

People first: maintaining trust when exploring generative AI in social service delivery

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While I arrived at the Ministry of Social Development in February planning to explore digital experience approaches more generally, it was clear that the generative-AI-in-government conversation was escalating rapidly. The opportunity to focus more deeply on this topic as it quite literally evolves has been welcome, instructive and challenging. Even as I complete this report, there are in-progress government policy, organisational structure and technology impact changes that could affect my own conclusions. The existence of change, however, is not new. That is part of why I continue to gravitate to user-centred approaches: who we serve is the most common of denominators across organisations. I am hopeful that can be a unifying focus here in New Zealand and at home in the United States.

Finally, this report is dedicated to my sister-in-law, Katie Seeds Taylor. The sudden passing of this kind and caring family member in October 2022 was a devastating reality check that in its own way led to my Axford Fellowship application. The tremendous opportunity to transplant myself and my family in Wellington for these six months has helped us heal and make the most of each gifted day. We've adapted well to the Aotearoa soil and return to Minneapolis with memories of experiences we could only have encountered together in this beautiful place. I continue to see Katie in every sunflower. Thankfully, there have been plenty of those in New Zealand.

Megan Evans Seeds
Wellington, June 2024

Executive summary

Generative AI (GenAI) is a current breakthrough technology that government organisations can use and must regulate. Its emergence presents choices on how to leverage opportunities and mitigate risks for clients.

This report considers how government agencies can navigate decision-making about GenAI in a human- and value-centred manner that prioritises organisational strengths and the needs of those being served. It focuses on New Zealand’s Ministry of Social Development (MSD) to frame how a social service organisation might explore GenAI, including by accounting for its existing values; mitigating risks so it can focus on the most impactful opportunities; prioritising use that empowers staff to improve client service; and exploring GenAI in a manner that maintains trust with clients, partners and staff. It sees opportunity to more directly incorporate the insights and outcomes of client experience, digital accessibility and equity teams to accelerate a people-centred approach.

Finally, it proposes guiding exploration by defining GenAI values, employing a maturity model that prioritises AI literacy development, and identifying use-case characteristics by risk to client trust. It emphasises that while GenAI is a powerful and transformative technology, it is still a tool that organisations must wield deliberately—and with transparent accountability—in service of people.

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Introduction

In the 20th century, government agencies were early adopters of new computing technology to improve administrative efficiency and service delivery. During the 1950s, the US Census Bureau's first modern computer supported population data processing.¹ In New Zealand, the Treasury employed a similar machine to support public employee payroll processing.² The expansion of government usage that followed led to new capabilities within agencies but also significant innovations now central to modern public life. The advancement of today's internet, touchscreen display and GPS technology all benefitted from early government research and development efforts.

Each new technology breakthrough presents government with choices as both a user and regulator. In each case its posture can affect the spectrum of public budgets to public trust—positively or negatively—depending on how effectively it leverages opportunity and mitigates risk in service of those being served. Does it enhance or degrade the human experience? How can it be harnessed for maximum public benefit?

Generative AI (GenAI) technology is a current example of just this kind of breakthrough and decision point. While artificial intelligence (AI) technology steadily evolved throughout the second half of the 20th and 21st centuries, the release of OpenAI's ChatGPT in November 2022 sparked significantly increased awareness in the application of GenAI, specifically. It gained over 100 million users within the first month.³ Now, governments globally are considering their posture on how to deploy it within operations to responsibly realise promised productivity gains while mitigating bias-laden risks. Governments must also approach regulation in a manner that balances economic-driving innovation with democracy-sinking threats.

An important part of the decision-making calculus must be the on-the-ground users and their trust. Whether thought of as customers, patrons, clients or residents, those who interact with individual government services experience the net impact of set policy. Today's governments often place administrative burden on those seeking services through complex forms and lengthy processes. The effort can be considered a type of regressive "time tax" that disproportionately affects lower-income, less privileged members of society, affecting administrative efficacy, service experience and resident trust.⁴ Reducing that effort—and increasing the equity of impact—requires intentional effort to simplify procedures, improve use of collected data and operate in more user-centred manners, as "when services respect our time, minimise intrusion, use language we understand and don't make us feel stupid, that deeply broken relationship with government can start to mend."⁵

¹ US Census Bureau (2023)

² Shaw (2012)

³ Markelius et al (2024)

⁴ Lowrey (2021)

⁵ Pahlka (2023), p. 184

Reducing administrative burden is not simply a matter of automating processes. In fact, automation itself can lead to unintentionally disproportionate impacts if the service journeys client groups must navigate are not well understood.⁶

This paper explores government as a user—as opposed to a regulator—of GenAI technology. It considers how government agencies can navigate decision-making about GenAI in a human- and value-centred manner that prioritises organisational strengths and the needs of those being served. It focuses on New Zealand’s Ministry of Social Development (MSD) as an example of a social service organisation facing GenAI technology at a particular moment in time. In the sections that follow, this report:

- establishes the current MSD context internally and externally: What are the strategies and outcomes the organisation is working toward, and in service of whom? What is GenAI? Why does trust in government matter?
- accounts for the state of New Zealand’s GenAI exploration: How are individual organisations and the government as a whole approaching the topic?
- reviews concurrent government examples of GenAI decision-making: How is regulation shaping exploration? How are other state and local governments approaching the topic? How is progress being received?
- recommends an approach to guide MSD’s GenAI maturity: How might MSD explore the topic within its own context? How is it different than other technology approaches?

The report considers how MSD might account for its existing values; mitigate risks so it can focus on the most impactful opportunities; prioritise use that empowers staff to improve client service; and explore GenAI in a manner that preserves trust with clients, partners and staff. It sees opportunity to more directly incorporate the insights and outcomes of client experience, digital accessibility and equity teams to accelerate a people-centred approach. This report is not a formal evaluation and does not identify a specific technical roadmap; nor does it recommend prescriptive use cases in which to apply GenAI. Instead, it proposes guiding exploration by defining GenAI values, employing a maturity model that prioritises AI literacy development and identifying use-case characteristics by risk to client trust. It emphasises that while GenAI is a powerful and transformative technology, it is still a tool that organisations must wield deliberately—and with transparent accountability—in the service of people. GenAI implementation must not be the goal itself.

While government policy might set the broad expectations and guidelines for government agencies, it will be the corresponding organisational decisions and client-facing activities that directly affect those who must interact with government. Depending on the source, GenAI might be characterised as a revolutionary technology that can lead to never-before-seen efficiencies, productivity gains and service personalisation that improves global quality of life.⁷ Or, it might be a scaled threat to data privacy and security that will magnify existing systemic biases and undermine

⁶ Wu and Meyer (2023)

⁷ Chui et al (2023)

human accountability.⁸ Both are possible, perhaps. But without intentional literacy investment, iterative experimentation and strategic deployment, government organisations risk following a volatile trend rather than harnessing a powerful potential.

MSD is equipped to apply its unique values and strategies to an accessible, equitable GenAI approach that measurably improves the service experience for its clients, partners and staff. Wielded thoughtfully and intentionally, applied GenAI technology *could* enhance human connection in the service delivery experience and reduce the time tax.

⁸ Nah et al (2023)

1 Current state context

Every generative AI exploration takes place in a specific context. This report considers the current state of New Zealand’s Ministry of Social Development and the clients it serves. Additional relevant context includes how digital service delivery is expanding across the New Zealand government, how GenAI is evolving and how government trust is measured and managed.

MSD’s role

MSD delivers the New Zealand welfare system on behalf of the Government, including employment, housing and income support services, and by partnering with communities. As at May 2024, more than 9,000 employees provide service from 200 locations across the country.⁹

MSD’s clients

Given MSD’s range of services as it helps “New Zealanders to be safe, strong and independent”, most New Zealanders will interact with the agency at some point in their lives. In the fiscal year ending 30 June 2023, 1.3 million New Zealanders received income support, 883,200 received superannuation and 105,000 received civil defence payments.¹⁰ The Ministry additionally provides income and service delivery support for students, public housing and community service providers.¹¹

MSD client service delivery takes place through contact centre phone calls, in-person service centre visits, contracted community providers and online services. Digital channel participation is increasing across services; a larger proportion of clients are submitting online applications for working age, senior and food hardship benefits. For example, by the end of 2023, more than 45 per cent of working age and senior clients were submitting their applications online (as opposed to 26 per cent at the beginning of 2016). Some products, such as the StudyLink student loan programme, are primarily digital.

Service recipients disproportionately include greater numbers of Māori and Pacific peoples, as well as disabled New Zealanders. For example, in April 2024 approximately 17 per cent of New Zealanders but more than 39 per cent of main benefit recipients were Māori. Similarly, eight per cent of New Zealanders were Pacific peoples, but made up 12 per cent of main benefit recipients.¹² One in four New Zealanders had disability, but people with a health condition or disability made up 42 per cent of all job seeker recipients.^{13, 14}

⁹ *Workforce Data—Workforce Size* (2024)

¹⁰ *Pūrongo ā-Tau Annual Report* (2023), p. 10

¹¹ *Pūrongo ā-Tau Annual Report* (2023), p. 11

¹² *Income support: monthly benefits update* (2024)

¹³ *Key facts about disability in New Zealand* (2023)

¹⁴ *Income support: monthly benefits update* (2024)

These communities are similarly overrepresented in participant statistics for youth, housing and employment services. This overrepresentation is not unique within MSD’s services: the same communities disproportionately receive social housing, require disability services, attain lower levels of education and experience poorer health outcomes.^{15, 16, 17}

Government targets

New Zealand’s current Government formed in November 2023 and released nine targets for government organisations in April 2024.¹⁸ The two that relate to MSD are:

- to reduce the number of people receiving Jobseeker Support by 50,000 to 140,000 by June 2029
- to reduce the number of households in emergency housing by 75 per cent by June 2029 (that is, so that fewer than 800 households are in emergency housing).¹⁹

The targets are intended to focus public sector service delivery improvements and are the responsibility of each lead minister and agency chief executive.

Values, strategies and outcomes

MSD structures its work on the basis of clear and culturally grounded purpose, values, strategies and outcome statements. The statements and accompanying imagery reflect relevant concepts from te ao Māori²⁰ and provide a guide for the daily actions that affect service outcomes. Concepts related to trust are implicit within the statements, whether in terms of trustworthy operations or efforts to earn client trust.

Four MSD values “represent who we are and what we stand for” and are visible throughout MSD’s physical workspaces and in digital materials, employee communications and products (see Table 1).²¹ The organisation consulted with staff and stakeholders to craft these representative expressions.

¹⁵ Wilson et al (2021)

¹⁶ Williams et al (2019)

¹⁷ Note: While the correlating causes of these service disparities are beyond the scope of this report, others document systemic impacts of colonisation, socioeconomic and health disparities, institutional bias, and historic government policy (Lange (2018); *The historical context of colonisation and statutory social work background paper* (n.d.))





