

Digital strategy

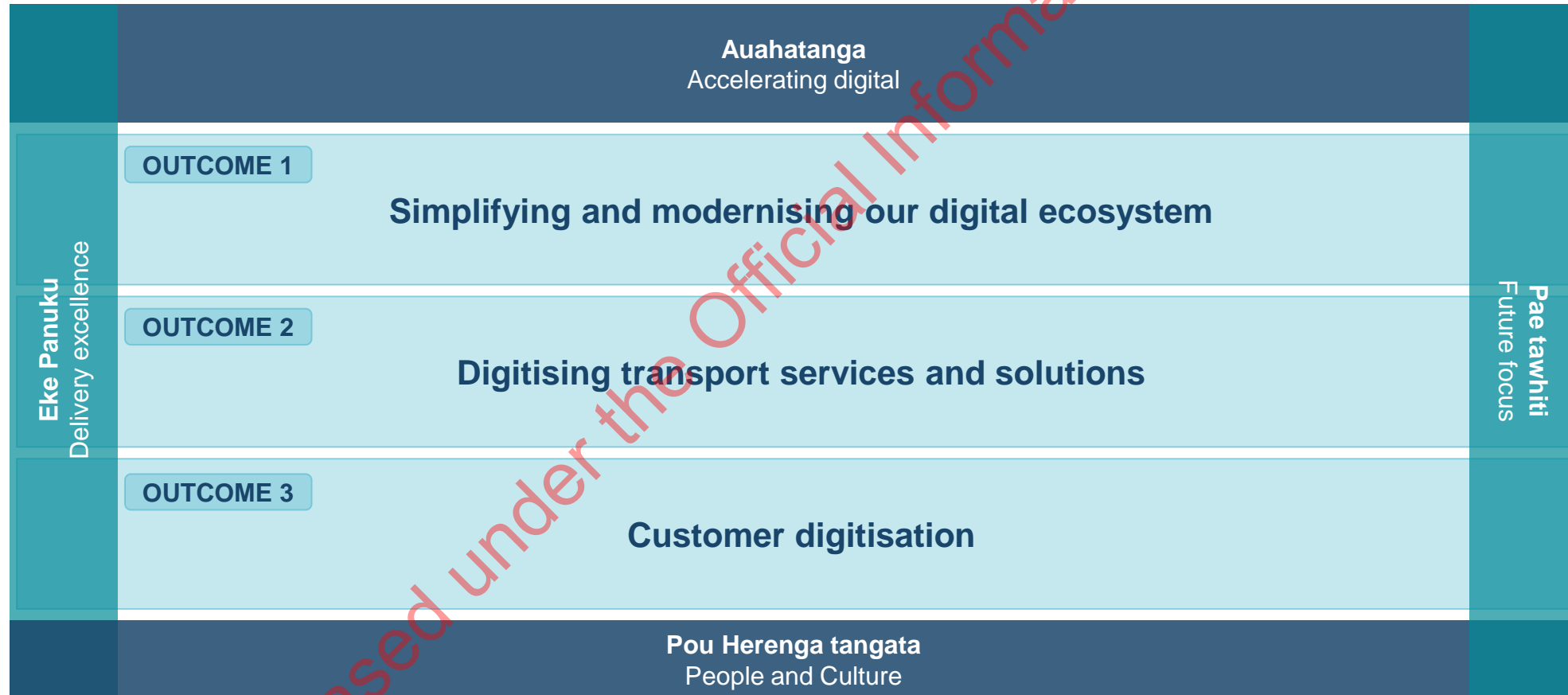
Auahatanga | Accelerating Digital

Our purpose is to accelerate our digital capability for a more safe, efficient and sustainable transport system.

August 2023

The Digital strategy supports Waka Kotahi to deliver Te kāpehu and the four Kāhui whetū

The three outcomes of the Digital strategy directly support the Agency to deliver on Te kāpehu and the four Kāhui whetū.



Our people underpin all that we do. We are committed to developing the Te Aukaha people plan, as we embed the Domain delivery model and agile ways of working.

What is the digital opportunity at Waka Kotahi?

1

Simplifying and modernising our digital ecosystem

- Simple and robust solutions that keep New Zealanders and their data safe.
- Deliver re-usable enterprise platforms rather than bespoke solutions for projects.
- Modern ways of working, automation and technology risk management.
- Leveraging machine learning and Generative AI for system and staff effectiveness across Waka Kotahi – vendor management, data insights, communications etc.

