PAVING THE WAY FOR RESPONSIBLE AI:
OUR JOURNEY & VISION

MOTT MACDONALD

POLL QUESTION
How does your company approach responsible AI?

1.

Strongly
This is non-negotiable, and our AI processes are underpinned by strong governance.

2.

Moderately
We recognize its importance and have some measures in place, but there's room for improvement.

3.

Neutral
We are aware of responsible AI but have not yet implemented significant measures.

4.

Weakly
We believe it is important but feel it hinders innovation, so we will address it later.
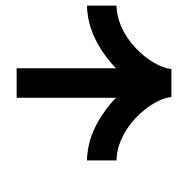
5.

Not at all
We do not prioritize responsible AI at this time.

→ **Our AI Strategy**

Empowering our people with Responsible AI

→ **Responsible AI**

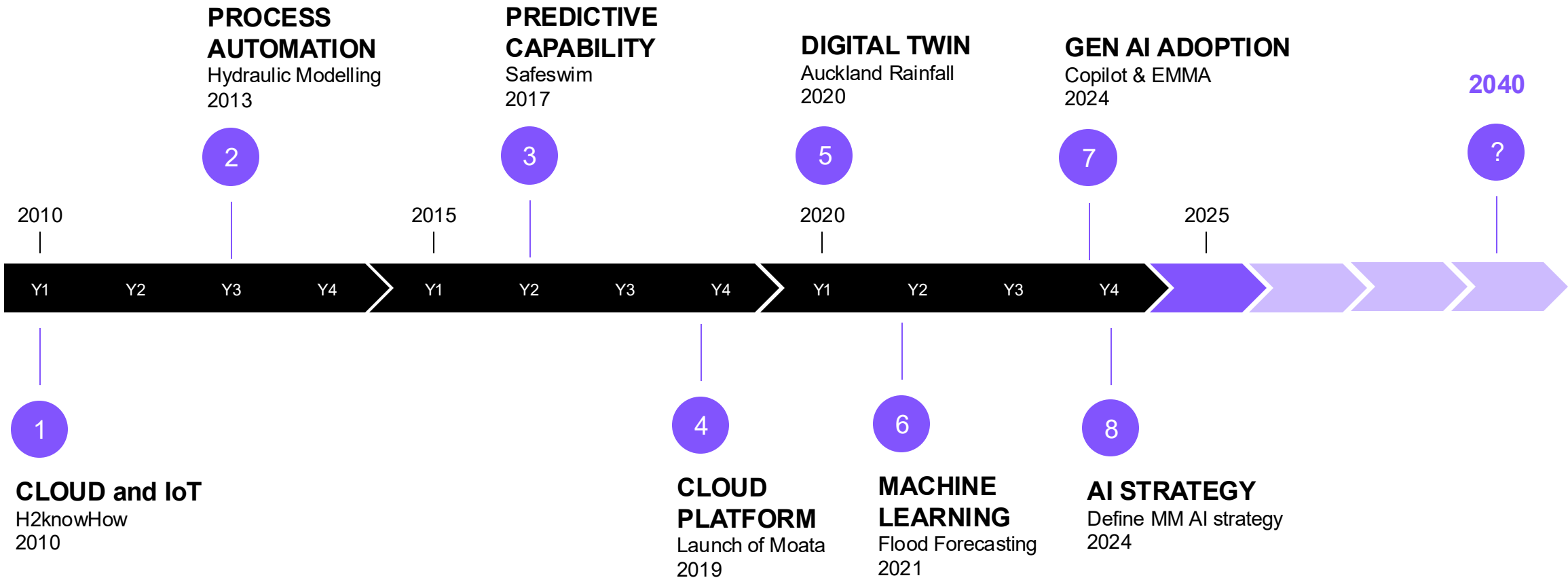We prioritise governance, ethics, and sustainability in all our AI initiatives.
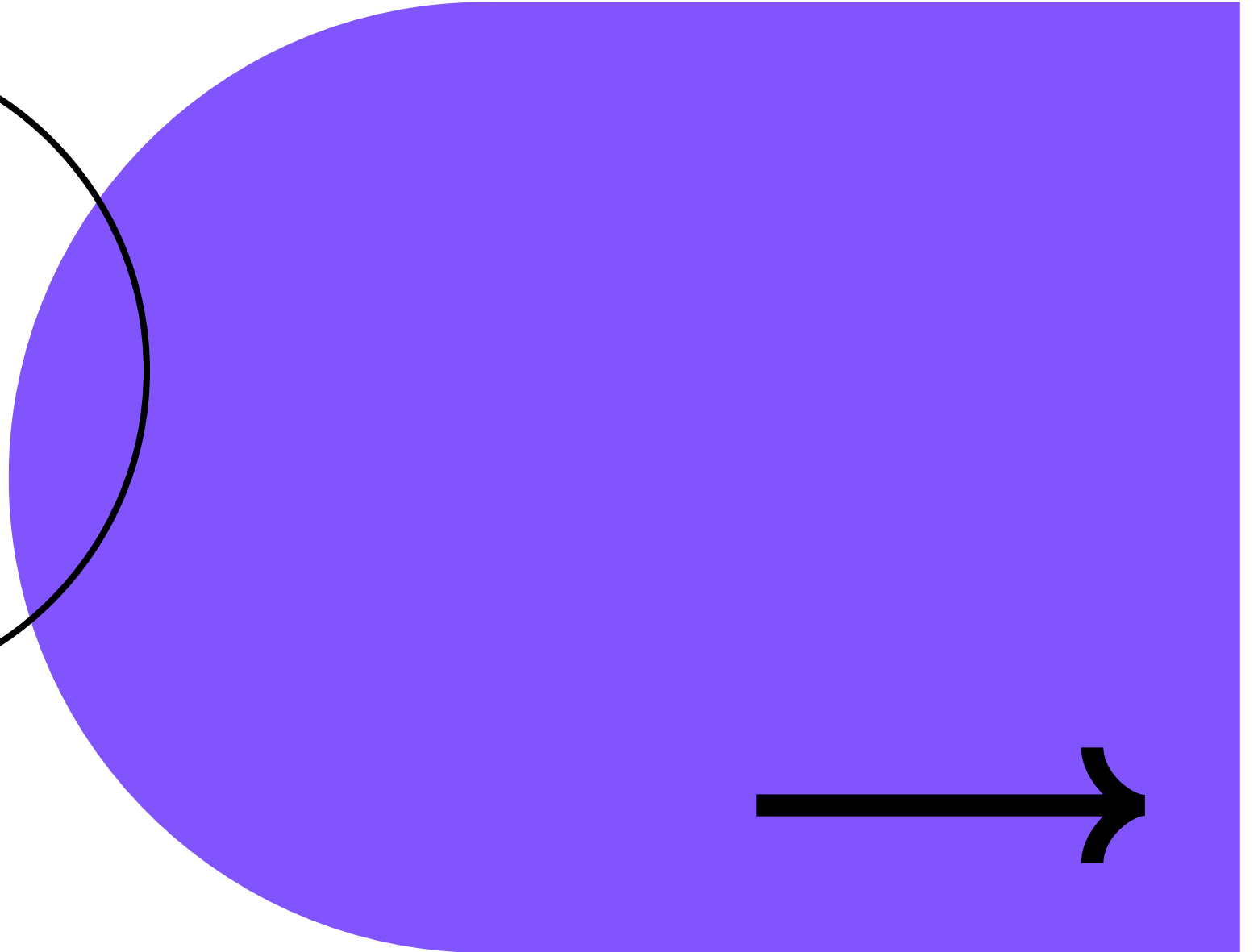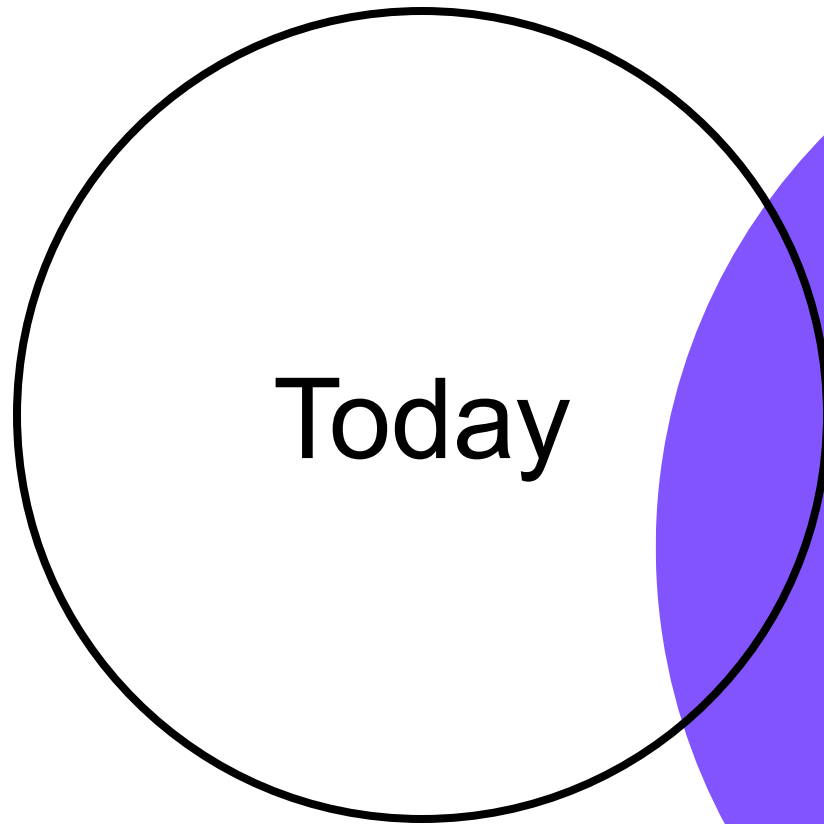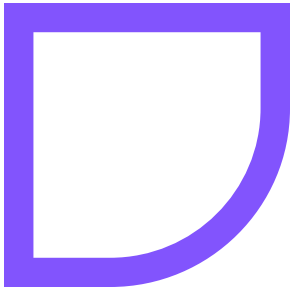
→ **How did we get there?**

