



New Zealand's Generative AI opportunity

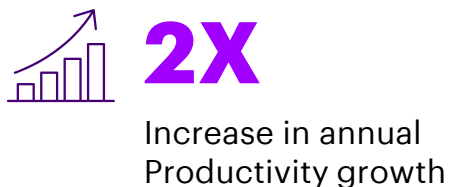
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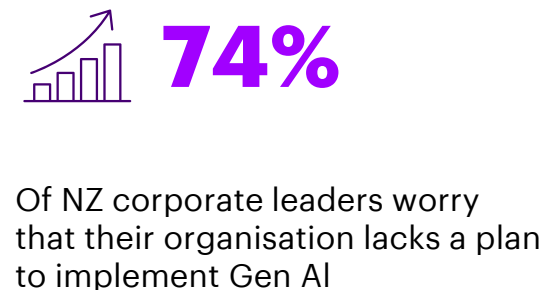
By focusing on six key enablers New Zealand has the opportunity to capture transformative economic benefits with Generative AI

1 Generative AI could significantly boost annual productivity growth, meaning **New Zealand's productivity will be 15% higher by 2038**

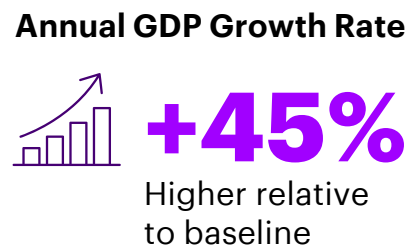
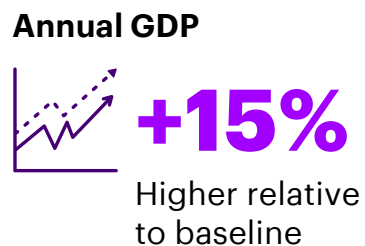


3 New Zealand's export driven economy and skilled workforce smooths the path to adoption, **but it must strengthen digital maturity and enterprise confidence**

Digital Maturity Index



2 Generative AI is expected to add **NZ\$76B** to New Zealand's annual GDP by 2038



4 **Focusing on six key enablers is critical to ensure New Zealand can fully realise the benefits of Generative AI**