¹⁸ *Government Targets* (2024)

¹⁹ Note: Te Tūāpapa Kura Kāinga (Ministry of Housing and Urban Development) is jointly responsible for this target

²⁰ Note: The Māori world view

²¹ *Pūrongo ā-Tau Annual Report* (2023), p. 16

Table 1. MSD organisational values

Value	Value statement	Value design description	Value design
Manaaki	We care about the wellbeing and success of people	This design is the interconnected relationship of the organisation and the community	
Whānau	We are inclusive and build a sense of belonging and place	The koru and puhoro are symbols of the strength of whānau and whakapapa. The mangōpare design in the middle is the common thread that binds us to Papatūānuku	
Mahi tahi	We work together, making a difference for communities	This design comes from rauru, a design that can reflect the separation of Ranginui and Papatūānuku as a result of their children working together	
Tika me te pono	We do the right thing with integrity	This design depicts a maunga, the sense of a higher purpose and responsibility of the organisation to be honest and trustworthy. The bindings of the maunga are the many threads needed to achieve this	

Key strategy documents guide policy and service delivery design for Māori (*Te Pae Tata*)²² and Pacific peoples (*Pacific Prosperity*).²³ *Te Pae Tawhiti—Our Future* presents MSD’s strategic direction and describes the three strategic shifts the organisation is making.²⁴ Each strategy is the result of community engagement activities across the country, which informed culturally specific visions, focus areas, actions and success measures.

MSD outlines the three strategic shifts that it aligns to three outcome statements to visualise how its intended work directions will affect measurable progress (see Table 2). It then maps 10 impact statements articulating its medium-term focus areas.²⁵




²² *Te Pae Tata: Māori Strategy and Action Plan* (2020)

²³ *Pacific Prosperity: Our people, our solutions, our future* (2019)

²⁴ *Te Pae Tawhiti—Our future* (n.d.)

²⁵ *Pūrongo ā-Tau Annual Report* (2023), p. 17

Table 2. Ministry of Social Development outcomes framework (as at May 2024)²⁶

Three strategic shifts	Strategic shift image	Outcome 1: New Zealanders get the support they require	Outcome 2: New Zealanders are resilient and live in inclusive and supportive communities	Outcome 3: New Zealanders participate positively in society and reach their full potential
Mana manaaki: a positive experience every time		Improve awareness of and access to support	Improve how we connect and partner	Improve effectiveness of support
Kotahitanga: Partnering for greater impact		Improve support to people, whānau and families in hardship or insecure housing	Improve the safety and strength of people, whānau, families and communities	Improve sustainable employment outcomes
Kia takatū tatou: Supporting long-term social and economic development		Improve equity of outcomes, particularly for Māori	Improve people's trust and confidence in the welfare system	Improve our contribution to business and regional development; improve people's readiness for work, including through training and education

Service transformation approach

MSD is currently carrying out its Te Pae Tawhiti programme, an in-progress, multi-year transformation to future-proof the welfare system and make it more responsive. Given known challenges with existing systems and processes, the programme identifies a need to “reset our foundations, changing the way we deliver services and modernising our technology, so we can deliver better for New Zealanders.” Te Pae

²⁶ Note: Statements are presently under review as MSD develops its new Statement of Intent

Tawhiti programme is divided into three horizons over nine years. Cabinet approved funding for the first two years in June 2023.²⁷

As at May 2024²⁸ the programme is focused on three areas:

- **Work:** Giving the right level of support to help clients get work-ready, get into work and stay in work.
- **Partnering:** Working better with partners and reducing red tape so they can focus on helping people.
- **Payments:** Making sure people get the right financial help, and reducing overpayments.

The Programme seeks to:

- redesign how MSD delivers services and make processes simpler for seniors, students and working age clients
- make transactional tasks easier so clients can do more themselves and MSD can focus on people who need extra help
- provide modern, stable technology so the Government can implement new policy more easily.

Technology strategy

MSD’s technology strategy is founded on the same values, strategies and priorities as the organisation itself. Six strategic themes guide a broader technology transformation (see Table 3).²⁹

Table 3. MSD technology strategy strategic themes

Strategic theme	Description
1.0: Digital experience	Empowering people, whānau and partners to access information and services anytime across all channels
2.0: Service enablement	Enabling a single view of MSD’s clients to understand needs and provide high quality personalised services
3.0: Unified ecosystem	Actively enabling the unified partner ecosystem which will underpin the future of digital government and New Zealand public services
4.0: Enabling better insights	Enabling personalised, proactive and preventative services and an organisation that leverages insights to improve services, operations and policy

²⁷ Cabinet Government Administration and Expenditure Review Committee: Minute of Decision (2023)

²⁸ Te Pae Tawhiti Programme (n.d.)

²⁹ MSD’s Technology Strategy (2022)

Strategic theme	Description
5.0: Digital workplace	Empowering MSD’s people with modern tools to work productively and collaborate easily
6.0: Digital workforce	Enabling digitally adept, agile and collaborative work, embodying a culture of learning and innovation

The plan additionally includes guiding principles for situations lacking a specific playbook or organisational principle. These are:

- delivering value
- responsible use
- enabling ecosystem
- our people, our future.

Finally, emerging themes identify where new focus is needed since the 2022 version of the plan. These themes are:

- resilience
- emerging technologies and innovation
- declutter the technology landscape and reduce technical debt
- digital accessibility
- sustainability.

The technology plan has a strong focus on the impact of delivered solutions to the service experience, for clients, partners and staff. The plan refers to the concept of “trust” as a critical element, to be built and sustained by treating people, their information and the environment with respect.

Responsible use of information

MSD handles personal information as part of service provision as well as to evaluate service effectiveness. In alignment with its Information, Data and Analytics strategy, MSD seeks to build trust in its data-handling practices through its Privacy, Human Rights and Ethics (PHRaE) Framework. The PHRaE guides personal information collection and use decisions in alignment with New Zealand’s Privacy Act 2020.³⁰ The framework operationalises a “privacy by design” approach to identify and mitigate risks early in data collection planning, supporting safe and respectful

³⁰*The Privacy, Human Rights and Ethics Framework* (n.d.)

processes. It also supports MSD’s commitment to only collect, use and disclose what is reasonably necessary.

Digital service delivery in New Zealand

Digital is an increasing service channel for organisations across New Zealand government. The Department of Internal Affairs’ 2020 *Strategy for a Digital Public Service* envisions a whole-of-public-service direction that “improve[s] the efficiency of the public service, enable[s] change, [and] support[s] better services and the digital transformation of agencies, putting people and businesses at the centre of government services.”³¹

Digital service options are available across government, including in the following ways:

- New Zealanders can apply online for income support through MyMSD, including document upload and identity verification steps (service may still require an additional in-person appointment to authorise benefits).³²
- The Ministry of Business, Innovation and Employment has streamlined the digital forms building and completion process, and indicates that industry partners now experience a quick, simpler question flow and user interface. Teams across government can more easily create and manage their data collection interfaces.³³
- Inland Revenue’s myIR service allows registrants to review personalised tax payment information, file tax returns, apply for parental leave payments and update their account information.³⁴
- The RealMe service allows residents to prove their identity online to enable access to digital services across New Zealand government and the private sector, such as to register to vote or open a bank account.³⁵

The COVID-19 pandemic further accelerated digital service delivery for New Zealand’s Government. Closing the door to physical service delivery supported the public health response but did not relieve government organisations from their obligation to deliver service at a time when demand only increased. The event drove additional digital adoption, forced organisations to enable remote work and revealed digital equity gaps.³⁶ The Organisation for Economic Co-operation and Development (OECD) found that sustaining a pandemic-induced digital transformation was only possible for countries that could employ “greater interoperability, integration and collaboration, within and across ... government.”³⁷ Those that reverted to siloed

³¹ *Strategy for a Digital Public Service* (2022)

³² *Apply online* (n.d.)

³³ *Business Connect* (n.d.)

³⁴ *myIR Secure Online Services* (2023)

³⁵ *Use RealMe to prove your identity online* (2022)

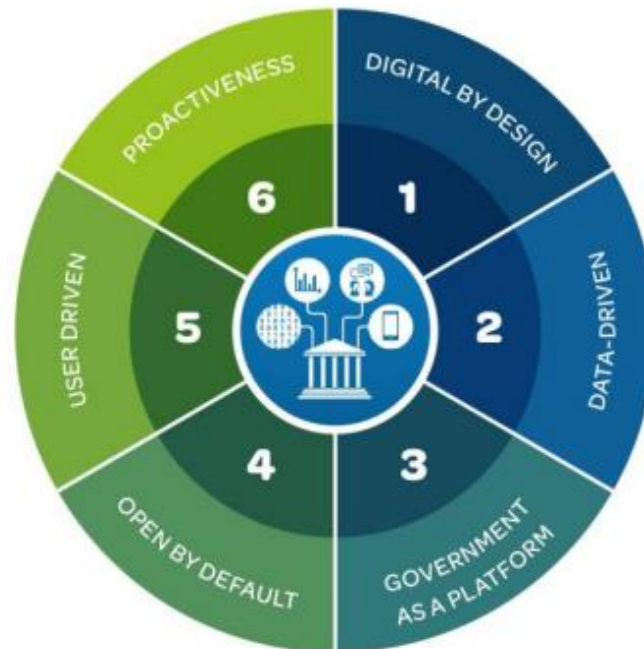
³⁶ *Report summary: Digital insights from the public service response to COVID-19* (2021)

³⁷ OECD (2024-a), p. 7

approaches or failed to invest in responsive digital government foundations struggled to capture improved outcomes.

