

# Item 1: Artificial Intelligence (AI) - An Introduction Into AI Trends & What it Could Mean for QLDC

**SESSION TYPE:** Workshop

## **PURPOSE/DESIRED OUTCOME:**

This workshop aims to give a practical overview of AI; what it is, why it's rapidly evolving, and its impact on Queenstown Lakes District Council (QLDC). AI is already present in the tools staff use and across the organisation. QLDC can boost productivity through AI, however there are key NZ public sector responsibilities around privacy, records, and official information. The goal is to expand safe AI use and redesign processes for effective human-AI collaboration, maximising benefits, while mitigating risks.

## **DATE/START TIME:**

Tuesday, 28 April 2026 at 3.00pm

## **TIME BREAKDOWN:**

Presentation: 40 minutes

Questions/Discussion: 20 minutes

## **PRESENTER:**

Ryan Clements - Chief Information Officer

### **Prepared by:**



**Name:** Ryan Clements  
**Title:** Chief Information Officer  
20 April 2026

### **Reviewed and Authorised by:**



**Name:** Meaghan Miller  
**Title:** General Manager, Corporate Services  
20 April 2026

## **ATTACHMENTS:**

A	PowerPoint Presentation: Artificial Intelligence (AI)
---	---

# Artificial Intelligence (AI)

An introduction into AI trends and what it could mean for QLDC

Organisational Excellence Committee - April 2026

# Run sheet

- A Brief History of AI
- AI 101
- The future of AI
- Key Obligations (NZ)
- AI Adoption in Local Government – Examples
- AI in QLDC
- What have we learned so far
- Opportunities
- Next steps

# A Brief History of AI

- 1950: Alan Turing publishes 'Computing Machinery and Intelligence'
- 1956: Dartmouth Conference – birth of AI as a field
- 1980s: Rise of machine learning and neural networks
- 1997: IBM Deep Blue defeats chess champion Garry Kasparov
- 2010s: Deep learning breakthroughs (ImageNet, speech recognition)
- 2022: Generative AI (ChatGPT, LLMs) and widespread adoption
- 2023-25: GPT-4 and Gemini integrated text, image, and code generation
- 2024-25: GPT 5, Copilot, Agentive AI is evolving toward enterprise automation, integrating with APIs, workflows, and decision-making systems