2

Digitising transport services and solutions

- Support the Transport System with smart data and digital solutions for asset management, revenue collection and delivery excellence.

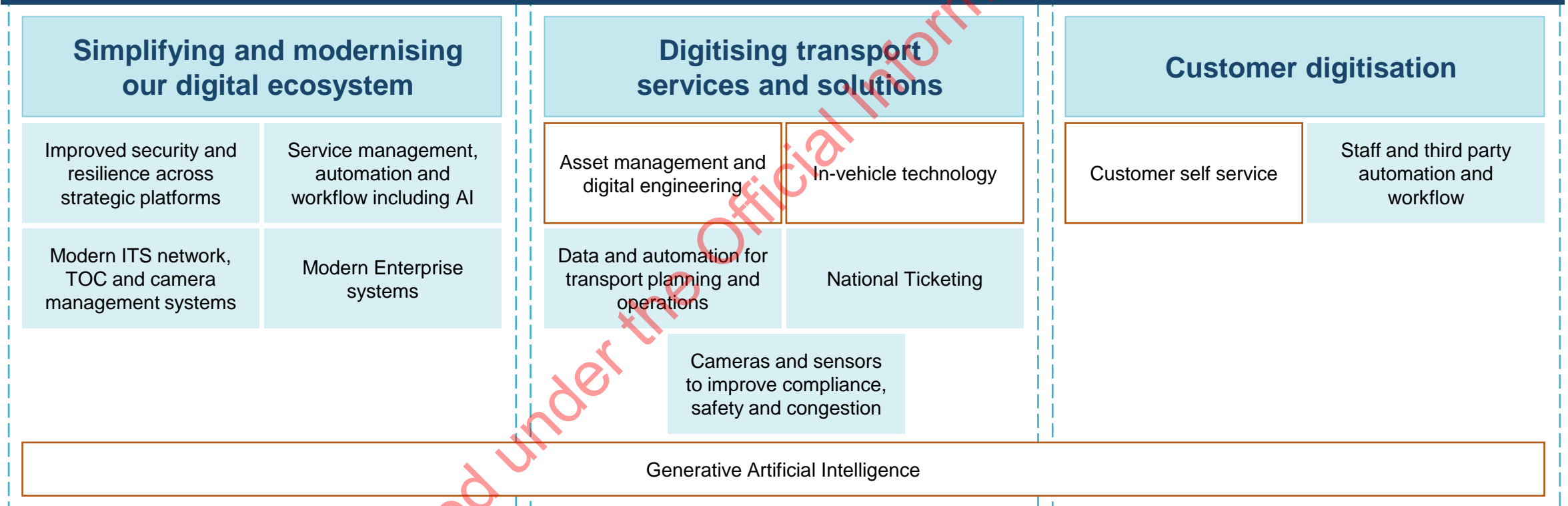
3

Customer digitisation

- Build engaging digital channels to drive operational efficiency, improve customer experience and enable personal interactions and choices about mode shift, climate and safety.

What are we chasing down?

The digital opportunity at Waka Kotahi



KEY

Waka Kotahi opportunities

Big plays

Simplifying and modernising our digital ecosystem

- Simple and robust solutions that keep New Zealanders and their data safe.
- Deliver re-usable enterprise platforms rather than bespoke solutions for projects.
- Modern ways of working, automation, security and technology risk management.
- Leveraging machine learning and Generative AI for system and staff effectiveness across Waka Kotahi – vendor management, data insights, communications etc.

