

AI

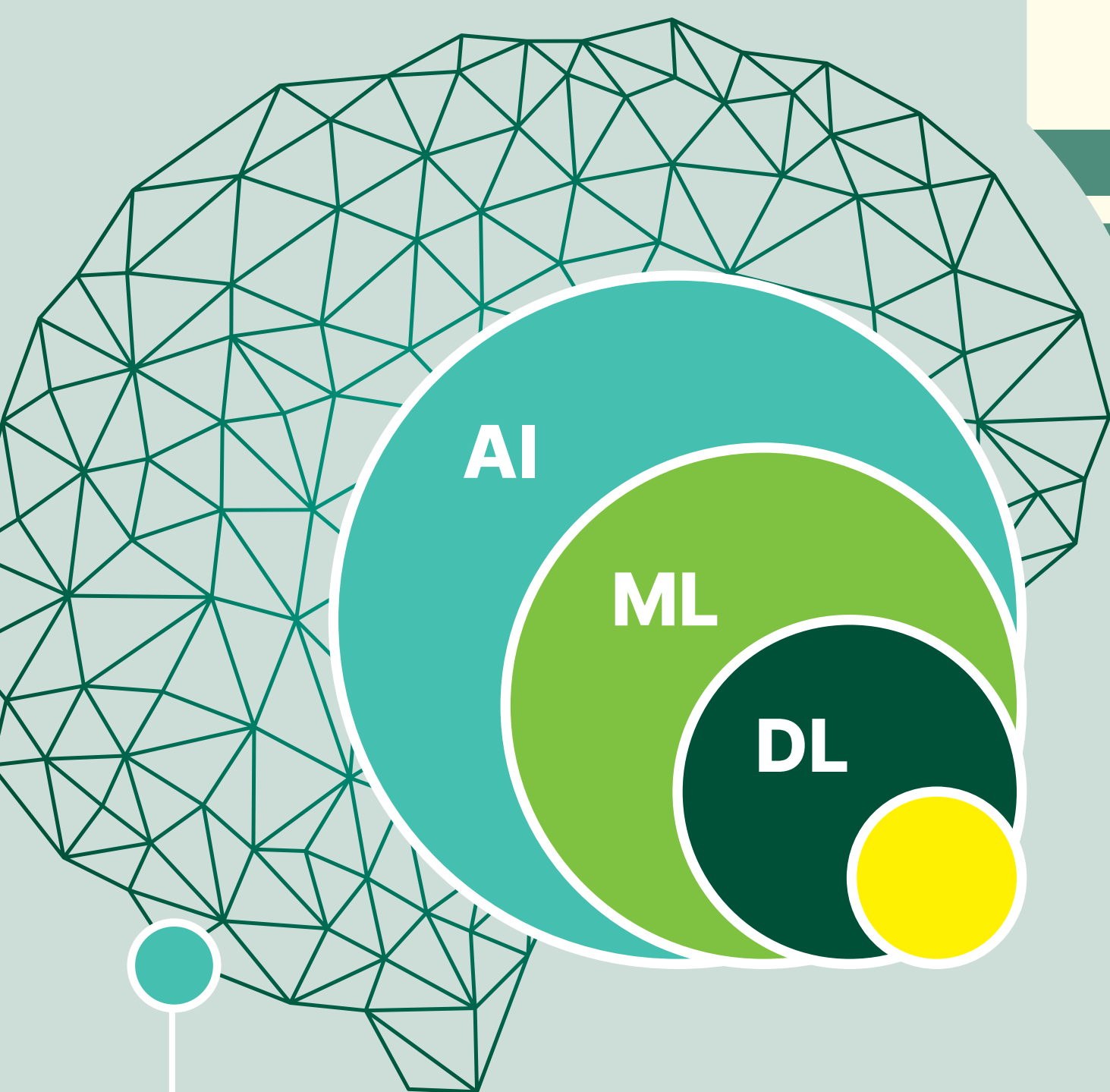
ARTIFICIAL INTELLIGENCE

— the simulation of human intelligence by machines

What is intelligence?