Looking
back

My AI Timeline

PROCESS AUTOMATION
Hydraulic Modelling
2013

PREDICTIVE CAPABILITY
Safeswim
2017

DIGITAL TWIN
Auckland Rainfall
2020

GEN AI ADOPTION
Copilot & EMMA
2024

2040

2

3

5

7

?

2010

2015

2020

2025

Y1	Y2	Y3	Y4	Y1	Y2	Y3	Y4	Y1	Y2	Y3	Y4

1

4

6

8

CLOUD and IoT
H2knowHow
2010

CLOUD PLATFORM
Launch of Moata
2019

MACHINE LEARNING
Flood Forecasting
2021

AI STRATEGY
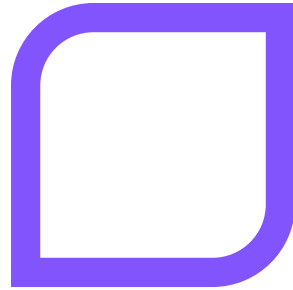Define MM AI strategy
2024

Today

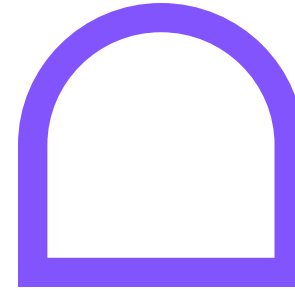# DEFINING AND IMPLEMENTING OUR AI STRATEGY

SHAPING
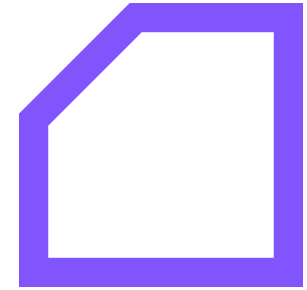
Identifying key AI strategic pillars.

POSITIONING

Defining our AI position and risk appetite.

ENABLING

Setting up systems enabling to manage risk.

DELIVERING

Implementing and developing new ways of working.

