numerous employment opportunities that align with First Nations values and aspirations. These initiatives contribute to building a skilled workforce within communities and reinforce the importance of land and waters as sources of both cultural sustenance and economic empowerment.

Achieving the target requires ongoing partnerships between First Nations communities, governments, and industry to support the recognition of Indigenous land and sea rights. Progress towards this goal also reflects a broader shift towards respect for First Nations sovereignty, with the inclusion of First Nations People as decision-makers and leaders in the management of their lands and waters. And as communities continue to secure legal rights and access to land and waters, the positive impact on cultural, spiritual, and social wellbeing will become evident. Target 15 underscores the essential role that connection to Country plays in First Nations identity and empowerment, highlighting the potential of culturally-aligned, community-driven approaches to drive sustainable and meaningful change.

Table 17. Summary of opportunities and risks of AI on First Nations communities maintaining connection to Country

Future impact of AI on First Nations communities maintaining connection to Country	**Opportunities**	• Tools to support broader understanding of First Nations rights • AI-powered systems to foster inclusive cultural exchange
	Risks	• Misappropriation of cultural data • Risk of exploiting First Nations cultural knowledge without permission • Over-reliance on AI may lead to tokenistic engagement with culture
Key drivers of the gap	• Historical erasure as colonisation disrupted the transmission of cultural knowledge • Systemic discrimination has limited inclusion of First Nations cultures in mainstream narratives	
Targeted interventions for First Nations People	**Opportunities**	• Language revitalisation using AI tools for learning and preserving Indigenous languages • Cultural knowledge databases developed by AI-driven platforms archiving oral histories and traditions
	Risk mitigation strategies	• Data sovereignty to ensure cultural data remains under the control of First Nations communities • Ethical AI frameworks developed guidelines to protect Indigenous knowledge systems

CTG 16: Cultures and languages are strong, supported and flourishing

Target 16 aims to ensure that First Nations cultures and languages are strong, supported, and flourishing across Australia.[114] Recognising the centrality of language to identity, culture, and heritage, this target commits to preserving and revitalising First Nations languages as essential components of cultural continuity and intergenerational resilience. First Nations People languages are integral to community strength, education, and wellbeing. For tens of thousands of years, languages have carried not only daily communication but also the spiritual, social, and environmental knowledge of the world's oldest continuous living cultures. Target 16 reflects this understanding that supporting language is essential to maintaining cultural vibrancy and empowering communities to thrive within their cultural frameworks.

The CTG framework recognises that language connects people to their land, community, and identity. This connection is evident in language revival initiatives and the establishment of language centres, which play a key role in maintaining, teaching, and celebrating First Nations languages. These community-led centres offer culturally-safe spaces for language transmission, intergenerational engagement, and connection to Country, providing essential resources for both fluent speakers and learners.

Language revitalisation is directly linked to other socio-economic outcomes in the CTG framework. Strong cultural and linguistic foundations enhance educational engagement and success, as young First Nations students are more likely to thrive in environments that reflect their identities and values. Language, being central to cultural knowledge and belonging, supports students' sense of self, resilience, and empowerment. Furthermore, language provides a pathway to enhanced economic participation, as it creates opportunities in cultural tourism, arts, media, and education sectors, fostering economic independence within First Nations communities.

Historically, colonial policies and practices disrupted language transmission, but First Nations communities have shown enduring strength in revitalising and sustaining their languages. Today, there is a renewed focus on linguistic diversity as a means of celebrating and preserving First Nations heritage, with communities, organisations, and the government working collaboratively to support language initiatives. Target 16 represents a strength-based approach that acknowledges First Nations People as cultural custodians, with a responsibility to pass down knowledge, stories, and language to future generations.

A vital part of meeting Target 16 is to ensure that First Nations People have access to high-quality language resources, education, and digital technologies that facilitate language learning and preservation. The creation of digital tools, language apps, and resources promotes accessible learning for young people and families, ensuring that language education is readily available in contemporary formats. Importantly, the CTG initiative underscores the role of Indigenous Data Sovereignty in the governance of language data, empowering First Nations communities to retain control over their cultural information.

Target 16 aligns with the broader CTG priority reforms, particularly those centred on transforming government organisations and shared decision-making. This approach strengthens the role of First Nations communities in policy decisions affecting language preservation, ensuring that the voices, values, and perspectives of First Nations People are respected in every stage of the policy process. Through genuine partnerships, the initiative promotes culturally responsive frameworks that support First Nations language education across the nation, with an emphasis on localised, community-driven solutions.

