2021 AUSTRALIAN RESPONSIBLE AI INDEX

EXECUTIVE SUMMARY

Bridging The Responsible AI Gap

Artificial Intelligence (AI) has huge potential to improve Australians' well-being, the economy, society and the environment. The powerful outcomes that can be delivered by AI however have to be weighed against considerations around the potential harms it may cause, not limited to personal privacy, algorithmic biases and issues of justice.

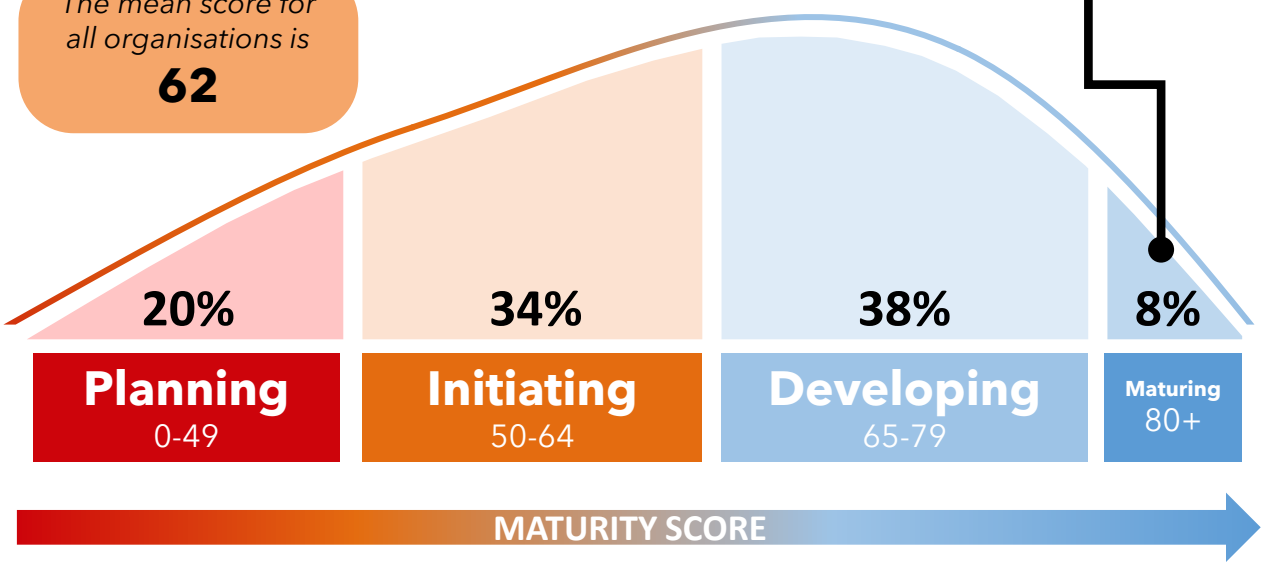
A lack of regulation, legislation and guidelines to monitor AI's development and use increases the risks that AI is developed without a true understanding of responsibility, potentially creating negative outcomes. AI technology maturity appears to be years ahead of legislation or regulation of AI. Therefore, organisations should turn to frameworks and guidelines as well as ethical leadership to guide them through developing Responsible AI.

In this context, Fifth Quadrant, Ethical AI Advisory and Gradient Institute partnered to create the inaugural Responsible AI Index, sponsored by IAG and Telstra.

The report, "**2021 Responsible AI Index**", is based on a survey of 416 Decision Makers for AI strategy and categorises organisations into four levels of Responsible AI maturity: Maturing (the most mature), Developing, Initiating and Planning (the least mature). The maturity model is based on an organisation's performance in: leadership support for responsible AI, governance mechanisms in place, data management and security, engagement of the workforce and consultants, and monitoring and review of their AI systems and their impacts.

Only 8%
of organisations are categorised as ***"Maturing"***

The mean score for all organisations is
62



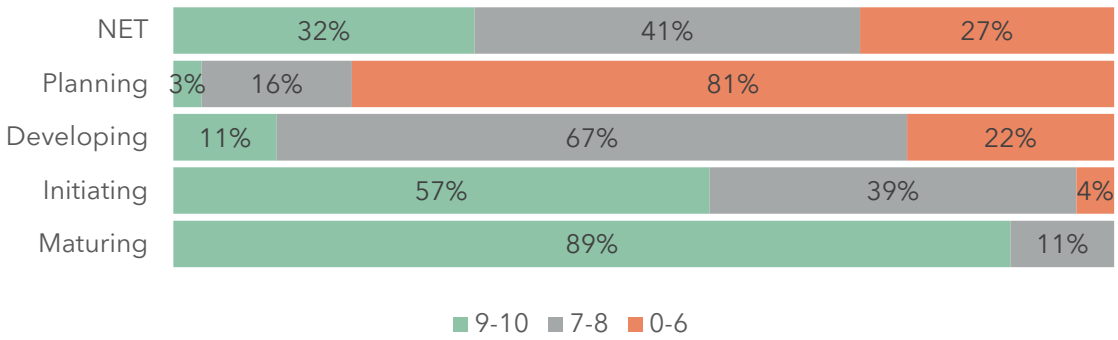
The report reveals that over a half of organisations studied (54%) are only at the Planning or Initiating stages of maturity and fewer than one in ten are at the Maturing stage (8%), highlighting the opportunity for business leaders to take action on critical AI initiatives such as reviewing algorithms and underlying databases, monitoring outcomes for customers, sourcing legal advice around potential areas of liability and reviewing global best practice.

THE RESPONSIBLE AI INDEX

The Index is constructed from a self-assessed rating related to performance across 16 statements about Responsible AI and whether any of 13 actions had been taken to implement AI in a responsible way. Responses to these questions were combined and weighted to provide a total score out of 100.