The OECD recommends investing in six dimensions to mature digital government (see Figure 1).³⁸

Figure 1. The six dimensions of the OECD Digital Government Index



The OECD's 2023 Digital Government Index assessed New Zealand as being behind the average performance of participating OECD countries, ranking 27th out of 38. It performed strongest, comparatively, on the measures of proactiveness (15th), data driven (21st) and user driven (24th).³⁹

Digital equity and inclusion

The COVID-19 pandemic accelerated use of the internet and demand for online services across industries and across the world. Globally, internet users grew by more than 10 per cent (to 4.9 billion people) between 2019 and 2021, representing the largest increase in a decade.⁴⁰ In response to public health-driven social contact limits, residents of developed and developing countries alike increased their daily internet use and shifted their retail, health, education and banking activities online.^{41, 42, 43} Even as usage growth slowed in the years following the pandemic, residents sustained

³⁸ OECD (2024-a), p. 8

³⁹ OECD (2024-a), p. 25

⁴⁰ International Telecommunication Union (2021)

⁴¹ Rahman et al (2023)

⁴² McClain et al (2021)

⁴³ De et al (2020)

their adoption. As of 2023, 67 per cent of the world’s population, or 5.4 billion people, is now online.⁴⁴

New Zealand sees the same sustained activity: nearly 96 per cent of the population were considered to be an internet users in 2024, an increase from 88 per cent in 2019.^{45, 46} Over 60 per cent of online residents reported spending between two and four non-work hours per day on the internet in 2023.⁴⁷ While social media is the top task for this time, email, media streaming, reading news, messaging friends, online shopping, using search engines, paying bills and gaming are other common activities.⁴⁸ However, disparities persist. New Zealanders who live in social housing, have a disability, are members of Māori and Pacific communities, live in towns of 10,000 to 25,000 people, are over 75 years of age or are unemployed are less likely to have internet access.⁴⁹ As noted previously members of these communities are also disproportionately represented among MSD’s clients. The cost of connectivity is a particular barrier to digital equity: as many as 58,000 households lack access to an affordable option.⁵⁰

Digital equity is a public concern, as a lack of digital inclusion “leads to diminished wellbeing and opportunity, and other forms of deprivation.”⁵¹ In response, the Government’s Digital Inclusion Blueprint and corresponding Action Plans identify work to ensure “everyone in New Zealand has what they need to participate in, contribute to, and benefit from the digital world.”^{52, 53} The framework focuses on activities to build the motivation, access, skills and trust required to increase digital inclusion. These considerations remain important as the emergence of GenAI technology affects work and service spaces, presenting an opportunity to either help or hinder digital equity and inclusion.

GenAI overview

GenAI is a rapidly developing subfield of AI. It has implications for every sector, including government organisations serving the public. This brief overview is context for a closer examination of its reception in government.

An AI system is defined by the OECD as:

a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual

⁴⁴ International Telecommunication Union (2023)

⁴⁵ Kemp (2019)

⁴⁶ Kemp (2024)

⁴⁷ Matika (2023), p. 6

⁴⁸ Matika (2023), p. 11

⁴⁹ *Digital Inclusion and Wellbeing in New Zealand* (2022)

⁵⁰ *Affordable connectivity in Aotearoa: Report on DECA mahi on the affordable connectivity problem and options to address it* (2023)

⁵¹ *Digital New Zealanders: the pulse of our nation: a report to MBIE and DIA* (2017)

⁵² *The Digital Inclusion Blueprint*. (2019)

⁵³ *Digital Inclusion Action Plan 2020–2021* (2020)

environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment.⁵⁴

AI broadly analyses and interprets data to make predictions or classifications in a manner that mimics human intelligence. GenAI, specifically, is a subset of AI technology that can create new content in response to prompts.⁵⁵ Generated content can include text, imagery, audio, code, music and synthetic data. GenAI learns patterns and relationships across training datasets, predicting the next data point through probability-based modelling. The approach differs from a deterministic model that provides a single and replicable outcome to the same set of inputs. Generated outputs are statistically similar to training data but original in their composition.⁵⁶

Also important, natural language processing (NLP) is the type of AI enabling machines to understand, interpret and generate human language. Large language models (LLMs) are the specific type of GenAI focused on text and trained on high volumes of written content. Put simply, NLP techniques support LLM training in the context of human language, enabling the models to produce content that resembles human-created text.⁵⁷

In short, GenAI is trained by humans on human-created data to mimic human output. As such, it presents both opportunities and risks.

GenAI development trajectory

The development of GenAI evolved from the early computing and neural network development of the 1930s and 40s. “Deep learning” capabilities evolved throughout the second half of the twentieth century, eventually resulting in features like image search, image generation and basic chatbots. LLMs enabled generative pre-trained transformers (GPTs) to take inputs and return predictive outputs based on training data beginning in the 2010s. OpenAI’s release of a ChatGPT demo in November 2022 marked the beginning of the current era in which publicly available chatbots and LLMs can be integrated into employee workflows, product development and customer-facing service experiences.⁵⁸

ChatGPT gained over 100 million users within its first month. This sparked significantly increased awareness in the application of GenAI.⁵⁹ The personal usage, business integration and funding of GenAI continued to increase exponentially throughout 2023 and into 2024.⁶⁰ Organisations in every sector report experimenting or moving to production with GenAI solutions: “this unprecedented wave of excitement and anticipation is undeniably on a significantly larger scale than previous eras of AI hype we have seen historically.”⁶¹

⁵⁴ OECD (2024-b), p. 6

⁵⁵ *The Benefits and Limitations of Generative AI: Harvard Experts Answer Your Questions* (2023)

⁵⁶ McKinsey & Company (2024)

⁵⁷ OECD (2023-a)

⁵⁸ Marr (2023)

⁵⁹ Markelius et al (2024)

⁶⁰ Mullen (2024)

⁶¹ Markelius et al (2024)

However, GenAI continues to be just one type of AI in the marketplace. Non-GenAI applications are already commonplace in private- and public-sector organisations alike.⁶² Through virtual assistants (like Apple’s Siri), personalised entertainment recommendations (like Netflix or Spotify), consumer fraud and cybersecurity threat detection services, HR resume screening and targeted marketing campaigns, the technology regularly reaches consumers and citizens. Over-engineering solutions is a risk for any organisation influenced more by today’s “GenAI hype” than its own service objectives. Focusing on problem definition (especially in terms of what users need⁶³) continues to be an important first step before designing a solution, regardless of which technology is deployed.

In addition to intentional GenAI exploration, organisations presently face GenAI applications integrating into the products they already use (for example, Microsoft 365, Adobe Creative Cloud, GitHub Copilot and Oracle OCI applications). Contracting partners may also leverage GenAI in their work with organisational clients. In these ways, engaging with GenAI technology is no longer a binary choice. Focusing on *whether* to use GenAI threatens to lose sight of *why* and *for whom* the technology might be applied. This is not a new risk to technology planning. But the accelerated pace of GenAI’s evolution and marketing is fuelling a narrative of promise that organisations may fear missing out on.⁶⁴ Organisations may be best positioned to consider *how* they will leverage the opportunities GenAI poses and mitigate its risks.

Public sector implications

The public sector can leverage GenAI in ways that affect the residents’ experience, support the public sector workforce and contribute to solution design and development. However, consideration of opportunity and risk in the government space is different to such consideration in the private sector. Public organisations cannot segment their services to a particular audience. They must serve all residents within their jurisdiction and typically ensure equitable access to those services. Public perception of technology and how government organisations navigate the impacts of biases and output risks are factors in whether residents can trust its use.⁶⁵

Public awareness and perception

As AI awareness increases, so does nervous sentiment. A 2023 global survey on AI attitudes found that 67 per cent of respondents “have a good understanding of what artificial intelligence is” across 31 countries. At the same time, 52 per cent of respondents expressed nervousness—a 13-point increase from 2022.⁶⁶ New Zealanders are increasingly paying attention to the development of AI technology. Four out of five know “at least a little” about it. Only 11 per cent are “more excited than concerned” about AI possibilities; 40 per cent are “equally concerned and

⁶² De Sousa et al (2019)

⁶³ Note: see Appendix 1 for a description of solution desirability, feasibility and viability.

⁶⁴ Markelius et al (2024)

⁶⁵ Schiff et al (2023)

⁶⁶ *Global Views on A.I. 2023: A 31-country Global Advisor survey How people across the world feel about artificial intelligence and expect it will impact their life* (2023)

excited,” and the balance are either more concerned than excited (42 per cent) or offered no response.⁶⁷ Just over 50 per cent of Māori, Pacific, Asian and Pākehā⁶⁸ respondents each reported concern about AI’s impact on society. Respondents identifying as women, aged 70 and older, having a long-term disability or in lower-income households expressed significantly more concern than all New Zealanders.⁶⁹ Concerns included that it would be used maliciously, that there was a lack of regulation regarding its use and that it would cause harmful unintended consequences.⁷⁰ This is similar to AI perception in the United States, where 9 in 10 Americans have heard “at least a little” about AI, 10 per cent are “more excited than concerned” and 36 per cent are “equally excited and concerned.” Americans are interested in AI that saves time but concerned about a “loss of the human element,” negative impact on jobs and surveillance impacts.⁷¹

Sources of bias

The conscious and unconscious bias of humans already affects government service design and outcomes. GenAI can additionally introduce bias through its data, design and interpretation.⁷² The quality of the output GenAI models deliver is only as good as the data they are trained on. Data quality, data volume and inherent data bias—whether because of what the data include or exclude—can result in biased output.

For example, datasets that are not representative of all populations (by race, ethnicity, gender, etc.) cannot represent them in the output. An LLM primarily trained on content from the Western or English-speaking world would perpetuate the assumptions, biases and stereotypes of those views. In addition, human annotators used to label training data are themselves disproportionately from Western backgrounds, further imposing this world-view bias.⁷³ Conscious and unconscious biases of those using GenAI in their work can continue to perpetuate the bias in their own decisions.

This is not to say bias in GenAI is unique but to emphasise that it can be less visible to users, as well as magnified in its application. At minimum, biased training data might result in GenAI applications that are less functional for particular users, such as facial recognition technology that is less accurate for darker skin tones.⁷⁴ Unmitigated, the scale and speed of GenAI-powered activities risk amplifying existing inequities, perpetuating stereotypes and discriminating against already marginalised groups systemically.⁷⁵

Output risks

⁶⁷ Matika (2023), p. 28

⁶⁸ Note: New Zealanders of European descent

⁶⁹ Matika (2023), p. 26

⁷⁰ Matika (2023), p. 29

⁷¹ Faverio and Tyson (2023)

⁷² Ferrara (2023)

⁷³ Nicoletti and Bass (2023)

⁷⁴ Pennington (2023)

⁷⁵ Ferrara (2023)

One primary concern about GenAI solutions is the lack of output *traceability*. Trained models return generated data without an explanation of how it is derived, including which data sources, data training methods and decision-making processes the models employed. This lack of transparency makes it challenging for users to defend the logic, reproduce the methods and explain generated findings. In this way, limited traceability leads to difficult *explainability* of methods and any resulting decisions.

AI-generated content can be misleading or deceptive, as LLMs are creating predictive—but not necessarily factual—output. A *hallucination* occurs when GenAI output is presented as factual without being accurate or true. Hallucinated visual content might divert from the laws of physics; hallucinated data output might amplify statistical outliers. This kind of action undermines output quality and affects explainability. Delivering hallucinated information to residents risks eroding public trust and contributing to further communication challenges.

Similarly, because LLMs memorise data patterns without actual comprehension, models can, unprompted, inadvertently reproduce sensitive or private data in output. This *data memorisation* is a risk to data protection regulation, data security practices and intellectual property rights.

Without awareness or mitigation, these kinds of output risks can contribute to the perpetuation of misinformation, make fact-checking more difficult, lead to confirmation bias and limit the critical thinking skills of both the GenAI user and the consumer of its output.