Table 18. Summary of opportunities and risks of AI on First Nations connection to culture and language

Future impact of AI on First Nations connection to culture and language	**Opportunities**	• AI language translation tools that enable non-Indigenous Australians to learn First Nations languages • Cross-cultural education tools utilising AI to facilitate shared understanding through language learning
	Risks	• Exploitation of data through improper use of AI-generated First Nations language • Surface-level engagement on technology may not foster meaningful understanding
Key drivers of the gap	• Language suppression policies during colonisation led to the loss of many languages • Under-funding has limited resources for language revitalisation projects	
Targeted interventions for First Nations People	**Opportunities**	• Language revitalisation tools for teaching and documenting First Nations languages • AI Integration into education systems can help create bilingual curricula
	Risk mitigation strategies	• Community ownership to ensure language tools are developed in partnership with Elders and language custodians • Equitable access in providing digital tools and training to First Nations communities

CTG 17: People have access to information and services enabling participation in informed decision-making regarding their own lives

Target 17 focuses on digital inclusion, aiming to ensure that by 2026, First Nations People have equal levels of access to digital services and technology. This target is not only about bridging the digital divide but also supporting First Nations communities to engage fully in a rapidly digitalising society, which is vital for education, employment, and cultural preservation.[115]

The essence of Target 17 is to provide equitable access to digital tools and services, enabling First Nations People to fully exercise autonomy in decision-making and community development. Access to digital resources is crucial for achieving broader social and economic outcomes as it enhances access to essential services, supports employment opportunities, and promotes lifelong learning. Acknowledging the intrinsic cultural strengths of First Nations communities, the government is aiming to enhance digital engagement without compromising cultural identity and self-determination.

Digital inclusion is more than providing access to devices and internet — it encompasses digital literacy, affordability, and infrastructure suited to diverse geographic contexts. Target 17 highlights the importance of co-designing initiatives with First Nations communities, ensuring culturally relevant digital literacy programs.

Target 17 acknowledges the role of digital access in preserving and revitalising First Nations languages and knowledge. Digital platforms provide unique opportunities for cultural education, allowing First Nations People to document, share, and teach languages, stories, and knowledge to younger generations. This preservation strengthens cultural continuity and resilience, empowering First Nations communities to thrive in both traditional and digital realms.

Community-led projects have shown significant success, especially in areas like digital education and small business development. These initiatives enable First Nations People to strengthen connections to their cultural practices and Country, while gaining skills that enhance participation in the broader economy.

Though varied progress has been made across regions, with some areas still facing infrastructure challenges, efforts to address these gaps are underway. Investments in digital infrastructure, such as community Wi-Fi and mobile connectivity in remote areas, have proven effective in enabling greater digital participation. Initiatives that prioritise First Nations data sovereignty and support digital leadership within communities are also playing a central role in these efforts, reinforcing the long-term benefits of digital inclusion.

The CTG framework's focus on digital inclusion is both a practical and symbolic commitment to equity, aiming to enable First Nations People to shape their futures, access opportunities, and connect to global networks without losing cultural heritage. This approach not only strengthens communities but also fosters a more inclusive society in which First Nations People can lead in the digital landscape on their own terms.

Table 19. Summary of opportunities and risks of AI on equity to access of digital services and technology

Future impact of AI on general Australian population's access to digital services and technology	**Opportunities**	• AI for bridging connectivity gaps to optimise internet infrastructure development in underserved areas • Digital literacy programs tailored to teach skills to all age groups
	Risks	• Unequal access to AI tools may primarily benefit urban populations • High costs of devices and services may restrict access
Key drivers of the gap	• Remote and rural locations face significant challenges in accessing reliable digital infrastructure • Higher levels of disadvantage among First Nations People limit their ability to afford the latest technology • Mainstream digital services have failed to accommodate cultural and linguistic needs	
Targeted interventions for First Nations People	**Opportunities**	• Customised digital inclusion strategies to identify specific needs in remote First Nations communities, such as device availability and internet access • Cultural content creation can enable the development of digital resources in First Nations languages and formats
	Risk mitigation strategies	• Prioritise remote First Nations communities for broadband expansion and affordable device distribution • Develop digital literacy programs that are culturally tailored and offered in First Nations languages • Community-led Initiatives working with First Nations leaders to identify the most effective digital access strategies

Discussion — What the CTG framework reveals

Looking back across the CTG analysis, one conclusion kept staring me down: AI did not land evenly.

In some areas it offered genuine potential to close distance — between people and services, between language and learners, between Country and the data needed to care for it. In others, it seemed more likely to hardwire yesterday's harms under the banner of efficiency. That unevenness wasn't just about the technology itself. It was about whose choices set the terms — who designed it, who benefited from it, and whose knowledge was treated as legitimate.