6
Enablers of Gen AI

Access to infrastructure

Collaborative ecosystem

Skilled workforces
Clear policy framework

Clear policy framework

Enterprise readiness

Public trust and license to operate



01

How Generative AI can transform the New Zealand economy

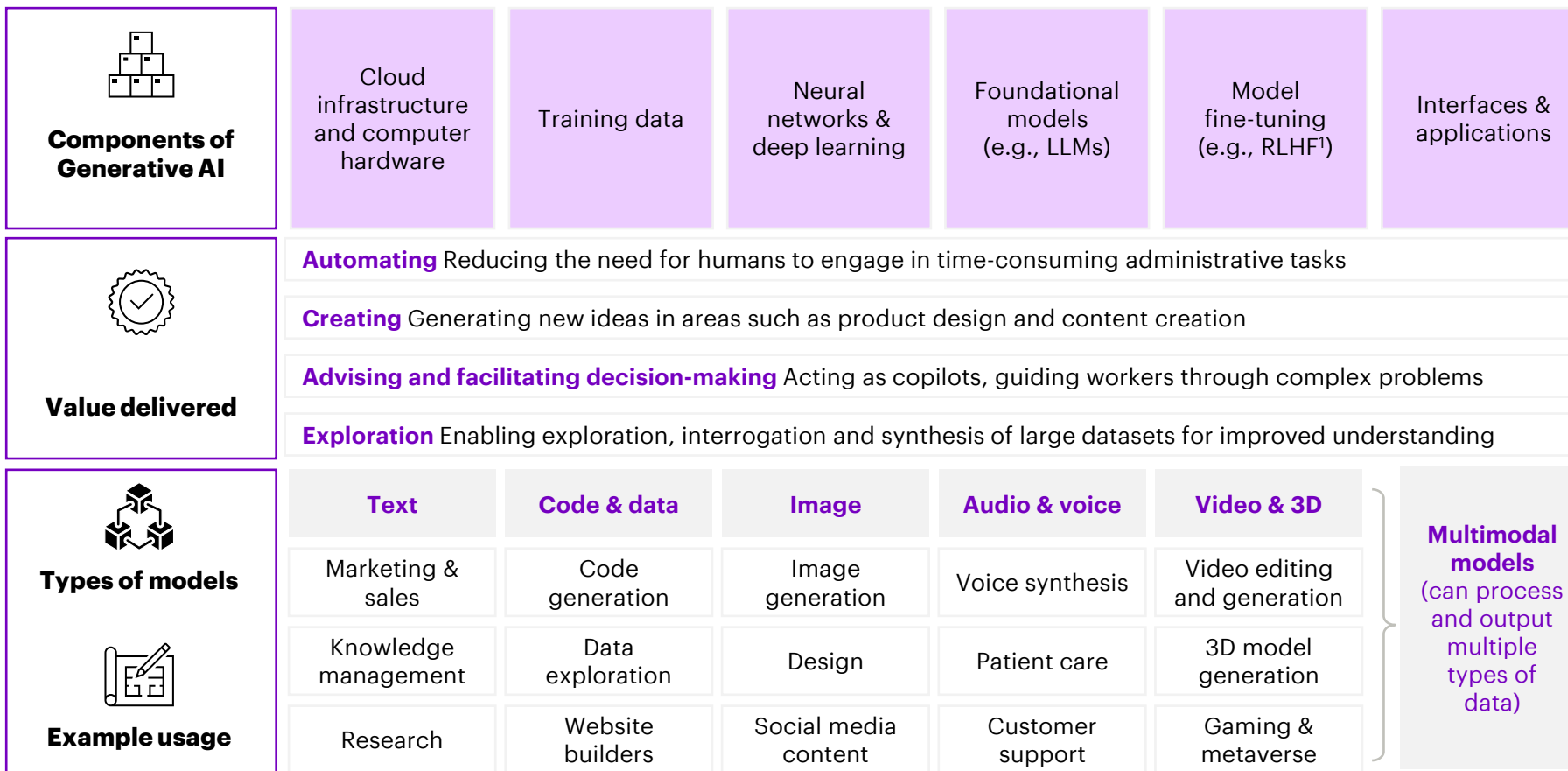


Generative AI is a type of artificial intelligence that can create new content

Generative AI is a type of artificial intelligence that can create new content, like text, images, or music, by learning patterns from existing data. They can then be fine-tuned for specific use cases and act as a base for applications.

These models can be used across a variety of domains, creating value by automating mundane tasks, aiding in the creation and generation of new ideas, advising on complex problems, and enabling enhanced exploration of large amounts of data.