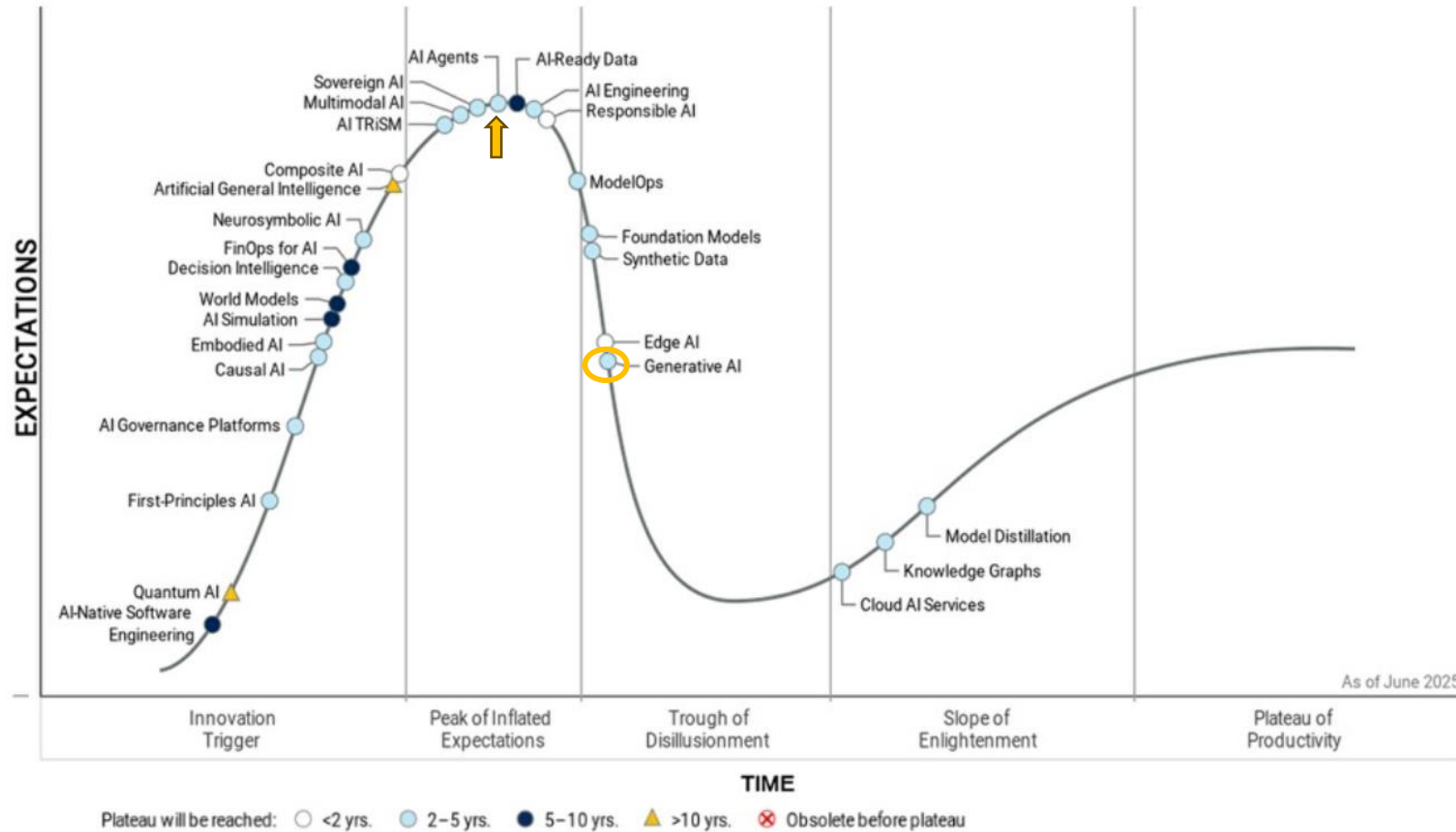
- > **Artificial** – Made or produced by human beings rather than occurring naturally, especially as a copy of something natural
- > **Intelligence** – The ability to learn understand and make judgments or have opinions that are based on reason
- > **Artificial Intelligence** – The ability of a computer or computer – controlled machine to perform complex tasks typically associated with humans

- Generative AI Use large language models (LLMs) to create new content rather than just retrieving existing information
- LLM (The model) AI system trained on massive amounts of data to understand and generate human-like language, images etc.
- Frontier models - The most advanced, large-scale AI systems e.g. ChatGPT, Claude, and Gemini.
- LLMs are large mathematical models. They use probability to generate content. It is therefore probabilistic
- *Agentive AI (or agentive AI or AI agents)* : Uses autonomous AI agents that can reason, plan, and act independently toward defined goals
- AI is now imbedded into many applications. E.g. Microsoft Office, Tech1 CiA in 2026A release

# The future of AI, maybe

- **Artificial General Intelligence (AGI)** - An advanced form of artificial intelligence that can perform any intellectual task a human can do, across multiple domains - AGI is theoretical and aspirational—it does not exist yet
- **AI Superintelligence** - Hypothetical stage of AI, surpasses human intelligence in every domain, including creativity, problem-solving, emotional intelligence, and strategic reasoning - No existing AI system is close to superintelligence, and it may never happen

# AI on the Hype Cycle



# Technology change isn't new



# Key Obligations and guidelines (NZ)

- Privacy Act 2020 (OPC GenAI guidance): PIAs, minimal data, accuracy checks, human review
- Public Records Act 2005 (Archives NZ): AI outputs and usage context are records
- LGOIMA 1987: Treat AI-assisted content we hold as official information
- Public Service AI Framework (Department of Internal Affairs, 2025)
- Responsible AI Guidance for the Public Service (GenAI)- Government Chief Digital Officer (Feb 2025)

Vision

Adopt AI responsibly to modernise public services and deliver better outcomes for all New Zealanders