Shaping Our Team

Nasrine Tomasi
AI Product Lead

Develop and implement our AI strategy

Paul Skidmore
AI Product Lead

Implement high business value AI use cases

Naomi Bishop Bunn
AI Governance Lead

Define and implement our AI governance framework

YJ Kim
AI Technical Lead

Define and promote best practice in AI development
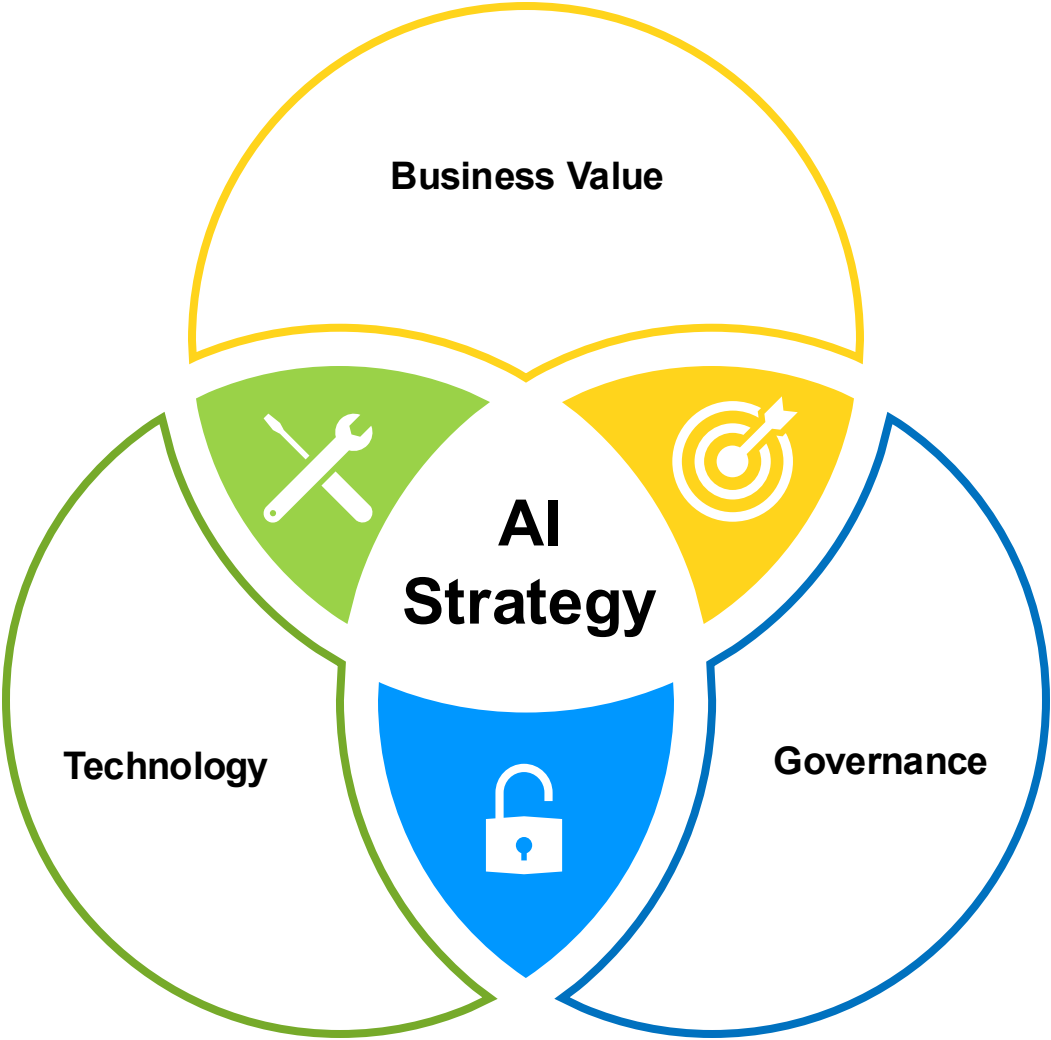
Shaping Our Team

AI Strategy

Defining and sharing our position and base principles to enable AI throughout the business.