Trust in government

Trust is a critical currency of democratic government service delivery. The OECD defines trust as “a person’s belief that another person or institution will act consistently with their expectation of positive behaviour.” Trust further “offers people confidence that ... institutions will act as they might expect.”⁷⁶ While governments can aim to be *trustworthy*, it is residents who assess whether they are *trusted*.

Governments with high resident trust realise lower service transaction costs, better service outcomes, more stable societies and more engaged, compliant community members. Governments are better positioned to respond effectively to crises when residents perceive state actions as beneficial.⁷⁷

Conversely, declining public trust can increase service cost through resistance, non-compliance and corruption. Whether because it becomes more difficult to attract workforce talent or because driving service adoption becomes harder, it is inherently more expensive to successfully implement programmes when public trust is low.⁷⁸ More important than cost, perhaps, is the risk that declining trust poses to the foundation of functional democracies.

⁷⁶ OECD (2022-a)

⁷⁷ OECD (2022-b)

⁷⁸ Alkrajji and Ameen (2021)

Measuring public trust

Public trust is regularly measured within organisations and comparatively across government institutions. For example, the OECD Trust Survey captures perception of democratic governments' performance against key trust drivers every two years.^{79, 80} The OECD has identified five key drivers of trust in government to capture how organisations deliver responsively and reliably, and act with openness, integrity and fairness (see Table 4).⁸¹

Table 4. OECD framework on drivers of trust in public institutions

Driver type	Driver	Driver description
Competency	Responsiveness	<ul style="list-style-type: none"> • Provide efficient, quality, affordable, timely and citizen-centred public services that are co-ordinated across levels of government and satisfy users. • Develop an innovative and efficient civil service that responds to user needs.
Competency	Reliability	<ul style="list-style-type: none"> • Anticipate needs and assess evolving challenges. • Minimise uncertainty in the economic, social and political environment.
Value	Openness	<ul style="list-style-type: none"> • Provide open and accessible information so the public better understands what government is doing. • Consult, listen, and respond to stakeholders, including through citizen participation and engagement opportunities that lead to tangible results. • Ensure there are equal opportunities to be part of and participate in the institutions of representative democracy.
Value	Integrity	<ul style="list-style-type: none"> • Align public institutions with ethical values, principles, and norms to safeguard the public interest. • Take decisions and use public resources ethically, promoting the public interest over private interests while combating corruption. • Ensure accountability mechanisms between public institutions at all levels of governance. • Promote a neutral civil service whose values and standards of conduct uphold and prioritise the public interest.

⁷⁹ OECD (2022-a)

⁸⁰ OECD (2022-c)

⁸¹ OECD (2022-a)

Driver type	Driver	Driver description
Value	Fairness	<ul style="list-style-type: none"> • Improve living conditions for all. • Provide consistent treatment of businesses and people regardless of their background and identify (e.g., gender, socio-economic status, racial/ethnic origin).

The impact of public trust was especially apparent during the COVID-19 pandemic. Countries with relatively high levels of public trust more effectively marshalled compliance with protective policies to minimise social and economic consequences.⁸² This is not to say that policies did not face resistance or that governments did not need to combat misinformation. But a larger proportion of trusting, willing-to-comply residents critically aided an effective response. Unfortunately, global levels of trust in government decreased following the pandemic. History shows us that it takes more time to rebuild trust than to lose it.⁸³

Public trust in New Zealand

New Zealand is a high-trust country; residents report higher levels of trust in other people and institutions compared with the OECD average.⁸⁴ Among surveyed categories, New Zealanders report highest trust in the police (73 per cent) and lowest in the media (35 per cent). More than half (56 per cent) expressed trust in the public service, compared with 50 per cent of OECD respondents overall. Fewer respondents—45 per cent—reported trust in local government. The gap between trusting people and trusting institutions follows the OECD average trend, perhaps because residents relate to the “human face of government institutions” rather than the abstract concept of government.⁸⁵

The New Zealand Government also manages its own survey, *Kiwis Count*, to capture feedback on a range of public service perceptions, including public trust and confidence. The Public Service Commission presently collects responses quarterly.

Kiwis Count captured a record 70 per cent level of trust in the public service brand in December 2020. This was up from 51 per cent just one year prior and higher than the 59 per cent of the most recent survey (March 2024).⁸⁶ The most impactful predictors of public service trust in New Zealand are service responsiveness, administrative service satisfaction and service reliability.

The Public Service Act 2020 captures the importance of public trust as an intended outcome of the five public service principles:⁸⁷

- politically neutral

⁸² OECD (2023-b)

⁸³ OECD (2022-a)

⁸⁴ OECD (2023-b)

⁸⁵ OECD (2022-a)

⁸⁶ *Kiwis Count* (2024)

⁸⁷ *Principles and Values* (n.d.)

- free and frank advice
- merit-based appointments
- open government
- stewardship.

Efforts to establish, maintain and measure public trust in New Zealand make clear the factor is important to government and valuable for effective service delivery. Operating with the competencies and values that drive public trust are a key foundation from which to face emerging and possibly threatening issues.

Trust is an important element of social service delivery, too. A 2019 Welfare Expert Advisory Group report notes that “For the welfare system to work effectively ... mutual trust between parties is essential” and that “This trust needs to be built on providing recipients with the right support and services when they need them.”⁸⁸

⁸⁸ Welfare Expert Advisory Group (2019)

2 GenAI consideration in New Zealand

The New Zealand Government is actively considering how it will leverage generative AI within and across organisations. The Minister of Digitising Government, Hon Judith Collins, sees the country “embracing the potential of AI innovation to support task automation, streamlining processes and optimising service delivery in appropriate circumstances” and seeks a unified government roadmap for AI government services.⁸⁹

Several government organisations released AI-related guidance beginning in 2023, including references to considerations for GenAI. At the same time, members of the public are making inquiries about government use of AI.^{90, 91}

Advice within government

Joint interim guidance from the Department of Internal Affairs, the National Cyber Security Centre and Stats NZ in July 2023 encouraged organisations to explore GenAI opportunities in ways that protect data classified as SENSITIVE (or above) and exclude personal information. Guidance additionally cautions against inputting client data or information that would be withheld under the Official Information Act 1982; allowing unsanctioned use; permitting use of free GenAI tools; and using GenAI for essential systems or services.⁹² The advice identifies risk areas to manage so that organisations can explore potential benefits without creating public harm or damaging trust. Recommended risk management considerations include:

- robustly govern the use of GenAI
- assess and manage for privacy risks
- assess and control for security risks
- consider Te Tiriti o Waitangi⁹³
- use AI ethically and ensure accuracy
- be accountable
- be transparent, including to the public
- exercise caution when using publicly available AI
- apply the government procurement principles
- test safely.

⁸⁹ Collins (2024)

⁹⁰ Ministry of Social Development (2024)

⁹¹ University of Canterbury (2023)

⁹² *Initial Advice on Generative Artificial Intelligence in the Public Service* (2023), p. 4

⁹³ Note: The Treaty of Waitangi, New Zealand’s founding document

The guidance does not offer a specific, all-of-government position but does broadly encourage organisations to safely explore—rather than ban—the technology.⁹⁴

Advice for New Zealand organisations

The Office of the Privacy Commissioner’s September 2023 guidance emphasises the relevance of the existing Privacy Act 2020 to any AI tool use. Whenever business, government or community organisations work with personal information, they must comply with the 13 information privacy principles set out in the Act.

The Office of the Privacy Commissioner recommends conducting a privacy impact assessment before using AI tools, including GenAI. This process proactively engages affected stakeholders to understand and mitigate potential risks. The guidance directs users to consider the impact of GenAI on data collection, security and retention, access and correction, accuracy, automated decision making, use and disclosure and unique identifiers.⁹⁵

Related guidance

Additional documents relating to GenAI exploration in New Zealand include the Algorithm Charter, Data Protection and Use Policy, the New Zealand Government Web Standards and the Accessibility Charter. Each considers a particular way that government use of technology can mitigate risk to the people it serves.

Algorithm Charter

The Algorithm Charter establishes commitment from organisations across government (including MSD) to manage algorithm use in a way that minimises bias, reflects the principles of Te Tiriti o Waitangi and maintains the trust of New Zealanders.⁹⁶ The Charter focuses on the impact an algorithm decision makes on the wellbeing of people, regardless of the algorithm’s complexity. Given that its application to every business rule would be unwieldy, a risk matrix guides assessment of risk likelihood against impact of said risk. Decision-making about applications characterised by the matrix as high-risk *must* consider the Charter. Decision-making on medium-risk applications *should* apply it, and on low-risk applications *could* apply it. Commitments for algorithm-informed decisions include:

- maintaining transparency by clearly explaining how decisions are informed by algorithms
- delivering clear public benefit through Te Tiriti o Waitangi commitments
- focusing on people

⁹⁴ *Initial Advice on Generative Artificial Intelligence in the Public Service* (2023), p. 11

⁹⁵ *Artificial Intelligence and the Information Privacy Principles* (2023)

⁹⁶ *Algorithm charter for Aotearoa New Zealand* (2023)

- making sure data is fit for purpose
- ensuring privacy, ethics and human rights are safeguarded
- retaining human oversight.

Signatory agencies commit to assessing the impact of algorithm-informed decisions in support of transparent and accountable data use. The Algorithm Charter would apply to any GenAI use case that could “significantly impact on the wellbeing of people, or [where] there is a high likelihood many people will suffer an unintended adverse impact.”

Data Protection and Use Policy

The Data Protection and Use Policy guides “respectful, trustworthy and transparent” collection and use of people’s personal information.⁹⁷ It applies to all New Zealanders, including government organisations like MSD. Along with its five principles and four values, the Policy supports agencies to:

- be clear about the vital importance of purpose when collecting and using people’s personal information
- help people to understand what’s happening with their information and what choices they have
- make it easy for people to see and request correction of their information
- work together for better insights and outcomes.

The policy language notes that “agencies that collect, share and use information in a respectful and transparent manner create a cycle of trust between themselves and the people who use their services.” The guidance within the Data Protection and Use Policy is a relevant framework for GenAI use cases.

Web Standards and Accessibility Charter

The New Zealand Government Web Standards “define how to make sure government websites are accessible and usable by everyone, including disabled people.”⁹⁸ The July 2019 updates include updated accessibility and usability standards that all public and non-public service agencies must meet, as mandated by Cabinet. The standards incorporate community feedback and reference the international web accessibility standard-bearer, the Web Content Accessibility Guidelines 2.1. Together, they are designed to meet the needs of current web technology users, including the growing population of users with low vision, who have cognitive disabilities or who use speech recognition software.