Principles

- |  |   |  |  |  |
|--|---|--|--|--|
| <p><b>Inclusive, sustainable development</b></p> <ul style="list-style-type: none"> <li>• Innovation</li> <li>• Efficiency</li> <li>• Resilience</li> <li>• Address inequalities and transition equitably</li> </ul> | <p><b>Human-centred values</b></p> <ul style="list-style-type: none"> <li>• Privacy and data ethics</li> <li>• Upholding democracy and the rule of law</li> <li>• Human and labour rights</li> <li>• Human oversight</li> </ul> | <p><b>Transparency and explainability</b></p> <ul style="list-style-type: none"> <li>• Promote awareness and understanding of AI systems and interactions</li> <li>• Explainable outcomes</li> </ul> | <p><b>Safety and security</b></p> <ul style="list-style-type: none"> <li>• Safety by design</li> <li>• Data protection</li> <li>• Traceable data</li> <li>• Robust risk management, including national security risks</li> </ul> | <p><b>Accountability</b></p> <ul style="list-style-type: none"> <li>• Governance</li> <li>• Regulatory frameworks</li> <li>• Auditing with human oversight</li> <li>• Capability growth</li> </ul> |
|--|---|--|--|--|

New Zealand policy context

Consider the legislative, regulatory and constitutional context

**Current laws that apply to AI**  
Bill of Rights Act, Human Rights Act, Privacy Act, Public Records Act, Public Service Act, Copyright Act, Official Information Act and others

<p><b>Treaty of Waitangi</b> Public Service commitments and Māori views of AI for ethics, bias and data</p>	<p><b>Potential barriers or enablers for AI adoption</b> Coordinated approach to assessing policies acting as a barrier to or enabler of AI adoption</p>
---	--

Work programme

Support agencies to embrace AI responsibly

<p><b>Governance</b> Ensure human accountability for inclusive implementation of data and AI use</p>	<p><b>Guardrails</b> Support safe and trustworthy use of AI and its underpinning data</p>	<p><b>Capability</b> Build internal and external AI capability and safety by design</p>
<p><b>Innovation</b> Develop pathways for safe AI innovation for government agencies</p>	<p><b>Social Licence</b> Understand how to build public trust and worker engagement in government use of AI</p>	<p><b>Global Voice</b> Build our global reputation as trusted partner and Public Service AI enabler</p>



Outcome: The Public Service models best practice in AI use, enabling and contributing to the wider community and economy in alignment with New Zealand's position as a trusted global partner.



# AI Adoption in Local Government - Examples

- Auckland Council: conversational AI to handle routine queries, reducing call centre load and improving response times. Classify and route incoming requests to the right teams for faster resolution.
- Nelson City Council: AI tools process thousands of community submissions, summarising themes for councillors to make informed decisions quickly.
- Wellington City Council: Machine learning models analyse sensor data from water and wastewater networks to anticipate failures and optimise maintenance schedules.
- Christchurch City Council: AI-enabled systems predict parking availability and optimise enforcement routes, improving efficiency and user experience.
- Dunedin City Council: AI algorithms optimise waste collection routes based on historical data and real-time conditions, reducing fuel use and emissions.

# QLDC – What have we done so far

- Digital Acceptable Use Policy (Aug 2024): AI section – needs refresh for enterprise AI
- Copilot for M365 Readiness: SoW & Readiness Report completed; clear next steps
- Digital Strategic Plan (July 2025): vision ‘Secure, trusted and intelligent systems’
- Internal interest & community of practice emerging; staff demand for safe tools
- 70 MS 365 Copilot Licenses, 100 Licenses in 2026/27

# What happens in the shadows...

> The last 90 days, 83 different AI apps used!

App	Risk score	Tags	Traffic	Upload	Transactions	Users	IP addresses	Devices		
Microsoft Copilot Studio Generative AI	10	SANCTIONED	112 MB	2 MB	151	68	83	69		
Microsoft Copilot Generative AI	10	SANCTIONED	1.5 GB	239 MB	5.8K	213	823	215		
Microsoft 365 Copilot Chat Generative AI	10		1.4 GB	60 MB	5.5K	567	1126	601		
Microsoft Designer Generative AI	10	SANCTIONED	223 MB	292 KB	122	57	76	57		
Microsoft Security Copilot Generative AI	10	SANCTIONED	16 MB	3 MB	47	7	21	7		
GitHub Copilot Generative AI	10	SANCTIONED	100 KB	—	2	1	2	1		
Google Dialogflow Generative AI	10		250 KB	29 KB	5	4	5	4		
Labs.Google Generative AI	10		3 MB	—	2	1	2	1	Oct 5, 2025	⊙ ⊙ ⋮
Adobe Sensei Generative AI	10		43 MB	39 MB	376	52	122	52	Nov 2, 2025	⊙ ⊙ ⋮
Grammarly Generative AI	9	ALLOWLISTED	21.4 GB	1.6 GB	107.1K	48	429	50	Nov 3, 2025	⊙ ⊙ ⋮
ChatGPT Generative AI	9	ALLOWLISTED	16.1 GB	6.4 GB	26.8K	245	825	263	Nov 3, 2025	⊙ ⊙ ⋮

