WHAT IS DIGITAL HEALTH?

Manatū Hauora—the Ministry of Health describes digital health as 'the use of digital technologies and accessible data, and the associated cultural change it induces, to help New Zealanders manage their health and wellbeing and transform the nature of healthcare delivery'.

The health ecosystem is moving towards a more holistic, inclusive, value-driven, data-enabled, augmented, accessible, shared, and connected model of care. Technologies enable creative solutions for the optimisation of health knowledge resources.

Digital health is a rapidly evolving field that leverages technology and digital tools to improve health outcomes and healthcare delivery. It encompasses a range of solutions, including patient-facing technology, clinician- or health service-facing technology, data science, robotics, and design innovation. These tools and services aim to increase access to care, improve patient engagement and self-management, streamline healthcare delivery, and support better-informed treatment decisions.


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Adaptation is required as we realign the processes with current health strategies and end-user needs. We now face healthcare needs and expectations at a scale our current system is unable to respond to. Digital health offers transformational opportunities to build more capacity in the health sector to reach more people and communities and empower them to live longer and be healthier. It can also provide a critical opportunity for improving equity and supporting rangatiratanga or Māori ownership and leadership in the sector.

Consequently, as well as the technology-focused disciplines, Māori leadership, Māori and Pacific expertise, government and policy studies, implementation science, critical humanities, psychology, ethics, design and social innovation, business, marketing and communications, and law play an important role when we co-create and integrate digital technologies into the health system.

[1] www.health.govt.nz/our-work/digital-health

INTEGRATION OF DIGITAL TECHNOLOGIES INTO THE HEALTH SYSTEM

Integrated Data Infrastructure (IDI)

Longitudinal Business Database (LBD)
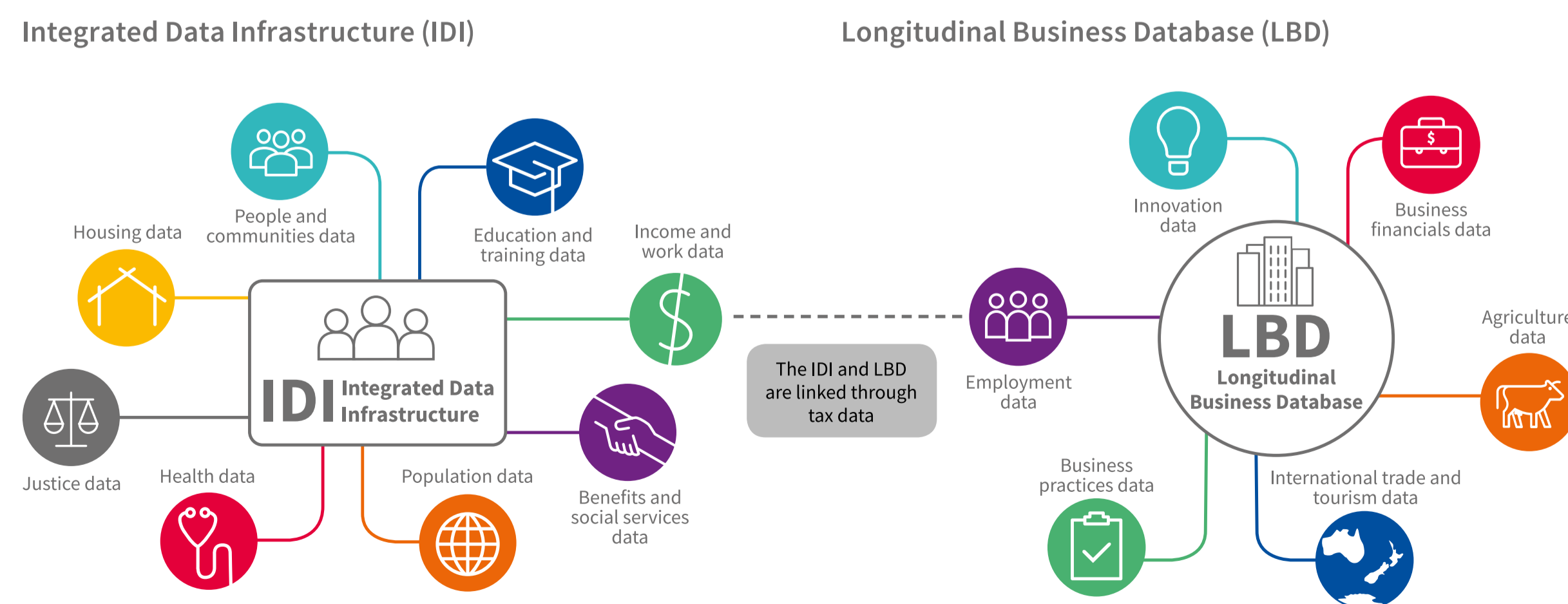
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*Ministry of Health Vision for Health Technology from 2017

KEY AREAS OF DIGITAL HEALTH

PUBLIC, CLIENT, OR PATIENT-FACING TECHNOLOGY

Includes tools such as mobile health apps, wearable devices, and telemedicine platforms that directly engage patients and provide them with relevant health information and access to care. This includes digital mental health tools.

CLINICIAN- OR HEALTH SERVICE-FACING TECHNOLOGY

Includes electronic health records, clinical decision support systems, and healthcare analytics platforms that provide healthcare providers with access to patient information and data to support better-informed treatment decisions.

DATA SCIENCE

Includes predictive modelling, population health management, and data visualisation. Leverages advanced analytics and machine learning to transform large amounts of health-related data into actionable insights.

DESIGN AND ENGINEERING

Robotics, including telepresence robots, surgical robots, and rehabilitation robots. These have the potential to revolutionise certain aspects of healthcare and improve efficiency, accuracy, and consistency in healthcare delivery. Design innovation applies design thinking and human-centred design principles to the development of digital health solutions, creating user-friendly, accessible tools that meet the needs of both patients and healthcare providers.

KEY DIGITAL HEALTH CONCEPTS

HOLISTIC

VALUE-DRIVEN

CONNECTED

INNOVATIONS IN AI, HARDWARE, AND SOFTWARE

AUGMENTED

INCLUSIVE

DATA-ENABLED