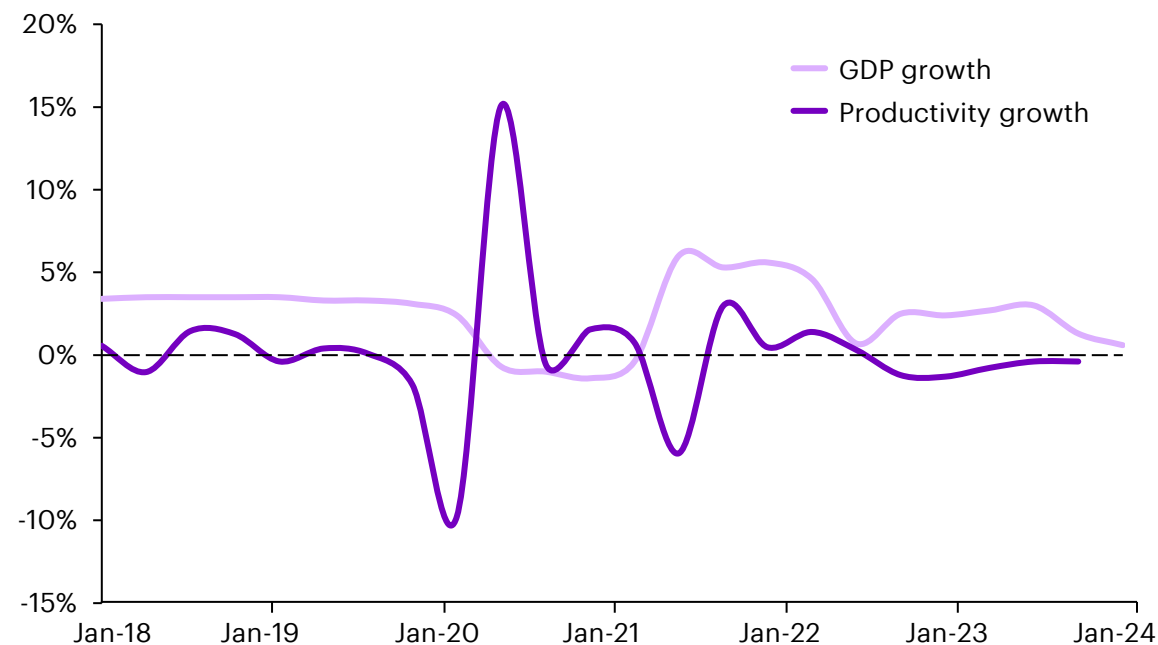
An overview of Generative AI



Generative AI can address declining productivity and GDP growth in New Zealand by unlocking new business models and uplifting productivity

New Zealand faces challenging economic conditions with low GDP and negative productivity growth

Annual % growth¹



Generative AI can help renew economic progress in New Zealand and address long standing structural economic challenges in **two key ways**:

- ❖ Generative AI can support the development of **new, globally scalable business models** that overcome the limitations of New Zealand's size and geographic isolation.
- ❖ Generative AI can reinvigorate productivity growth by **automating** routine tasks and **augmenting** workers' skills and capabilities.