In addition, respondents were asked to rate their organisation's overall ability to deploy AI responsibly and ethically. Overall, only 32% gave a high rating, with 89% of the Maturing segment and only 3% of the Planning segment giving a high rating.

Overall Rating of Ability to Deploy AI Responsibly and Ethically



This result indicates that the majority of Australian organisations that are deploying or planning to deploy AI recognise there are significant gaps in their capabilities to do this according to Responsible AI practices.

ENABLERS OF RESPONSIBLE AI

The results suggest that a lack of confidence in deploying AI responsibly comes down to an overall lack of knowledge and vision, while those who are more confident and mature cite that their greater capabilities are due to the processes they have put in place, as well as consultation with subject matter experts.

Planning

"It requires more strategic vision to enable it to be a suitable solution, we are a bit piecemeal at the moment."

Initiating

"We are still learning but are getting guidance from third parties"

Developing

"We have the capability but implementing anything at scale in an organization this size takes so long."

Maturing

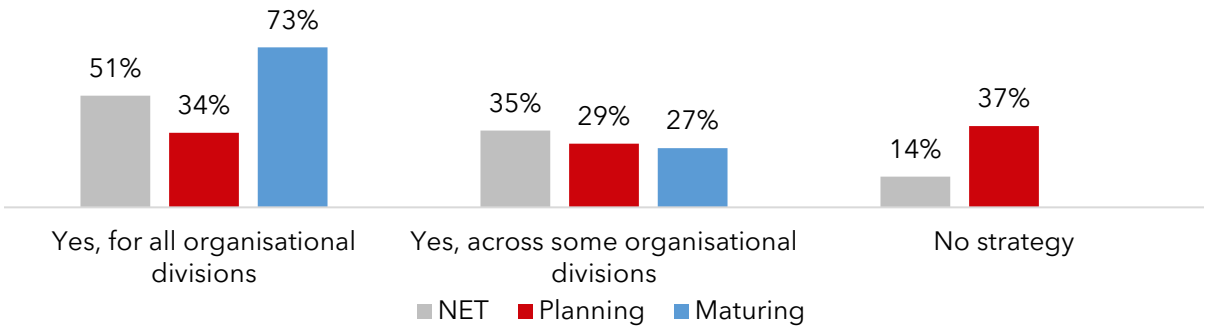
"We ensure that our systems are audited to ensure ethical decision making and analytics."

Respondents note that control over the data that is being used by the AI systems gives them the most confidence in their ability to deploy AI responsibly.

ORGANISATIONAL STRATEGY FOR AI

Just over half (51%) of organisations studied have an enterprise-wide AI strategy, and this remains a work in progress for the Planning and Initiating segments where AI capabilities are likely to be more siloed or unevenly distributed.

Do you have a strategy for the development of AI that is tied to your wider business strategy?



In order to be more mature in responsible AI, organisations need to transition from opportunistic and tactical AI decision-making to a more strategic orientation.

AUSTRALIA'S AI ETHICS PRINCIPLES

The elements of the Australia's AI Ethics Principles, developed by the Department of Industry, were incorporated into the survey to identify the gap between attitudes towards Responsible AI and the steps that organisations are taking towards implementing Ethical AI.

Awareness of Australia's AI Ethics Principles is much higher in the Maturing organisations (94%). As organisations become more mature in their development and use of AI they are more likely to have developed their own ethical standards.

Principles relating to social well-being, human-centred values, fairness, data & technical security and integrity are considered by respondents to be important, however this is not reflected in the actions that organisations take. This result points to a significant gap between intent and actions.

Human Principles	Data & Security	Integrity
81% Agree that: *"Throughout their lifecycle, AI systems should benefit individuals, society & the environment"*	**83%** Agree that: *"Throughout their lifecycle, AI systems should respect & uphold privacy rights & ensure the security of data"*	**84%** Agree that: *"There should be transparency & responsible disclosure to ensure people know when they are being significantly impacted by an AI system"*
Only 31% have reviewed AI algorithms for potential bias	**Only 32% strongly agree** that their organisation has processes in place to reassure customers that personal information used by AI systems is appropriately protected	**Only 30% strongly agree** that their organisation makes it easy for customers to report any issues or complaints about their AI systems

HOW TO BRIDGE THE AI RESPONSIBILITY GAP

The AI Ethics Principles are the starting point for the responsible development and deployment of AI. However, this research shows organisations are struggling to translate good intentions into real world actions. Below are examples of practical steps recommended to bridge the Responsible AI gap.

6 Steps To Bridging The AI Responsibility Gap:

1. Stakeholder Consultation

Consult widely with stakeholders to identify the harms the system may cause, then determine ethical objectives to control these harms and ensure the AI system achieves them.

2. Risk Identification

Identify the people at risk of being systematically disadvantaged by the AI system and ensure that special consideration is given to protect them.

3. Document AI Systems

Document AI systems that can affect the lives of people: their purpose, risks, key design decisions and justifications, performance, and who is responsible for them.

4. Continually Monitor AI Systems

Continually monitor AI systems against their business and ethical objectives, search for unintended harms, and build in mechanisms for review, redress and mitigation.

5. Staff Training

Train staff in the novel risks of AI systems and their roles in controlling those risks.

6. Risk Management

Extend existing risk management frameworks to incorporate risks introduced or potentially amplified by the use of AI systems.

To Do Now: We have developed an online tool which you can use to assess your organisation's current ability to develop and deploy Responsible AI. The tool gives you a score which can be benchmarked against other organisations as well as your industry.

Click here to get your score

Click here to download the report

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