Technology

Leveraging AI technologies and infrastructure to provide scalable, efficient, and innovative solutions across the business.

Business Value

Alignment with business strategy, ensuring that AI initiatives drive measurable improvements in business performance and deliver tangible benefits.

Governance

Implementing governance frameworks to ensure ethical, transparent, and compliant AI practices across the organisation.

Business Value

Technology
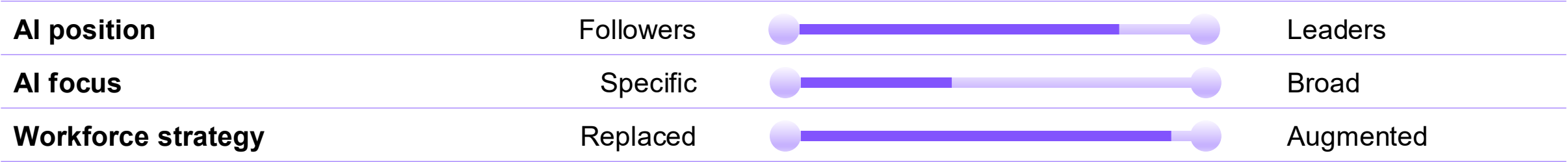
Governance

AI Strategy

Defining Our AI position

RISK ●————————————● OPPORTUNITY

Defining Our AI position

Business Value

AI position	Followers		Leaders
AI focus	Specific		Broad
Workforce strategy	Replaced		Augmented

Governance

Risk appetite	Low		High
Regulatory adherence	Low		High
Monitoring and auditing	Low		High

Technology

Buy vs Build	Buy		Build
Citizen development	Disabled		Encouraged
Technology spectrum	Focused		Broad
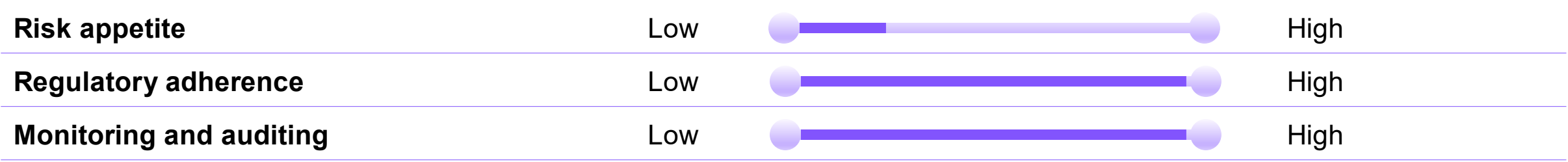
Enabling Responsible AI

Business Value

- Business value framework
- AI build upscaling principles
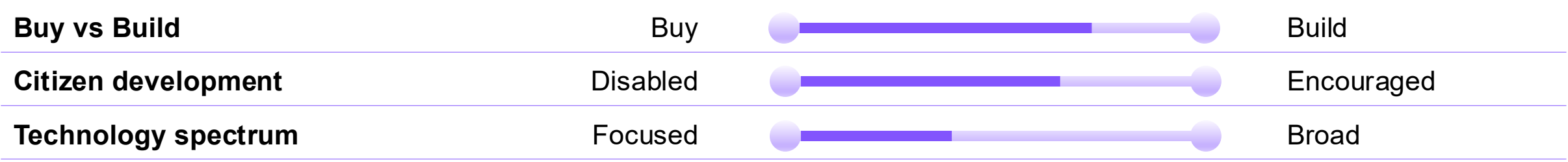- Enterprise product roadmap

Governance

- Consolidated risk assessment framework
- Structured procurement process
- AI technical documentation requirements

Technology

- Development pathway
- Best practice guidance and tools
- Agent strategy

Delivering Responsible AI

1

Personal productivity

Optimising ways of working

- Adoption of GenAI (Copilots, LLMs)
- Development pathways for citizen developers