# Copilot pilot – how it's being used in QLDC

- Summarising lengthy submissions and technical documents, extracting key findings, policy implications, and modelling results
- Drafting, reviewing, and summarising letters, emails, documents, and presentations
- Assisting with Excel tasks such as formulas, setout, graphs, and summarising data sheets
- Creating operational calendars, action plans, and visuals for presentations
- Supporting growth modelling projects by comparing models, drafting capability roadmaps, and synthesising best-practice research
- Locating specific data points, tables, and policy references within large documents
- Drafting summaries, briefing notes, and presentation materials for internal and external audiences
- Assisting with plain English rewriting and summarising stakeholder submissions
- Helping with content and structure for business continuity planning documents
- Providing quick answers to technical questions and supporting collaboration among colleagues
- Summarising online meetings, creating minutes, actions and helping people prepare for meetings

# What have we learned so far

- AI changes the tasks performed rather than eliminating entire jobs
- Consider AI as advanced mathematical models instead of all-powerful entities
- AI - Assisted Intelligence
- At present, AI companies (Open AI, Anthropic, Google) are heavily subsidising the cost of AI, incurring billions of \$ in losses each year.
- Soon, the true expense of AI will likely be reflected in higher costs for consumers
- Without context GenAI is probabilistic. We need deterministic

# What have we learned so far

- Generative AI:
  - Has lead to widespread incremental productivity gains. Becoming an essential tool to cope with and understand the ever-increasing information
  - Helping staff focus on relevant information, trends or sentiment buried in the information noise
  - Self-service, 'how-to' assistant for our work
  - Excellent tool if your role involves creating something new (policy, strategy, plan, roadmap, whitepaper etc.)
- With training, Copilot for O365 can provide time savings of 2-5hrs/week/knowledge worker
- Our data, not generic data, makes it a useful tool
- AI is moving from Tool -> Resource

# What have we learned so far

- Our Business Processes were designed in a pre-AI world
- Productivity transformation using AI will involve reimagining these business processes
- Creating processes that allow staff and AI agents to collaborate safely to delivery high quality results quickly
- To achieve this:
  - Managed as a project
  - Prioritised by QLDC
  - Detailed understanding of what we want to achieve
  - Partnering with AI specialists
  - Data engineering and analysis
  - Potentially custom built LLMs and integration development

# Opportunities worth exploring?

- **Customer Service and Community Engagement**
  - AI virtual assistants to support customer services advisors via Natural Language Processing, real time searching and, information retrieval and summary
  - A multilingual AI virtual assistant to resolving common customer service issues and to assist with emergency management communications
- **Administrative Efficiency**
  - AI-driven triage and routing of LGOIMA requests
  - LIM/PIM report generation AI agent
  - Application compliance agent e.g. Checking planning application applications for non-compliances and offer immediate feedback
  - Council Meetings/Workshops transcribing, minuting and translating to other languages
- **Asset Management and Infrastructure**
  - Smart Resource Allocation e.g. Solid waste collections, inspections
  - Use camera equipped vehicles + machine learning to inform predictive maintenance roads/trails, trees etc. And automated asset collection - Road signs, street furniture etc.
  - AI driven street light control
- **Improve Safety**
  - Swimming pool monitoring, waterways monitoring, wildfire

# How do we move forward safely?

- People in the lead. Zero trust
- Understand the risks. Pace of change leads to obsolescence
- AI Strategy aligned to the Digital Strategic Plan (in development)
- AI Policy + guidelines to provide guardrails (in development)
- Imbed AI governance:
  - Public register of all AI systems and use cases
  - Clear roles defined: AI Owners (business accountability), Data Stewards (data quality and ethics), and an AI Governance Group (oversight and escalation).
  - Regular reporting to the Executive Leadership Team