Staff from MSD and the Disabled People’s Organisation action lead, the Association of Blind Citizens New Zealand, developed the February 2018 Accessibility Charter to improve disabled people’s access to and consistent experience with government

⁹⁷ *Data Protection and Use Policy* (2022)

⁹⁸ *Web Standards effective from July 2019* (2021)

information. Committed organisations agree to “ensuring that all information intended for the public is accessible to everyone and that everyone can interact with our services in a way that meets their individual needs and promotes their independence and dignity.”⁹⁹

With focused intention, GenAI-powered applications could improve the service experience for disabled people through existing assistive technology and service personalisation improvements. The Web Standards prescribe the expected digital experience, and the Accessibility Charter offers a relevant framework from which to consider GenAI use case opportunities.

MSD-specific guidance and activities

MSD continues to develop standards and activities that relate to or inform its approach to exploring algorithms or automation broadly and use of GenAI in particular.

Model development lifecycle

MSD created the Model Development Lifecycle to help manage new and emerging uses of data in operational algorithms, as required by the Algorithm Charter and the Data Protection and Use Policy. The Lifecycle guides users through privacy versus transparency considerations, helps prevent unintended bias and reflects Te Tiriti o Waitangi principles.¹⁰⁰ It is complementary to the PHRaE Framework and incorporates PHRaE drafts at each of three approval gates designed to identify and reduce operational algorithm risk.¹⁰¹

Automated decision-making standard

MSD approved an automated decision-making standard in February 2022 to align non-human decision processes to New Zealand’s digital strategy, laws and policy intent. This standard ensures that when MSD implements a process which contains an automated decision, there are sufficient safeguards suited to the particular circumstances, and MSD can show that the relevant law and facts were taken into account.¹⁰² The standard applies when decisions could affect a client’s entitlement, obligations or eligibility status. For example, MSD uses it to charge types of child support payments as income or grant Winter Energy Payment decisions. The PHRaE Framework guides verification of new automated decision-making uses.

Interim position on use of GenAI

MSD began developing an interim position on potential GenAI use in 2023, including a pathway to consider example use cases. The recommended position states:

⁹⁹ *The Accessibility Charter* (n.d.)

¹⁰⁰ *Model Development Lifecycle* (n.d.)

¹⁰¹ Nicholson Consulting and the Ministry of Social Development (2021)

¹⁰² *Automated Decision Making* (n.d.)

- “Where there are identified business needs to use generative AI over other mechanisms, a risk-based approach should be taken to assess use, in line with System Leads’ guidance and the Ministry’s existing approach to the use of algorithms. This risk-based approach will be supported by the development of additional controls to mitigate each risk.
- Generative AI tools can be considered for use where there are identified business needs, but that our pace of adoption will be kept to within our ability to ensure its responsible use. This includes consideration of the policy and legislative environment we operate within.”

GenAI use cases

In line with the interim GenAI guidance, MSD is considering six initial use case-types in a protected, low-risk manner. These include:

- support for code development
- creation of synthetic data for testing
- sentiment analysis of data sets¹⁰³
- automating applying metadata or extrapolating missing data
- information discovery using natural language search
- summarisation and context-driven knowledge provision.

None of the initial use cases would involve automating a decision. While a theoretical decision-making use of GenAI would fall under the automated decision-making standard, because of GenAI output’s traceability limitations this type of use case is unlikely to be suitable.

The organisation’s emerging technology function is coordinating exploration, and will begin with synthetic data generation, sentiment analysis and metadata application use case-types. Staff guiding the research provide emerging technology updates to an advisory committee comprised of legal, information group, architecture, digital accessibility, policy and procurement stakeholders. This work is in turn reported quarterly to the committee within MSD responsible for governing consistent application of its design principles.

MSD communicated interim guidance on employee use of GenAI in April 2024. It references existing guidelines in the organisation’s technology usage policy, such as the guideline that ministry information should not be used within GenAI tools. At present, “ideation”—including brainstorming, outlining, prompting thinking and making document headings—is the only acceptable work-related use case for MSD staff. Employees may use these tools for personal use.

¹⁰³ Note: quantitative and qualitative analyses of staff feedback data on updates or changes to systems and processes

3 Concurrent approaches

Local and state governments globally are considering whether, and if so how, they will leverage generative AI in service delivery. As was true of previous disruptive technology moments, at this time governments are both pressured to make quick progress and rapidly discerning how their risk profiles differ from the private sector. However, it will be the individual project team decisions that most affect residents in each country. Macro policy statements may set the direction, but on-the-ground GenAI implementation choices will continue to shape the service experience.

Example policy and regulation approaches

The United States, the United Kingdom and the European Union have taken different policy steps to account for the new risks and opportunities presented by AI generally and GenAI in particular. Their various approaches to setting guidelines illustrate the differing interests GenAI involves and the expectations it raises.

The United States: structural accountability

United States federal government agencies follow direction in proclamations like the October 2023 White House Executive Order on the Safe, Secure and Trustworthy Development and Use of Artificial Intelligence¹⁰⁴ and the March 2024 Office of Management and Budget's follow-up requirements and guidance.¹⁰⁵ The Executive Order broadly directs action to protect the experiences of service recipients, the federal workforce and market competitors. It positions the United States government as a consumer, a user and a regulator of GenAI technology.¹⁰⁶ The Office of Management and Budget memo details specific actions agencies must take on AI—including GenAI—by strengthening AI governance, advancing responsible AI innovation and managing risks from the use of AI. These include to:

- designate a chief AI officer
- conduct AI impact assessments
- integrate beneficial uses of GenAI into agency missions.

This guidance can be referenced by state and local government partners but does not obligate them to follow it. Partnering organisations can consider the differing factors in their own context and determine whether a distinct approach makes sense relative to their work with the Federal Government.

¹⁰⁴ Biden (2023)

¹⁰⁵ Young (2024)

¹⁰⁶ *Fact sheet: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence* (2023)

The United Kingdom: clear agency expectations

The United Kingdom released a January 2024 framework with 10 principles for government organisations to consider in their use of GenAI.¹⁰⁷ The guidance is intended to be dynamically updated as the technology advances and agencies acquire additional experience using the technology.

The principles are:

- “Principle 1: You know what generative AI is and what its limitations are
- Principle 2: You use generative AI lawfully, ethically and responsibly
- Principle 3: You know how to keep generative AI tools secure
- Principle 4: You have meaningful human control at the right stage
- Principle 5: You understand how to manage the full generative AI lifecycle
- Principle 6: You use the right tool for the job
- Principle 7: You are open and collaborative
- Principle 8: You work with commercial colleagues from the start
- Principle 9: You have the skills and expertise needed to build and use generative AI
- Principle 10: You use these principles alongside your organisation’s policies and have the right assurance in place”

The tone of the framework implies an understanding that agencies are using GenAI and that each is still accountable to existing guidelines across legal, ethics, data privacy and security domains.

The European Union: balanced risk regulation

The European Union’s AI Act is the world’s first legal AI framework. Approved in March 2024, it establishes a regulatory framework for any AI system provider seeking to operate within the EU, regardless of their location. It establishes three risk categories that indicate whether applications create unacceptable risk and so are prohibited, are deemed high risk and must be regulated, or create minimal risk and can be left unregulated.¹⁰⁸ In this way, it seeks to support innovation while mitigating risk. The act presently classifies GenAI systems as high-risk. Providers must adhere to risk assessment, human oversight, data governance, transparency and monitoring requirements.¹⁰⁹

A new EU AI Office is tasked with supervising and enforcing AI Act rules. As of May 2024, it is being actively staffed to support implementation.¹¹⁰

¹⁰⁷ *Generative AI Framework for HMG (HTML)* (2024)

¹⁰⁸ *The EU Artificial Intelligence Act: Up-to-date developments and analyses of the EU AI Act* (2024)

¹⁰⁹ Chan (2024)

¹¹⁰ *High-level summary of the AI Act* (2024)

State and local government approaches

Every government must establish a GenAI position within its own context. Official actions and anecdotes from city, county and state government practitioners describe differing approaches to GenAI exploration. The following examples from the United States, gathered in response to interview requests and based on public reporting, offer aspirational or cautionary examples to social service organisations exploring GenAI themselves.

Pennsylvania: proactive exploration of responsible use

The Commonwealth of Pennsylvania (population 12.9 million) established its own executive order on “expanding and governing the use of generative artificial technologies” in September 2023.¹¹¹ The order intends to guide a responsive, responsible approach to GenAI governance in adherence with commonwealth and United States laws. It identifies 10 core values to inform GenAI design, development or procurement activity; establishes a governance board; and directs creation of a GenAI use policy. The core values are:

- accuracy
- adaptability
- employee empowerment
- equity and fairness
- innovation
- mission aligned
- privacy
- proportionality
- safety and security
- transparency.

Commonwealth staff describe considering GenAI from two vantage points: the “wide and shallow” use cases that support daily employee work and the “deep and narrow” applications that engage the technology in a more targeted manner.¹¹² The organisational posture—guided by the employee value of employee empowerment—is one of GenAI as a “job enhancer, not replacer.” In practice, this might mean:

- GenAI is prioritised for siloed or understaffed functions;

¹¹¹ Shapiro (2023)

¹¹² MacRae and Pardoe, personal communication (2024)

- employees across the workforce can incorporate more data-informed analyses; or
- technical writers can guide their communication toward non-technical audiences.

To gain experience with low-risk use cases, Pennsylvania’s Office of Administration began partnering with OpenAI in January 2024 to pilot an enterprise ChatGPT version with select employees. The pilot’s goal is to identify opportunities for greatest impact before considering expanding use across other agencies. It will not incorporate resident-facing use cases. Additional ChatGPT security layers ensure it will not train with pilot data.¹¹³

Pennsylvania’s approach to transparently communicate intention, values and partnerships is a clear signal to its residents about what it is doing and how it is approaching exploration. Insights from the pilot will inform its next steps.

Colorado: internal consideration, external regulation

The State of Colorado (population 5.8 million) is informally experimenting with GenAI use cases that leverage publicly available information and focus on improving bureaucracy navigation. It does not presently have a formal GenAI policy.¹¹⁴ However, teams like the Colorado Digital Service are already approaching service problems with a values-based lens that can be applied to GenAI conversations (see Table 5).¹¹⁵

Table 5. Colorado Digital Service values statements

Value statement	Value description
Find the truth, tell the truth	We examine opportunities with humility, integrity and bravery. We have the courage to find a different path forward.
Give credit and absorb risk	We share our wins with our partners and provide cover for them when facing challenges together.
Champion equity	We advocate for diverse perspectives and act on these insights to build toward a more just, equitable world.
Move at the speed of trust	We prioritize relationship building and bringing team members along above the speed of deliverables.

¹¹³ *Pennsylvania Announces GenAI Pilot for State Employees* (2024)

¹¹⁴ Fisher, personal communication (2024)

¹¹⁵ *Colorado Digital Service (CDS)* (2024)

Value statement	Value description
Lead with curiosity, not judgment	We use empathy and curiosity to find positive outcomes in challenging situations.
Build momentum	We are here to break analysis paralysis and are focused on progress, not perfection.