2

Enterprise

Enhancing efficiency

- Enhanced access to knowledge
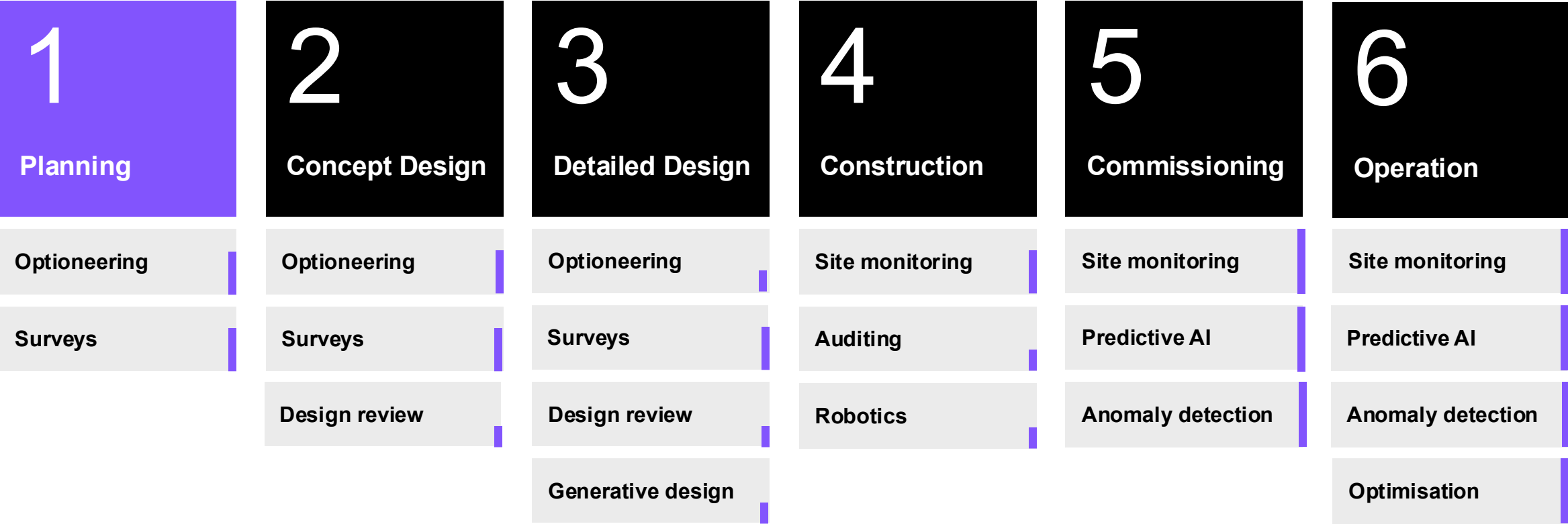- Process automation using AI agents

3

Projects

Transforming project delivery

- Predictive AI through ML
- Site monitoring computer vision
- Automation through GenAI

Delivering Responsible AI

Project Focus

1 Planning	2 Concept Design	3 Detailed Design	4 Construction	5 Commissioning	6 Operation
Optioneering	Optioneering	Optioneering	Site monitoring	Site monitoring	Site monitoring
Surveys	Surveys	Surveys	Auditing	Predictive AI	Predictive AI
	Design review	Design review	Robotics	Anomaly detection	Anomaly detection
		Generative design			Optimisation

Maturity level

Tomorrow

Key Messages

AI DISRUPTION

AI will change our ways of delivering Infrastructure projects.

THE NEED FOR AN AI STRATEGY

Having a clear strategy helps getting alignment throughout the business.

This is how you can deliver meaningful impact.

OPPORTUNITIES

There are many untapped opportunities in the AEC industry.

Manage the risk.

Focus on the opportunities.

The Future of AEC

SLOW TECHNOLOGY ADOPTION

One of the slowest sectors when it comes to digitisation (McKinsey, 2017)

A SECTOR IN EXPANSION

Global construction spending is projected to escalate in the next 15 years

TALENT SHORTAGE

The industry is lacking sufficient capable workers. Vacancies in the US almost doubled since 2017.

FLATLINING PRODUCTIVITY

Productivity has been stagnating over the last decades

NEED TO COME TOGETHER TO ACCELERATE OUR TRANSFORMATION

MOTT
MACDONALD

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THANK YOU