Anchoring the work in the CTG framework gave the whole exercise a discipline it needed, which was not part of my original plan. Without the CTG targets, it would have been tempting to wander into the usual language of "innovation" — abstract, de-politicised, and untethered from the realities of community life. The CTG framework forced the analysis back onto solid ground: things that matter most. Whether a baby is born healthy. Whether a young person finishes school. Whether families have safe housing. Whether languages continue to be spoken. Whether justice systems do less harm. These are the daily measures of life and death, dignity and opportunity. And by pinning AI against these agreed national priorities, the work stayed focused on outcomes that communities have fought to put on the agenda, not just on what the technology can do in theory.

At the same time, the CTG framework exposed its limitations. Numbers and targets can reveal gaps, but not everything. A deficit measure might show school attendance, but it cannot show whether a child feels proud in their cultural identity. It can track life expectancy, but not connection to Country or community control over decisions. The CTG framework gave the analysis relevance and concrete footing, but it could not stand alone.

The deeper challenge was always to look beneath the metrics and ask the question: Will this technology shift power towards First Nations People or will it take more power away? That became the ethical test running through this entire Fellowship.

What stood out from the analysis was where AI proved most useful. In health, the value was practical rather than shiny: getting care to people who are far from clinics, catching problems earlier, and freeing up human clinicians for the parts of care that machines cannot do. The same logic applied to schooling — continuity over novelty — and to language and Country, where the best results came from tools that extended existing strengths rather than imposing new ones. When rangers and Traditional Owners shaped the brief, computer vision became another set of eyes on Country rather than a black box directed at it — camera-trap detection, culturally-informed fire management, and decision tools that respected protocols instead of bulldozing them. That work showed AI was most useful when it amplified long-standing stewardship with community governance built in.

These were practical openings that emerged when communities held the reins.

Even where the technology looked strong, social plumbing still decided outcomes. Language technology appeared powerful in the abstract, but only became ethical in practice when data was gathered through decolonised methods — with consent, reciprocity, and clear boundaries on use. It was not just about building models — it was about who owned the corpus, who could say no, and who could walk away. That is why Indigenous Data Sovereignty kept surfacing as more than a principle: it functioned like a safety rail. Without it, even well-meant projects could drift into extraction. With it, the work sat inside community authority.

Other domains proved more fragile. Employment tech promised matching, training, and recognition of skills — yet the same systems could quietly exclude people who did not fit the data they learned from. Housing tools could, in theory, speed up maintenance and triage need, but in practice automated-screening risked reproducing bias at scale. Though these are not reasons to abandon the tools. They are reasons to set harder rules around transparency, auditability, recourse, and human discretion. Innovation without context is just another form of neglect.

Behind all of the CTG targets sits the Digital Divide: access, affordability, and digital ability. Wherever connectivity is thin, costs are high, or support is weak, the benefits of AI arrive last or not at all. That gap is not cosmetic — in very remote regions, digital inclusion scores clearly tell a story in numbers that many people feel in daily life.

Other areas make optimism harder to justify. Justice and child protection stand out as places where AI promise efficiency but delivered risk. If you feed biased policing data into an algorithm, you don't get fairness, you get faster injustice. And if you wrap it in a dashboard and call it "smart", the outcomes will look chillingly familiar. So, in systems already low on trust, the only honest stance has to be precaution: unless First Nations governance sits at the centre, unless there is a real power to say no, then the only ethical response is "not yet" or "not at all."

In the end, unevenness was the point. AI looked transformative in health, education, language, and environmental management, mixed and fragile in employment and housing, and high-risk in justice and child protection.

Recognising this is not defeatist — it is responsible.

And the posture that follows is triage: accelerate where the upside is clear, move carefully where the gains are fragile, and apply the brakes where the risks of harm are still too great.

Looking back, threaded through every CTG target were the same structural determinants. Digital exclusion sat like bedrock: without reliable connectivity, affordable access, and the skills to use it, none of the supposed solutions reached the people who might benefit. Algorithmic bias was everywhere: historical data carried the marks of historical inequity, and so their systems often meant unfairness made precise.

Surveillance creep was also a constant worry: technologies introduced as service improvements risk becoming tools of monitoring and control. And finally, there was the spectre of data colonialism — information about First Nations People extracted, centralised, and monetised abroad.

The counterweight is Indigenous Data Sovereignty: control, consent, benefit-sharing, and the right to say *stop*. Without these, "AI for good" simply remains marketing copy.

Overall, what became clear to me is that the real determinants of success have little to do with clever code and everything to do with governance and fit. Leadership means more than consultation. It means decision rights. What to build, what not to build, and when to walk away. Cultural safety can never be an afterthought. It has to be in the design brief. Indigenous Data Sovereignty needs to move from principle to practice: protocols, consent processes, hosting arrangements, and contracts that give communities real leverage. And smaller, more specialised systems appears to almost always beat sprawling "frontier" models — cheaper, greener, easier to govern, and capable of being tuned with culturally-specific data under local control.