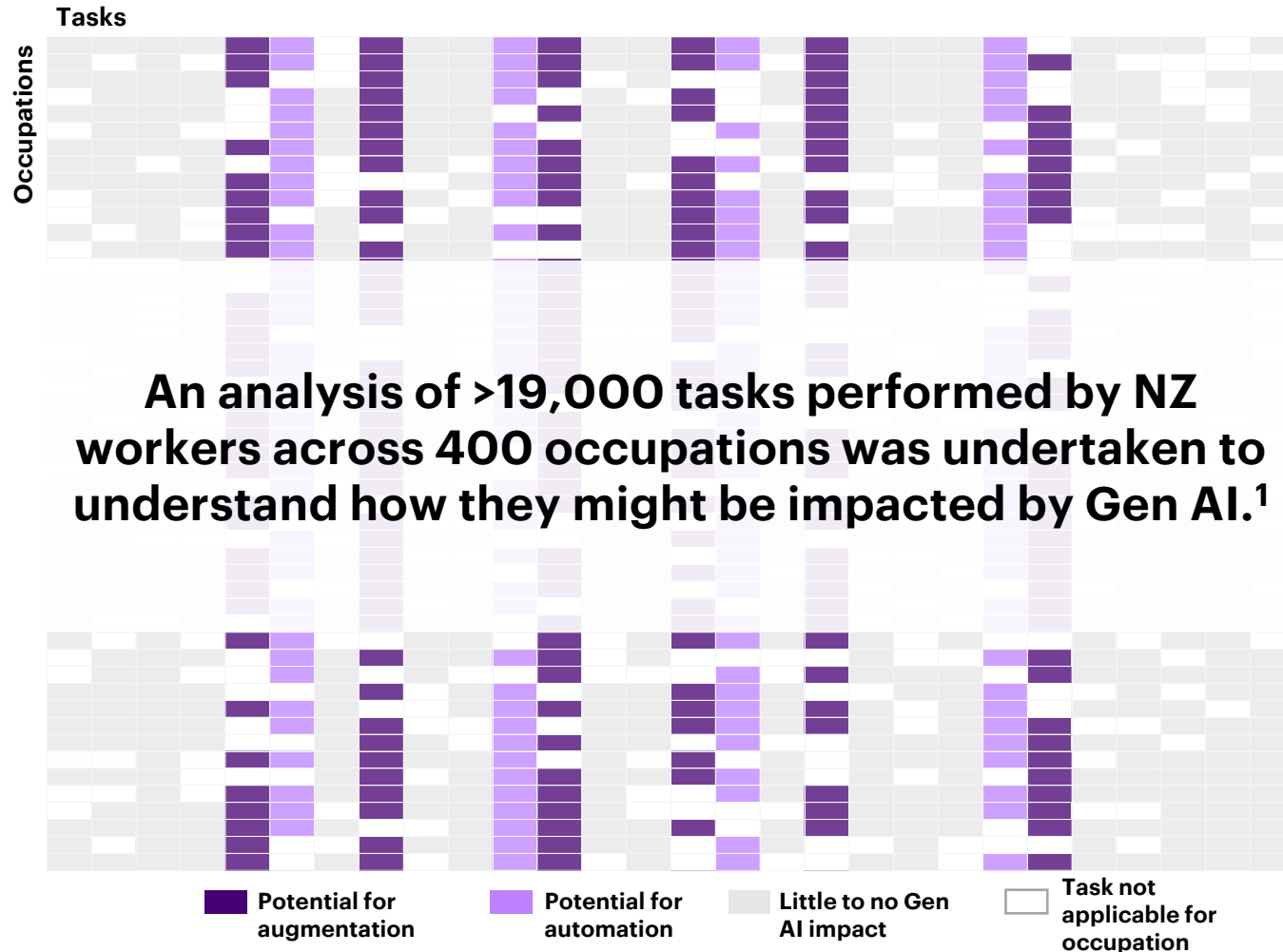


02

The economic opportunity of Generative AI in New Zealand



Generative AI's productivity-boosting potential could help with 38% of work tasks across the economy



We found that Generative AI could help with **38% of tasks**

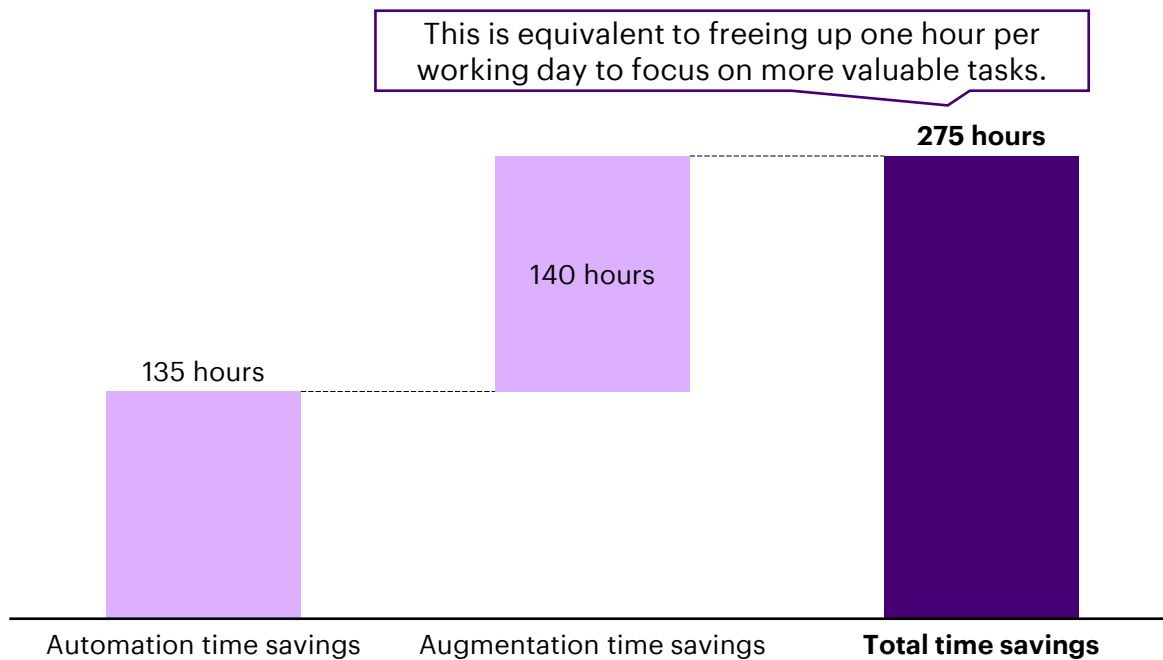
- 24% of tasks could be **augmented** with Gen AI.
- 14% of tasks could be **automated** with Gen AI.