The value to “move at the speed of trust” could particularly apply to Colorado’s GenAI posture. Problem approaches that are technology agnostic support a thorough understanding of user need before solution design. They permit capture of the existing user experience for staff and residents, making it possible to prioritise and measure against outcomes that improve it. In this way, experiments that seek to make legislation plain-language readable, identify policy overlap, or improve staff navigation of complex information sources might test GenAI options. Importantly, “deploying GenAI” would not be the project goal itself.

Colorado became the first state within the United States to pass a law regulating GenAI, in May 2024.¹¹⁶ The Bill addresses the potential discrimination of consumers by “high-risk artificial intelligence systems” and requires deployers to publicly notify usage, perform risk assessments and establish an accountability reporting process.¹¹⁷¹¹⁸ Business owners opposed to the legislation cited stifled innovation, process burden and commercial speech infringement concerns as grounds to convene a task force ahead of its enactment.¹¹⁹ Governor Jared Polis expects concerns to be addressed between now and the February 2026 effective date.

As Colorado’s legislation moves toward implementation, businesses and government organisations alike will concurrently be assessing the use of GenAI and its impact on consumers. The joint focus should encourage use that prioritises user value and support trustworthy development approaches.

Hennepin County, Minnesota: internal experimentation

Local governments within the United States are grappling with the same risks and opportunities. Minnesota’s largest local government, Hennepin County (population 1.3 million), is exploring GenAI actively but cautiously, starting with employee-facing opportunities. It approved internal policy in March 2024 permitting employee use of GenAI technology for business reasons that align with existing data privacy and technology usage guidelines, as well as the county mission, vision and values. Uses can only inform—not make—decisions. Business-facing applications of GenAI must first be approved through technology department intake processes before approval is confirmed at the assistant county administrator level. Each request must also include an equity impact analysis to analyse how different racial and ethnic groups may be affected by the usage.¹²⁰ The county additionally developed AI and

¹¹⁶ Chuang (2024-b)

¹¹⁷ Chuang (2024-a)

¹¹⁸ Williams (2024)

¹¹⁹ Rocky Mountain AI Interest Group and AI Salon, personal communication (April 2024)

¹²⁰ Robertson, personal communication (2024)

machine learning guidelines to facilitate exploration of tool benefits in a manner that mitigates risks to client and organisational data.

Future opportunities, such as experimenting with Microsoft’s Copilot, could be considered once those applications are available on the government cloud. This could allow, for example, case managers to review compiled client information from multiple sources more quickly or support more efficient code development in service applications. Learning to leverage the GenAI technology being increasingly incorporated into already licensed products will be both a business opportunity and fiscal management exercise.

Hennepin County’s approach supports GenAI literacy and skill development for employees while gathering insights to support future, scalable opportunities. Hennepin County is not pursuing a goal of GenAI use but instead creating infrastructure to guide experimentation within business areas.

New York City, New York: public work-in-progress

New York City (population 8.3 million) released its Artificial Intelligence Action Plan in October 2023. The Plan outlines 37 initiatives and actions to “help the city harness the power of AI to benefit New Yorkers while protecting them from its potential harms.”¹²¹ The actions¹²² map to milestones through 2025 and are to:

- design and implement a robust governance framework
- build external relationships
- foster public engagement
- build AI knowledge and skills in city government
- support AI implementation
- enable streamlined and responsible AI acquisition
- ensure action plan measures are maintained and updated, and report annually on the city’s progress.

Agencies will receive guidance on emerging GenAI uses and risks before creating a broader AI project typology.¹²³

The city concurrently released its beta “MyCity Chatbot” as an example of the plan in action. The service is designed to provide conversational responses to questions about the city’s business services based on the MyCity Business website.¹²⁴ Users can chat in English or 10 other Google-translated languages.

¹²¹ *The New York City Artificial Intelligence Action Plan (2023)*, p. 4

¹²² *The New York City Artificial Intelligence Action Plan (2023)*, p. 12

¹²³ Note: see Appendix 2 for a particular typology example.

¹²⁴ *MyCity Chatbot (2024)*

Within six months, reporters identified inaccurate, fabricated responses and in some cases found the chatbot recommending illegal actions.¹²⁵ Mayor Eric Adams acknowledged issues but implied real-world use was necessary “to iron out the kinks.”¹²⁶ New York City’s Office of Technology expressed an intention to continue improving the tool and a desire to enhance its reliability. Introductory messaging on the (still live as of June 2024) page evolved to remind users it is a beta product and warn against using “its responses as legal or professional advice” or inputting private information.

This example signals active exploration of the technology as a step toward the city’s aim to “harness the power of AI” but in a manner that does not necessarily “benefit New Yorkers while protecting them from its potential harms.” Current users of the chatbot may wonder whether the city values their time if they must personally verify responses on the same website supposedly training the chatbot.

¹²⁵ Lecher (2024)

¹²⁶ Allen (2024)

4 Assessment and recommendations

This report has established the current state context, describing the way in which MSD as an organisation actively delivers digital service to clients while generative AI emerges and trust in government is plateauing. Section 2 identified relevant guidance across New Zealand government agencies and within MSD itself. Section 3 summarised example regulation and implementation approaches in other governments facing similar pressure to explore GenAI. Given each factor and example, how might MSD explore GenAI?

Overall, MSD is well-positioned to explore the use of GenAI through its existing values, strategies and outcomes. It can centre client, partner and staff users in a maturity model process to ensure GenAI application would preserve—or enhance—client trust. Action guided by the model could account for the appropriate risk level and use-case characteristics that meet organisational need. Exploration could align existing practices to bring lenses of client experience, digital accessibility and equity more directly into GenAI decision-making.

At the same time, exploration and pursuit of maturity requires accounting for new risks posed by GenAI technology and carefully weighing user impacts accordingly.

Even as an all-of-government approach could emerge from coordinating organisations, MSD must consider what GenAI opportunities and implications most affect its clients, partners and staff at this moment. Positive client experience and trust hinges on thoughtful direct implementation.

Organisational strengths to leverage

As discussed in section 1, MSD is practised in stating its intentions. To an outside observer, the organisation incorporates the language and sentiment of its values and strategies in written and visual communication to staff. Visitors to its spaces see evidence of values in signage, desktop screens and interior decorations. Employees readily reference and connect the values into their work. The strategies describe the destination for the organisation and the Te Pae Tawhiti transformation programme itself is the plan for getting there. These specific, culturally rooted statements are not just words if they continue to be actively embedded in the execution of MSD work. Discussion about leveraging transformative technology like GenAI must adhere to these concepts if it is to drive client-focused service improvements.

MSD also has existing organisational expertise in three particular areas that are not routinely part of its present technology exploration or decision-making: client experience and research capacity, digital accessibility expertise and an equity focus. This expertise could be intentionally integrated into GenAI exploration to support a user-centred, trust-building approach.

Client experience and research capacity

The Client Experience team is an in-house asset available to inform MSD technology decision-making. The team routinely gathers, listens to and promotes client feedback

to inform service improvements. Its research activities include project-based research and user testing, as well as management of the Heartbeat client experience survey. The team analyses weekly Heartbeat feedback from phone and in-person interactions, identifies the root causes of poor experience, facilitates service recovery for clients indicating unmet needs and trains managers in the use of local client feedback. Regular review and meta-analysis of this data helps identify drivers of positive client experience.

Directly connecting the service and client experience insights into GenAI exploration would support user-centred maturity. Closer partnership with technology teams would also inform what research takes place.

Digital accessibility expertise

MSD's Digital Accessibility team is powered by valued expertise and lived experience to make digital services accessible for disabled people. The team provides digital accessibility training, audit services, consulting, accessibility statements and User Experience (UX) testing facilitation to guide the creation of accessible digital services for MSD staff and clients.

Directing in-house accessibility expertise to inform user-impacting technology decisions is a valuable opportunity that MSD could increasingly deploy at strategic levels. The earlier and more foundationally digital accessibility is centred in service design, the more effective—financially and in terms of outcome—that service could be for users. Exploring GenAI opportunities that improve the digital accessibility of services could compound the impact and support values alignment.

Equity focus

The integration of equity in service outcomes and experience is a third consideration for technology decision-making. MSD's Equity team guides work to define equity, determine its application and shape capabilities within the Te Pae Tawhiti transformation programme and across the organisation. Team members consult on project approaches that serve those with the greatest needs and those at risk of poorer outcomes. They particularly track outcomes for Māori and Pacific community clients who are disproportionately represented in the welfare system. Their mapped focus areas identify specific actions that relate to Te Tiriti o Waitangi and support the informed implementation of Te Pae Tawhiti transformation programme.

Equity team members understand connections between service design choices and client impacts. Leveraging this same expertise when exploring GenAI is a user-centred action that could guide trustworthy, values-supporting outcomes.

Risks to mitigate

This section will briefly discuss two particular risks to consider when exploring GenAI within MSD, with the acknowledgement that each topic is worthy of its own full assessment.

Disparities in service participation

As already noted, MSD's service recipients disproportionately include members of Māori and Pacific communities and disabled people. MSD clients also face lower levels of digital equity, measured by access to broadband internet, digital devices and digital literacy development.¹²⁷ Even as this disparate level of service participation is not unique to MSD, the organisation can prioritise Māori and Pacific community needs in its consideration of emerging technology like GenAI. At a minimum, it must ensure technology decisions do not exacerbate existing disparities, including the digital divide.

Reframed as an opportunity, focusing on those at risk of poorer outcomes leads to solutions that can make a disproportionately positive impact.

Data sovereignty and governance

New Zealand's policy making around automated decision-making has entailed a deeper examination of Māori data sovereignty and its relation to historical system distrust. The concept emphasises the inherent rights and interests that Māori have in the collection, ownership and application of data about them.¹²⁸ It also relates to historical distrust in the system and perceptions of technology harm and benefit. In this context, the Te Kāhui Raraunga Charitable Trust led a co-design process to design a system-wide model for Māori data governance. The resulting Māori Data Governance Model is a values-led, Māori-centred and research-informed approach that is consistent with the Crown's Te Tiriti o Waitangi obligations. It has not presently been formally adopted by the New Zealand Government.

These considerations and recommended governance processes are equally relevant to applications of GenAI in the public service. In fact, GenAI technology presents additional obstacles to Māori data control given the lack of transparency and traceability in many products, and the incorporation of data without consent in the development of these GenAI tools.

While formal adoption of the governance model has not yet occurred, MSD can in the meantime deliberately apply its values, the existing PHRaE Framework and culturally grounded engagement practices to incorporate meaningful Māori community feedback in its GenAI approach.