And so, none of the above works without capability and connectivity — the people and the pipes. Without both, even the best-intentioned initiatives wither.

Philosophical questions are as important as the technical ones. The practical test for any AI project concerning First Nations People is disarmingly simple: does this shift power, benefits, and decision-making towards First Nations communities? And if the answer is no, then nothing else — no matter how clever — matters.

Technology is not just a tool, it is a relationship — who is in relation with whom, on what terms, and with what accountability. If the relationship is extractive, the tools follow that path. If it is reciprocal, governed, and grounded in culture, then the tools have endless potential.

I leave this AI and CTG analysis convinced of two things. First, that AI does have a role in closing gaps, but only where it is deliberately built to extend people, respect culture, and strengthen community control. Second, that in some areas the risks remain so great, the governance so thin, and the track record so poor that the only wise choice is to pause and take stock.

Recommendations

The path forward is to lay down the foundations that apply universally, then act with different speeds across different domains: accelerate where AI clearly helps, adapt where it is fragile, and pause where the risks are too high.

Foundations that apply everywhere

These are the conditions that must hold, no matter the context.

- **First Nations leadership and governance: not consultation, but decision rights:** what to build, what not to build, and when to stop.
- **Indigenous Data Sovereignty:** control, consent, benefit-sharing, and the right to say no, made contractual not aspirational.
- **Cultural safety by design:** begin with community priorities, stress-test harms early, treat safety as the design brief, not the afterthought.
- **People and pipes:** invest in connectivity, affordability and skills alongside the technology. Without both, initiatives will likely wither.
- **Fit-for-purpose technology:** smaller, more specialised, explainable systems over sprawling "frontier" models. These are generally greener, cheaper, and easier to govern.

Accelerate — where AI extends people and strengthens what already works

Lean in where AI clearly improves access, continuity and cultural strength, and where governance can sit with community from the start.

- **Health**: extend reach (telehealth, diagnostics), reduce admin, and free up clinicians for human care, governed by community-controlled organisations.
- **Education:** prioritise continuity: tutoring, translation and supports that bridge distance and respect culture, not surveillance-heavy tools.
- **Language**: fund community-owned language tech, respect ICIP, pay language workers properly, keep control with communities not vendors.
- **Land & waters:** pair ranger knowledge with computer vision for fire management, biodiversity monitoring; keep data local, create real ranger / data roles.

Adapt — where potential is real but fragile

These domains have promise, but need guardrails first and must remain human-centred.

- **Employment:** use AI for matching and training, but require transparency, fairness checks, and community-led services.
- **Housing**: apply AI for maintenance triage and planning, not gatekeeping. Keep decisions reviewable by First Nations People.

Pause — where harm is likely and trust is thin

Some areas are too risky for now.

- **Justice and child protection**: unless First Nations governance is central, bias is tested, and redress is real, the stance should firmly remain "not yet."

Conclusion

When I began this Fellowship, I wanted to understand what AI might mean for First Nations People. That question took me through health and housing, justice and language, Country and classrooms. And what I found was not a single answer, but a set of tensions.

AI's promise is unquestionably real. A chance to connect families to care more quickly, to make learning travel across distance, to support rangers on Country, to help strengthen languages at risk. But its dangers are just as real: predictive policing trained on biased data, child protection systems that confuse surveillance with safety, housing tools that could screen people out as easily as they screen repairs in.

The unevenness is stark, and the lessons unavoidable.

This is not a technology that can carry us forward on its own. AI is one that will move in the direction of whoever holds the power to shape it. Even where the upside is strong, the terms of use matter as much as the tool itself.

The deeper issues are not technical but ethical. What does it mean to bring machines into spaces that have carried so much harm in the past? What does cultural safety look like when an algorithm is making inferences? What does self-determination mean when data itself can be colonised, centralised, and monetised?

These questions resist easy answers, but they cannot be ignored.

What gives me sincere hope is that the most promising uses of AI were not futuristic at all. They were simple, grounded, and already underway in community-controlled settings — telehealth services to reach families, ranger groups trialling AI detection software, language centres building their own recordings and resources under strict protocols. These examples show us a path: technology not forced on communities, but taken up on their terms.

The choice now is whether AI deepens dependence on systems that have failed us, or strengthens the authority of communities to govern their own futures. That is the ethical test this work leaves behind: not whether AI is "good" or "bad," but whether it can shift power towards First Nations communities.

The future of AI in our country will not be written by code, but by whether we choose to listen — and share control — with the communities who've long known how to care for systems of life far older than machines.

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