Note: (1) We classified tasks based on three criteria: (A) requires human to human interaction; (B) non-routine and/or non-well-defined; (C) requires human involvement enforced by law, ethics, or social conventions. We used a combination of human and machine learning classification to classify all the tasks. (2) Gen AI could help with 38% of task hours; of these, almost two thirds of this have a high potential for augmentation and over a third have a high potential for automation. For more analysis, see World Economic Forum, 'Jobs of Tomorrow: Large Language Models and Jobs' (2023). Source: Accenture analysis.

Generative AI is expected to give the average worker 275 additional hours per year to dedicate to high-value tasks, improving productivity 15.5% by 2038

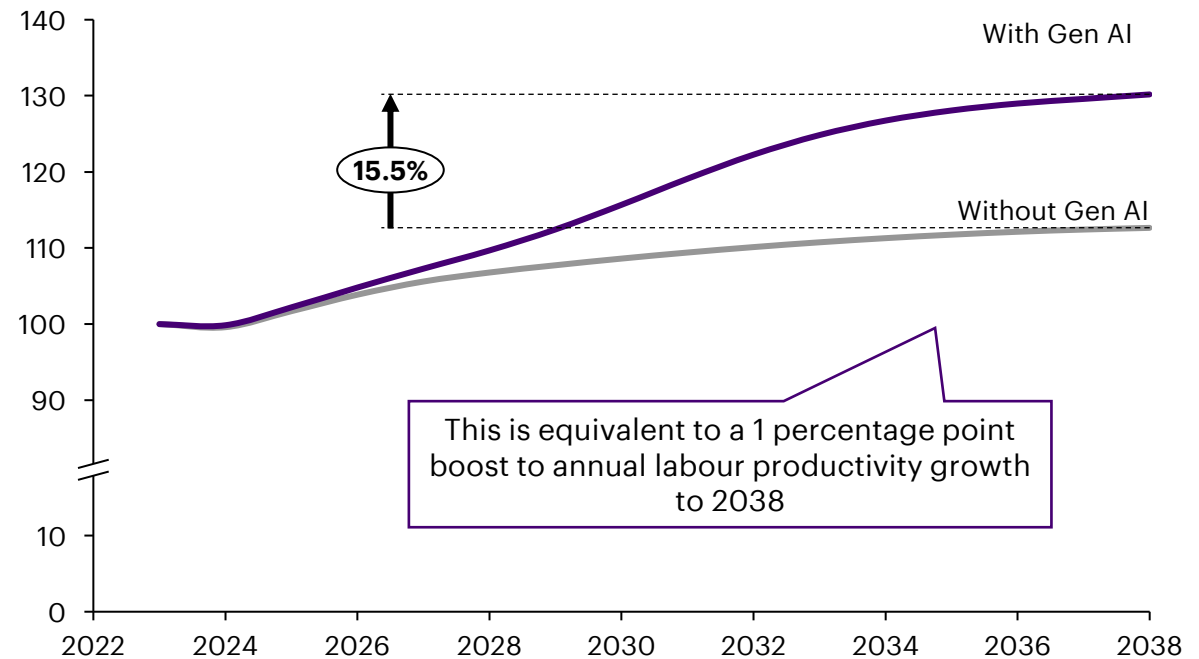
Time unlocked for workers to reallocate to high-value tasks every year