Improved security and resilience across strategic platforms



Service management, automation and workflow, including AI



Modern ITS network, TOC and camera management systems



TBC

Modern Enterprise systems

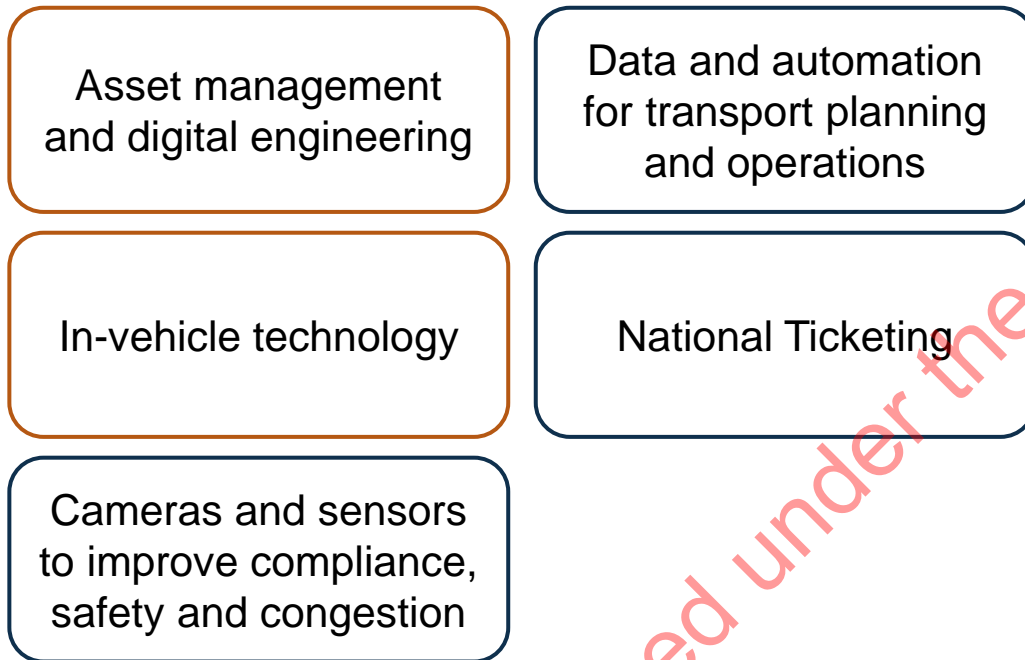


Finance Systems TBC

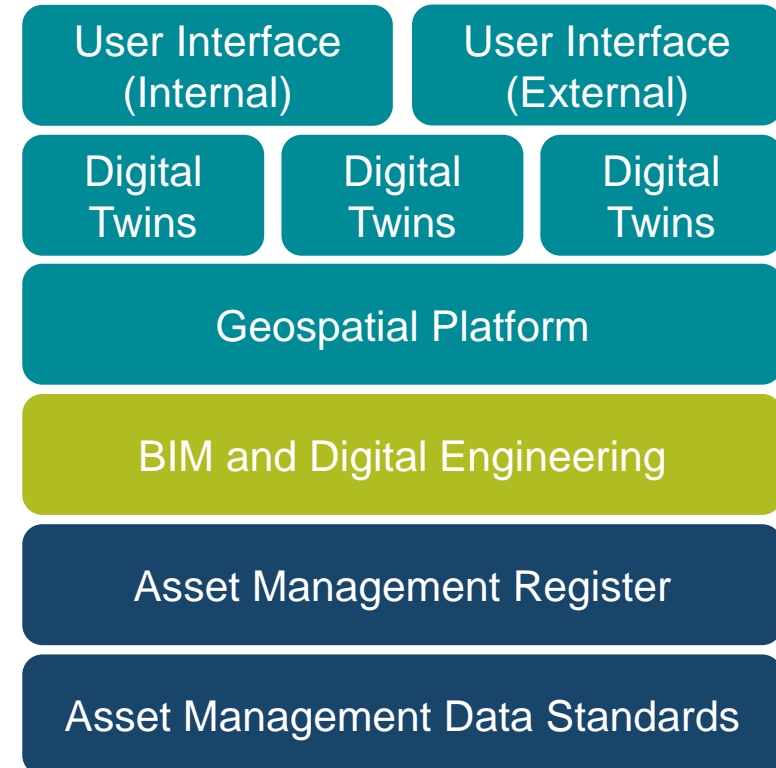
Generative Artificial Intelligence

Digitising transport services and solutions

- Support the Transport System with smart data and digital solutions for asset management, revenue collection and delivery excellence
- Enable regulatory compliance effectiveness through smart data, automation and technology solutions for system monitoring and enforcement.



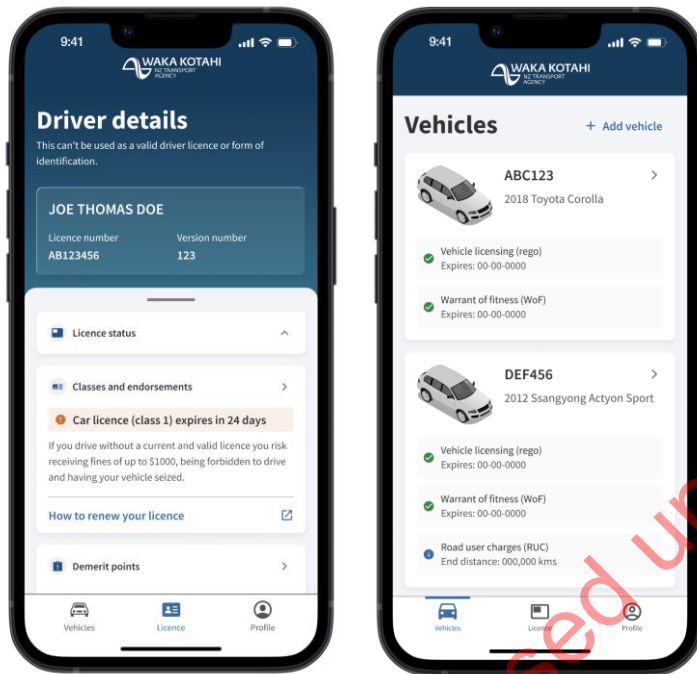
We have started building the components required to deliver a robust digital asset management and digital engineering capability.