It is the capacity to **learn** from experience, **solve** problems, **adapt** to new situations by using acquired knowledge, and **understand** complex ideas.

Artificial Intelligence is the science and engineering of making intelligent machines that sense, act, and learn from experience, to perform tasks for humans.



ML

Machine Learning

Data-driven subset of AI, focused on algorithms that learn automatically from data.

DL

Deep Learning

Subset of ML, focused on algorithms using artificial neural networks (NNs), inspired by the neurons in the human brain.

Generative AI

Generative AI

Subset of DL that generates content like text, images, video, audio or code, based on provided input/prompts (for example, ChatGPT).

Artificial Narrow Intelligence

ANI

Also referred to as Narrow AI or Weak AI, it focuses primarily on one single narrow task, with a limited range of capabilities.

Artificial General Intelligence

AGI

Strong AI, similar to human intelligence, capable of learning, reasoning, adapting and performing a wide range of tasks.

Artificial Super Intelligence

ASI

AI technology that would be more capable and surpass the human mind in every way possible.

DIFFERENT TYPES OF ARTIFICIAL INTELLIGENCE

1 Machine Learning

2 Machine Intelligence

3 Machine Consciousness

Speech Recognition

Personal Assistants

Navigation Apps

Search Engines

Online Banking

Smart Phones

Healthcare

Chatbots

Robotics

Social Media

Smart Homes

Autonomous Cars

Streaming Services

Security Surveillance

SNAPSHOT OF ARTIFICIAL INTELLIGENCE IN AOTEAROA*



67%

NZ BUSINESSES ALREADY USE AI

Particularly Generative AI, like ChatGPT and Grammarly



96%

INCREASED WORKER PRODUCTIVITY

8%

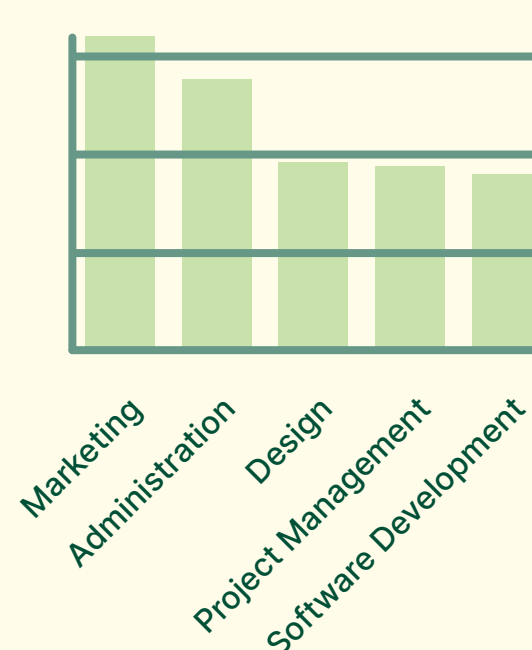
WORKER REPLACEMENT

Strongly suggests that AI is being used to complement, rather than replace human labour.

49%

NEW CAREER OPPORTUNITIES CREATED BY AI

TOP 5 AREAS OF USE



REVOLUTIONARY RESEARCH

— for smart conservation

Te Herenga Waka's groundbreaking research in kākā identification offers a new approach for identifying individual kākā without the need for manual tagging.

By creating one of the world's first AI-based tool for recognising individual birds in complex real-world images, crucial information can be quickly collected and delivered to conservation managers, allowing for more effective intervention and better protection for kākā in urban environments.

Beyond kākā, this cutting-edge technological research has the potential to transform conservation practices for other threatened bird species in Aotearoa and worldwide.

Study Artificial Intelligence

www.wgtn.ac.nz/ai



VICTORIA UNIVERSITY OF
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TE HERENGA WAKA