Average hours unlocked per worker per year by 2038¹



Economy-wide labour productivity improvement

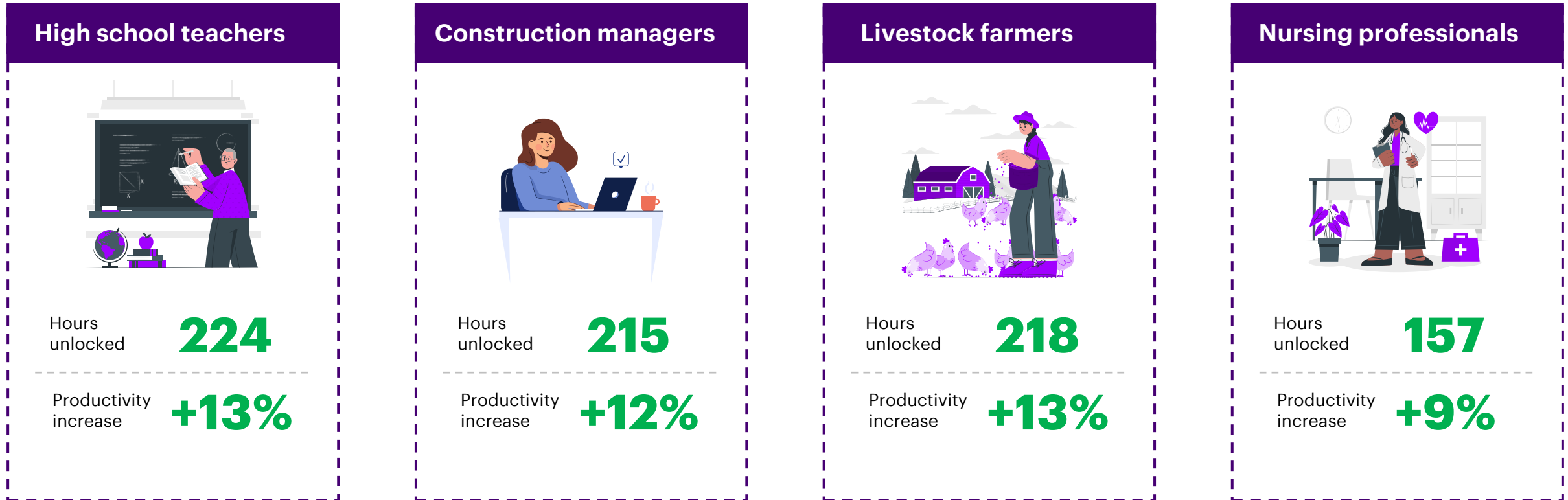
Index (2023 = 100)¹



Generative AI is projected to raise worker productivity by 15.5% by 2038 by freeing workers to reinvest their time into high-value tasks, a significant uplift in the context of labour productivity growth of only 0.2% over the last decade.² Ultimately, this could translate into higher wages, greater business value, and better, more efficient products and services for New Zealanders.

Generative AI will enable workers in critical sectors of New Zealand's economy to spend more time on their most important tasks

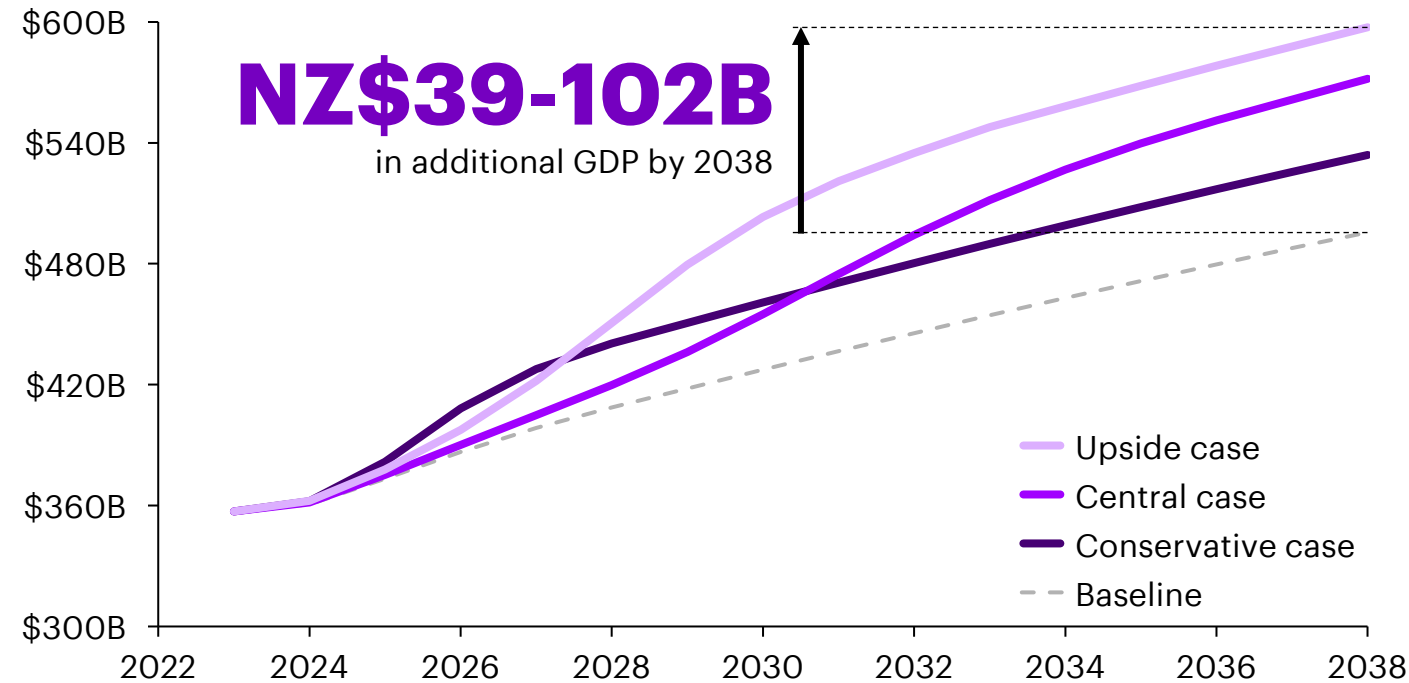
Our modelling shows that a significant amount of time each year will be unlocked for workers in critical industries to reinvest in the highest value aspects of their roles