Customer digitisation

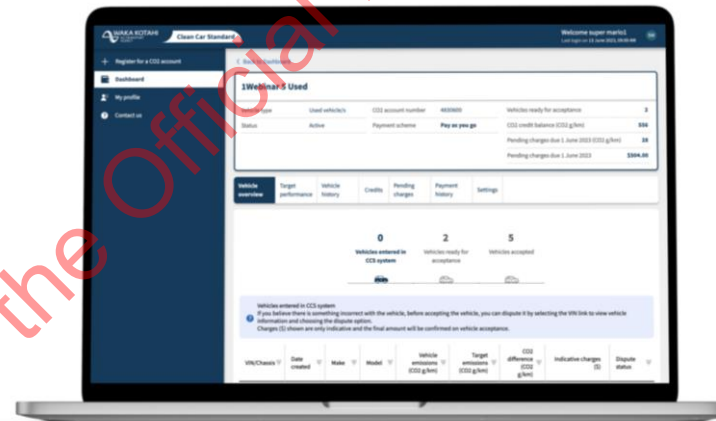
Build engaging digital channels to drive operational efficiency, improve customer experience and enable personal interactions and choices about mode shift, climate and safety.

Customer self service

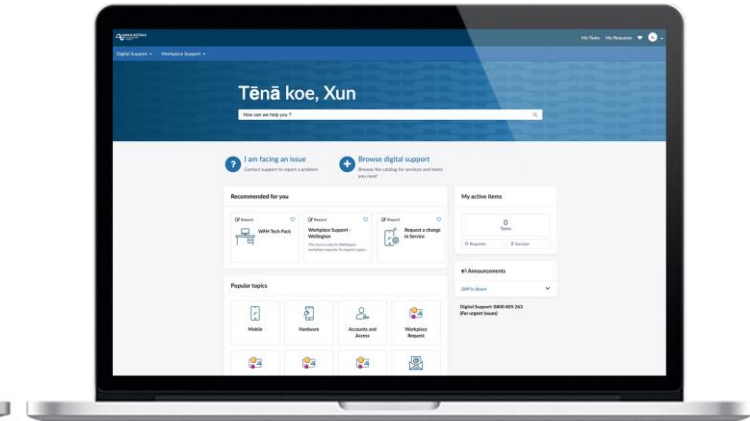


Consumer Hub

Staff and third party automation and workflow



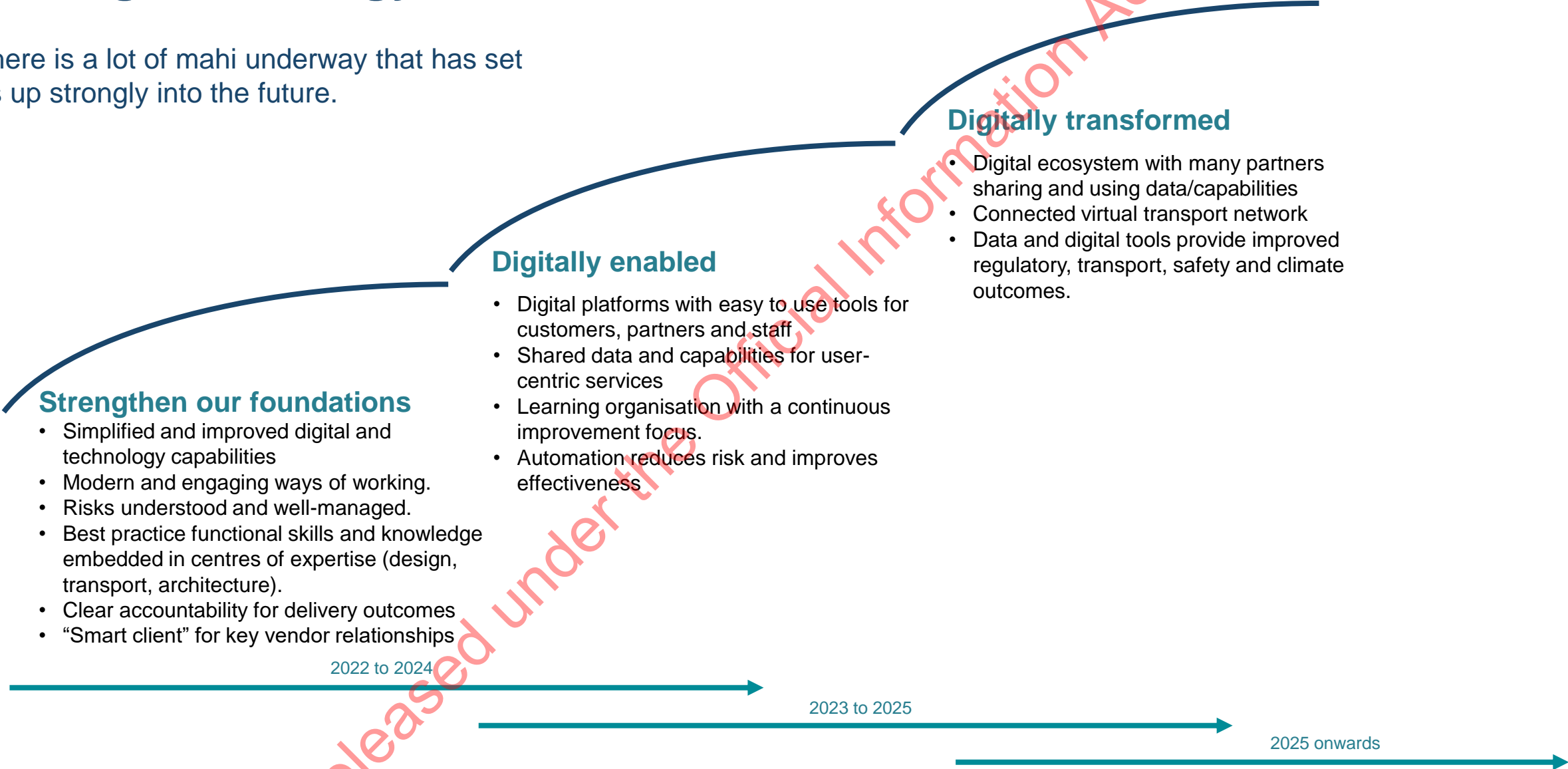
Clean Car Scheme (Pega)



Digital Support Homepage (ServiceNow)

Strengthening our foundations remains critical to achieving our digital strategy

There is a lot of mahi underway that has set us up strongly into the future.



We have identified six industry and global innovation trends relevant to Waka Kotahi:

Digital Engineering

Digital Engineering, Digital Twins, BIM (Building Information Modelling), Smart Business Cases

Digital Engineering is the collaborative way of working using digital processes to enable more productive methods of planning, designing, constructing, operating and maintaining assets throughout their lifecycle.



Smart Cities and Intelligent Vehicles

MaaS (Mobility as a Service), IoT (Internet of Things), Alternative fuelled Vehicles, Autonomous and Connected vehicles,

A Smart City uses technology to solve city problems - devices and sensors collect data, then use that data to manage traffic, utilities and services to ensure a safer, cleaner and more efficient city.



Artificial Intelligence and Augmented Reality

Generative AI, virtual / augmented reality

AI based-technologies to simulate, replicate and augment human interactions for operational efficiency, risk management, greater insights, training, health and safety, and to support in non-hospitable / non-accessible environments.



Partnerships and Ecosystems

Shared platforms and innovation hubs with other agencies, councils, public and private sector, NZ and beyond,

With the speed of evolving technology, organisations need to maximise strategic partnerships to ensure they are able to respond to the pace of innovation. Partnerships help us make use of the best technology solutions while we can focus on our core business.



Automation and Digitisation

Process standardisation and simplification, automation, micro-services

Digitally transforming business by adopting technology with more accurate and reliable outcomes. Using tools to automate processes that have been simplified and standardised, reducing human touchpoints and leveraging real time data automation and configurable business rules.



Modern Data Capabilities

Open Data, Analytics, Evidence based outcomes, real time data

Data is connected between applications and databases in a way that ensures they are updated in near real time. Data is securely available to other participants of the transport and regulatory ecosystem as well as being available for analysis and machine learning.