Maturity model approach

GenAI is a topic of widespread conversation. In many countries the private sector marketing push is in full force. Public familiarity with GenAI tools and personal use of them is increasing. Government organisations are setting policy, establishing regulation and beginning to incorporate GenAI in resident-facing service. In New Zealand, government organisations are currently tasked with reducing annual budgets

¹²⁷ *Affordable connectivity in Aotearoa: Report on DECA mahi on the affordable connectivity problem and options to address it* (2023)

¹²⁸ West et al (2020)

while demonstrating progress toward measurable objectives.^{129, 130} Given the hype, possible opportunities, known risks and organisational pressures, how might MSD approach GenAI exploration while maintaining trust with its users? In considering the examples discussed and observed lessons from concurrent approaches, this report concludes that GenAI exploration must be based on organisational values and prioritise resident trust.

Considering the pace of technological and organisational change, it is impractical to predict what future GenAI application specifically looks like. Instead, this report recommends a maturity model approach to guide GenAI exploration in social service delivery. It proposes statements on GenAI aligned with MSD's current values, describes organisational characteristics and activities that could help MSD move from initial GenAI awareness to sustaining it in service, and identifies use case characteristics that align to different risk levels in terms of client trust. Rather than prescribing how GenAI should be applied, these recommendations define the conditions in which it should be applied.

Align to values

One of MSD's strengths lies in the fact that it is a values-centred organisation. In this context, it can articulate how GenAI exploration will be guided by reference to its four existing statements. The following statements are examples. Jointly crafting values statements with user-focused stakeholders and, ideally, including client representatives, would provide a more valuable output.

Manaaki: GenAI prioritises the needs of all clients. Gained efficiencies benefit clients, staff and partners. Successful maturity is measured by community feedback.

Whānau: GenAI activities include staff across functions. All staff are equipped with the skills and expertise to effectively leverage GenAI in their work.

Mahi tahi: GenAI increases staff and partner capability to effectively serve clients. Humans are assisted, not replaced.

Tika me te pono: GenAI supports trustworthy work. Humans remain accountable to advance unbiased, ethical decisions.

Build trust through maturity activities

This maturity model attempts to account for the many factors social service organisations like MSD must consider when navigating this transformative, emerging technology (Table 6). It describes the characteristics of organisations in each stage and proposes sequential training, use-case development, governance and trust-building activities that advance maturity.

To move from an initial maturity level to a sustained one, MSD would progressively capture needs, invest in AI literacy, iteratively experiment with solutions, evaluate

¹²⁹ Radio New Zealand (2024-a)

¹³⁰ Radio New Zealand (2024-b)

before scaling and implement opportunities that support human-led activities while improving outcomes for the most vulnerable clients. Ensuring—and building—trust through each maturity phase is a critical investment opportunity in GenAI exploration. By incorporating public communication and stakeholder engagement from the first phase, organisations can build public confidence and establish transparent, closed-loop feedback processes.

Organisations like MSD should aim, at a minimum, to move beyond “initial awareness.” Developing AI literacy for staff at all levels, partners and even clients is itself a risk-mitigation activity for the GenAI applications people will increasingly encounter in other sectors or products already in use.

Table 6. Proposed GenAI maturity characteristics and activities by phase

Phase	1: Initial awareness	2: AI literacy, strategy and use case development	3: Iterative experimentation	4: Managed implementation	5: Sustained in service
Phase goal	Cross-agency commitment to GenAI literacy and planning	GenAI literacy foundation; need-informed use case opportunities by risk to client trust	Expanded GenAI literacy; user-tested findings for appropriate client trust risk level	Ability to implement and scale user-tested solutions; organisational capability to mitigate risks	Ongoing GenAI learning/application/monitoring part of operations
Organisational characteristics (States or activities that describe organisation at each maturity phase)	<ul style="list-style-type: none"> • Use is not authorised (expect unauthorised use as staff/partners experiment on their own) • Stakeholders inquire about opportunities and concerns • Exploration to learn about capabilities and implications is beginning • Assessment of internal policy and external regulation is beginning 	<ul style="list-style-type: none"> • Use is authorised within defined limits to understand capabilities • Can identify appropriate client trust risk level to operate within • Able to cycle between phases 2 and 3 as needed 	<ul style="list-style-type: none"> • Use is authorised within defined limits to test opportunities • Can iteratively test, evaluate and share findings • Able to cycle between phases 2 and 3 as needed 	<ul style="list-style-type: none"> • Use is encouraged within defined limits to improve service outcomes • Can mitigate low and medium client risks 	<ul style="list-style-type: none"> • Able to support ongoing continuous improvement • Partnered use is normalised within regular operations • Demonstrates sustained literacy in GenAI tech and continually emerging application opportunities • Enhances human workforce capabilities

Phase	1: Initial awareness	2: AI literacy, strategy and use case development	3: Iterative experimentation	4: Managed implementation	5: Sustained in service
<p>Training activities</p> <p>(Internally led activities to develop cross-organisation AI literacy)</p>	<ul style="list-style-type: none"> Invest in technology staff GenAI skill development to ensure technology decision-makers have current on opportunities, knowledge on capabilities and risk mitigation opportunities 	<ul style="list-style-type: none"> Develop internal awareness and training campaign to educate staff about GenAI basics, including terms, ethics and bias considerations, and appropriate use guidance (per current policy) 	<ul style="list-style-type: none"> Expand all-staff training offerings to include role-specific application, data literacy, risk assessment, output interpretation and evaluation, and bias mitigation 	<ul style="list-style-type: none"> Expand training offerings to partners Develop GenAI skill development opportunities for staff 	<ul style="list-style-type: none"> Implement continuous required training objectives for staff at all levels and partners. Ensure clients have access to and are supported through GenAI skill development
<p>Use case development activities</p> <p>(Internally led efforts to responsibly test and implement user-centred GenAI solutions that are accessible, advance equity and measurably improve experience)</p>	<ul style="list-style-type: none"> Identify current organisational capabilities and limitations, as identified in transformation programme business case Engage client experience team for additional insight-gathering Gather relevant accessibility audits 	<ul style="list-style-type: none"> Formalise partnership with client experience and equity teams (to participate on emerging tech committee, support use case development and contribute to outcomes evaluation) Identify engagement pathways for 	<ul style="list-style-type: none"> Iteratively test experiments in non-production environments with representative users, including disabled people Evaluate findings against organisational strategies and outcomes; additionally evaluate for bias 	<ul style="list-style-type: none"> Formally implement and scale successful solutions that clear equity/ethics criteria and meet accessibility standards and guidelines 	<ul style="list-style-type: none"> Share findings/approaches for successful, accessible solutions that improve outcomes for over-represented communities Advocate for GenAI application that identifies policy complexity and duplication across organisations

Phase	1: Initial awareness	2: AI literacy, strategy and use case development	3: Iterative experimentation	4: Managed implementation	5: Sustained in service
	<p>that point to GenAI solution opportunities</p> <ul style="list-style-type: none"> Identify potential AI use cases that support organisational strategies and outcomes (after confirming existing solutions cannot meet need) Communicate GenAI staff guidelines 	<p>conversations with stakeholder GenAI (staff, clients, partners) to design use case experiments</p> <ul style="list-style-type: none"> Classify use cases by risk to client trust (see Table 7); establish current client trust risk level to operate within Conduct privacy impact assessments for selected use cases 	<ul style="list-style-type: none"> Project impact of successful experiment findings on scaled application; conduct ethics/equity evaluation Cycle back to phase 2 as needed 		
<p>Governance activities</p> <p>(Internally led activities to guide organisational consideration and use)</p>	<ul style="list-style-type: none"> Identify existing relevant governance structures 	<ul style="list-style-type: none"> Empower an emerging tech committee to function as AI steering committee, reporting into existing design decision structure 	<ul style="list-style-type: none"> Review findings and feedback with the emerging tech committee Regularly report updates through design decision structure 	<ul style="list-style-type: none"> Further develop governance on staff use of GenAI Formalise GenAI monitoring and evaluation 	<ul style="list-style-type: none"> Contribute to a consistent all-of-government GenAI approach

Phase	1: Initial awareness	2: AI literacy, strategy and use case development	3: Iterative experimentation	4: Managed implementation	5: Sustained in service
		<ul style="list-style-type: none"> • Develop an organisational ethics framework for AI, prioritising organisational values, accessibility and equity 			
<p>Trust-building activities</p> <p>(Externally facing activities that build public confidence through transparent reporting and responsive feedback)</p>	<ul style="list-style-type: none"> • Begin public communication about GenAI maturity plan 	<ul style="list-style-type: none"> • Provide clients and partners with information about benefits and risks • Publish transparent public updates about maturity progress, including how GenAI is and isn't being applied 	<ul style="list-style-type: none"> • Share experiment findings with public advocacy groups 	<ul style="list-style-type: none"> • Include production applications of GenAI in publicly published updates, including how it affects decision-making • Include client representatives in the AI oversight process 	<ul style="list-style-type: none"> • Activate a formal GenAI feedback process to suggest and respond to solutions

Define use case characteristics

Finally, this recommended approach defines risk in terms of client trust (see Table 7). An organisation beginning to develop GenAI literacy and capability across its workforce should focus on activities that are of low risk to client trust. Conversely, an organisation literate in GenAI and practiced in iteratively tested GenAI experiments may be prepared to consider use cases that are of higher risk to client trust.

The use case characteristics describe the kinds of scenarios appropriate to each risk level. Each level considers the following questions:

- Is it client-facing?
- Does it meet overlapping desirability/viability/feasibility criteria?¹³¹
- What role do humans play?
- What AI system typology does it match?¹³²
- What are the consequences of errors?

The example use cases illustrate GenAI solutions for different areas based on current applications. They should not be considered definitive nor prescriptive given the continual evolution of the technology and applied public sector solutions.

¹³¹ Note: see Appendix 1.

¹³² Sætra (2021); see additional detail in Appendix 2.