Productivity improvements from Generative AI are estimated to add between **NZ\$39-102B** in annual value to the New Zealand economy by 2038

GDP Growth Impact of Generative AI by 2038

GDP of New Zealand, NZ\$ 2023¹



Depending upon the approach of businesses and speed of adoption, New Zealand's GDP could be 8-21% higher by 2038

Upside case	+NZ\$102B higher GDP than baseline	+1.3% higher annual GDP growth
Central case	+NZ\$76B higher GDP than baseline	+1.0% higher annual GDP growth
Conservative case	+NZ\$39B higher GDP than baseline	+0.5% higher annual GDP growth

Productivity and GDP growth, which are projected to be 0.9% and 2.2% respectively on an average annual basis, could instead reach 1.4-2.2% and 2.7-3.5%. New Zealand's relative degree of success will depend on how fast it adopts Generative AI and how well it supports its workforce to transition to using it.



03

The pathway to achieving the opportunity



New Zealand has competitive advantages in Generative AI across three key areas: openness to trade, potential for innovation, and network infrastructure

New Zealand's competitive advantages in Generative AI

Openness to trade



New Zealand is an open, export driven economy underpinned by high performing industries such as agriculture and tourism with a strong record of success in key global markets.

Potential for innovation



Workers in New Zealand have rapidly adopted Generative AI with 84% of knowledge workers already using it at work.¹ New Zealand is also a **responsible global citizen** well positioned to provide global thought leadership on AI policy debates. Finally, New Zealand is an **ideal global test-bed** for emerging Generative AI use-cases.²

Well-developed network infrastructure



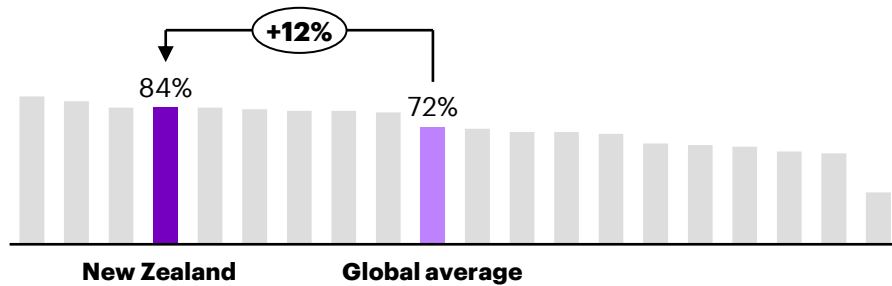
New Zealand's domestic network infrastructure is highly developed, with a significant quantity of spare capacity and good access to global subsea cable infrastructure.²



Organisations in New Zealand have an opportunity to increase their digital maturity and clarify their plans to implement Generative AI

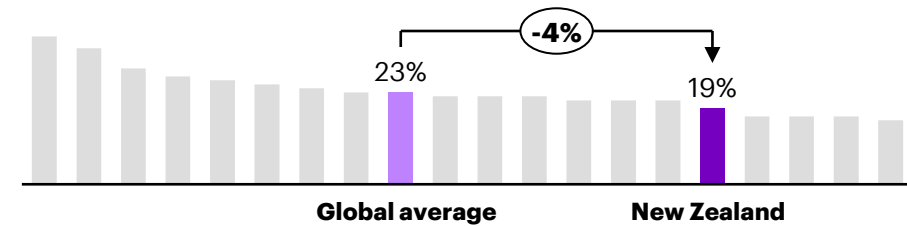
84% of knowledge workers in New Zealand say they are already using Generative AI at work, the third highest in the world...

% of survey respondents who use Generative AI at work^{2,3}



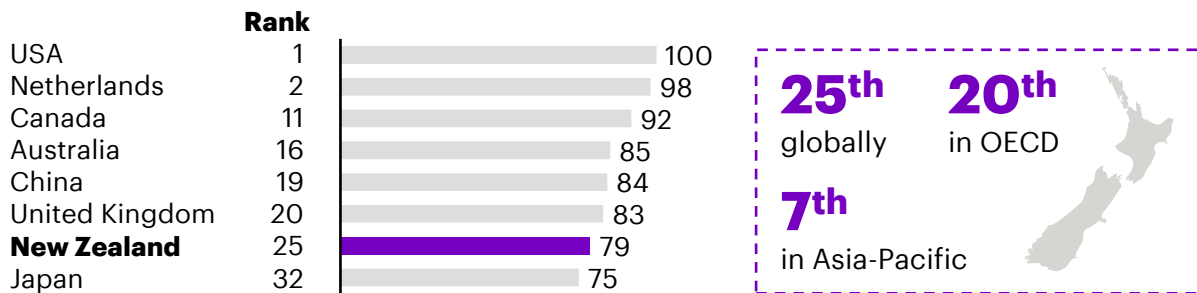
... but just 19% use Generative AI tools provided by their employer, suggesting NZ firms are adopting enterprise-level solutions more slowly than global peers

% of survey respondents who use Generative AI tools provided by their employer^{2,3}



New Zealand performs relatively well on global measures of digital maturity but lags most advanced economies, which may slow adoption of Gen AI...

Score, IMD Digital Competitiveness Index²



...Corporate leaders in New Zealand believe Gen AI is a priority but feel less prepared to implement it than their global peers

% of survey respondents who agree they are concerned their organisation lacks a plan to implement Generative AI³



Focussing on six key pillars will be critical for New Zealand to fully realise the benefits of Generative AI

Enablers of Generative AI adoption in New Zealand

Access to infrastructure

- ❖ **Continue to maintain high-speed network infrastructure** to connect users to AI service providers
- ❖ **Access to local supercomputing capacity** to deliver secure, low-latency access to advanced, resource intensive models
- ❖ **Access to hyperscale data centres** onshore to enable fast, secure, and legally compliant transmission and storage of massive datasets

Skilled workforces

- ❖ **C-Suite knowledge** of Gen AI and how it can be deployed
- ❖ **Workforce digital literacy** and skills that enable workers to make use of Gen AI applications
- ❖ **Managing training and workforce transition** to allow workers to reskill towards high-value tasks when low-level tasks are automated

Enterprise readiness

- ❖ **Clarifying strategies** to drive whole-of-enterprise reinvention and redefine the performance frontier
- ❖ **Creating an AI-enabled digital core** that seamlessly integrates AI and enables new capabilities
- ❖ **Willingness to take risks** to develop proven use cases to that deliver real value beyond technological novelty

Collaborative ecosystem

- ❖ **Cross-sector engagement** among domestic stakeholder groups to share knowledge and surface opportunities and risks
- ❖ **Inclusion of Māori perspectives** to promote culturally relevant and ethical AI use
- ❖ **International collaboration** to enhance knowledge transfer and align with global best practice

Clear policy framework

- ❖ **Global regulatory interoperability** to avoid erecting barriers to international investment and cooperation
- ❖ **Regulatory certainty** to enable investors, enterprises, and users to commit to AI in NZ
- ❖ **Balancing safeguards and support for innovation** to contain risks while incentivising adoption

Public trust and license to operate

- ❖ **Transparency and accountability** around how models function and how they are used for decision making
- ❖ **Safeguarding privacy and data security** to ensure users feel safe when using AI
- ❖ **Ensuring equitable access** to Generative AI to ensure its benefits are fairly distributed across all communities