Table 7. Proposed GenAI use case characteristics and examples by risk-to-client-trust level

Risk-to-client-trust level	Low	Medium	High
Use case characteristics	<ul style="list-style-type: none"> • Not client-facing • Readily desirable/viable/feasible • Humans review and validate output • AI type: “Prepare” • Errors have limited to no consequence 	<ul style="list-style-type: none"> • May be client-facing • Likely desirable/viable/feasible • Humans act or decide based on generated output, or machine decides based on fixed human-generated criteria • AI type: “Assist” or “Alleviate” • Consequences of errors can be managed by humans 	<ul style="list-style-type: none"> • May be client-facing • Current barriers to desirability/viability/feasibility • Machine decides based on human-generated criteria; human may not validate • AI type: “Augment” • Errors are consequential and may affect client service access
Example use cases	<ul style="list-style-type: none"> • Content generation: summarise topical research; generate meeting transcripts; draft internal documents; review writing (identify jargon, suggest plain language, adjust for reading levels) • Staff training: permit hands-on exploration of GenAI tools; coach staff on interpersonal skills • Data analysis: generate synthetic data generation • Accessibility: generate proposed captioning and audio description; convert documents to accessible formats 	<ul style="list-style-type: none"> • Client support: undertake client communication sentiment analysis; review and summarise case histories; undertake client needs assessment; generate next-step recommendations; generate job application materials; translate documents; perform real-time translation services during service delivery • Staff training: facilitate client interaction practice • Data analysis: undertake predictive modelling of current service demand; 	<ul style="list-style-type: none"> • Client support: make recommended benefits decisions; provide job matching services; complete automated housing applications • Staff training: recommend training pathways based on skill assessment • Data analysis: undertake predictive modelling of future service demand that guides resourcing decisions • Accessibility: act as a virtual assistant to support service navigation

Risk-to-client-trust level	Low	Medium	High
		<p>detect patterns of client success or non-compliance factors</p> <ul style="list-style-type: none"> • Accessibility: convert text to speech or speech to text during service delivery; support accessible code generation; automate website accessibility testing 	

Use case characteristics example

As an example, NYC’s MyCity chatbot (see section 3) could be characterised as a “medium-risk to client trust” use case that advanced ahead of the organisation’s maturity phase. For the purposes of this report, the MyCity chatbot might be evaluated as follows:

- Is it client-facing?
 - Yes. Clients interact directly with the GenAI service.
- Does it meet overlapping desirability/viability/feasibility criteria?¹³³
 - Likely; it can be built and is something that residents would want to engage with.
- What role do humans play?
 - Employees craft content on website but cannot manage generated chatbot output.
 - Residents interact with chatbot but cannot reach a live human if additional assistance is required.
- What AI system typology does it match?¹³⁴
 - Alleviate. Employees inform the system but do not interact with residents.
- What are the consequences of errors?
 - Residents bear the burden of erroneous content. Organisation experiences consequences of poor service or reputational impact.

¹³³ Note: see Appendix 1.

¹³⁴ Sætra (2021); see additional detail in Appendix 2.

Conclusion

Generative AI is the kind of breakthrough technology that can accelerate an organisation's strategic outcomes or devastate its credibility. Government organisations in the United States and New Zealand are concurrently exploring GenAI approaches as the rapidly increasing rate of private sector and personal use necessitates a proactive posture. Investing in AI literacy and safely experimenting with GenAI today will ensure informed guidance for an agency's specific client base and services in the future.

As a previous Axford Fellow notes, “deploying responsible AI to solve (public) problems offers dual benefit too—greater societal trust in an emerging technology application and in the public sector itself.”¹³⁵ Social service organisations like New Zealand's MSD are well positioned to realise this combination.

How might MSD explore GenAI? By defining GenAI values, employing a maturity model that prioritises AI literacy and identifying use case characteristics by the risk they pose to client trust. Employing a maturity model is a way to communicate intention and coordinate internally and externally facing activities. This report's recommended model emphasises the opportunity to simultaneously mature related strategies in client experience, digital accessibility and service equity. The combination can powerfully advance service outcomes that truly meet the needs of those served.

Thinking about GenAI implications is not the work of policy experts, technology practitioners or service designers alone. This is a moment for partnership, where “we need technologists to apply user-centred design to policy and put citizens and their needs at the centre of the policy-making process.”¹³⁶

Emerging government use of GenAI technology has the potential to perpetuate harm without intentional mitigation of existing biases, known risks and discriminatory output. An intentionally values-based approach that transparently engages stakeholders could create an “aspirational AI” that extends human abilities and enhances the human service experience. Social service organisations like New Zealand's MSD already put people first in service and are well-equipped to do so with GenAI. It's not only a matter of policy; it's a matter of deliberate implementation.

¹³⁵ Mulopulos (2023)

¹³⁶ Pahlka (2023), p. 243

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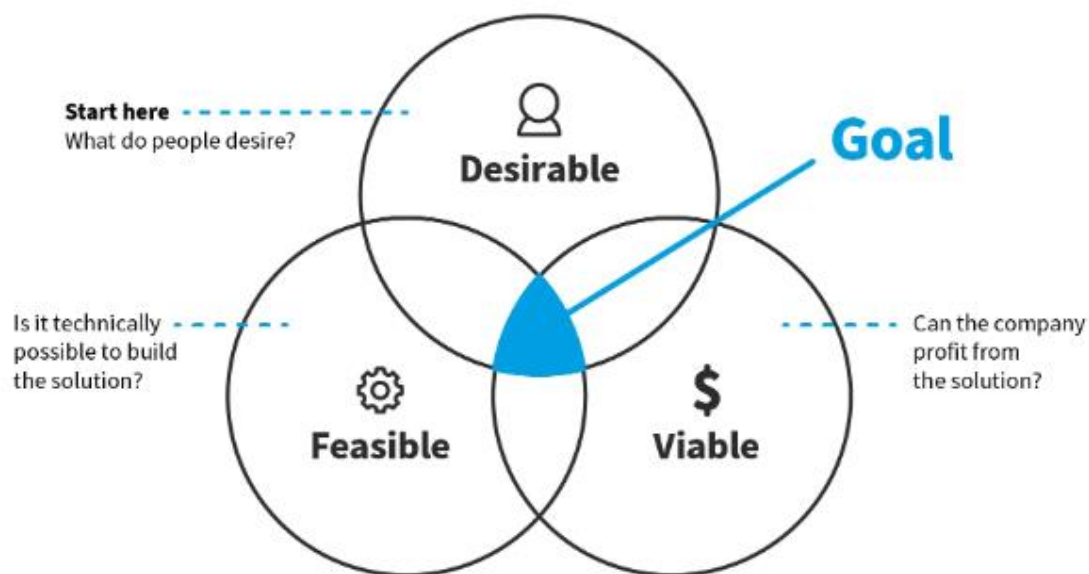
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Appendices

Appendix 1: Solution desirability, feasibility, viability

Organisations exploring technology solutions face multiple and competing inputs to the problem-solving process. The Design Thinking field often identifies an ideal solution goal state to be one that is desirable to the user, technically feasible and financially viable (see Figure 2). The preferred starting point is to focus on what users need. Designing with consideration of just two of the three criteria risks creating a solution that—depending on the selection—no one wants, cannot be built, or cannot be afforded.¹³⁷

Figure 2. Interaction Design Foundation’s illustration of three lenses of design thinking



These three lenses can be applied for GenAI decisions, too. The below example frames decision-making around a use case considering a chatbot.

The Nielsen Norman Group proclaims itself “world leaders in research-based user experience.” While it has not released organisation-level guidance on GenAI, it is offering recommendations on leveraging GenAI tools for the work of UX. This is relevant because even as GenAI can support UX work, the current GenAI tools themselves are ripe for UX improvement.¹³⁸ Most relevant to social service organisations is the recommendation that AI be used to augment, not replace, human skills.

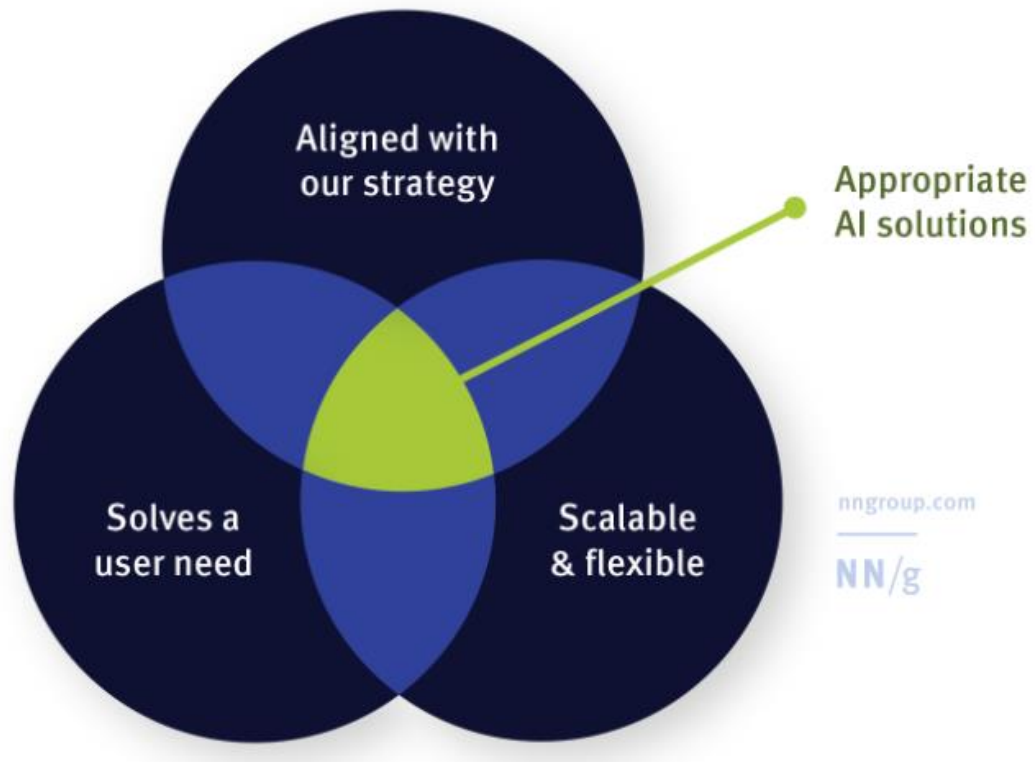
This framing is applied to consideration of AI chatbot demand. Technology should not be implemented for the sake of itself. Instead, organisations should start by

¹³⁷ Yu Siang (2019)

¹³⁸ Moran and Nielsen (2023)

identifying user needs, considering alignment to existing strategy and determining options to scale for the future (see Figure 3).¹³⁹

Figure 3. Nielsen Norman Group's illustration of appropriate AI solutions



¹³⁹ Gibbons and Moran (2024)

Appendix 2: AI system typology

Sætra’s “typology for AI systems in political contexts” offers a way to consider human and AI-system positioning in relation to organisational decisions (see Figure 4).¹⁴⁰ This report references the *Support* type as a characterisation in its “low risk” use cases. The *Assist* and *Alleviate* types are part of the “medium risk” use case characterisations. The *Augment* type is part of the “high risk” use case characterisations. The *Supplant* type is considered out of scope for this report’s proposed use case types.

Figure 4. Sætra's typology for AI systems in political contexts (abbreviated)

Type	AI's role	Constellation of “decision loop” description	Constellation of “decision loop” image
Support	Prepare	Machine-out-of-the-loop	
Assist	Automate and prepare	Human-in-the-loop	
Alleviate	Automate	Human-on-the-loop	
Augment	Guide and tutor	Machine-on-the-loop	
Supplant	Decide	Human-out-of-the-loop	

¹⁴⁰ Sætra (2021)