AUSTRALIAN RESPONSIBLE AI MATURITY INDEX 2022

EXECUTIVE SUMMARY

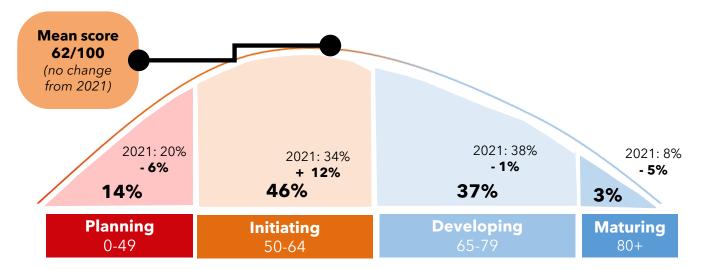


Bridging The Responsible Al Gap

The Responsible AI Index 2022, sponsored by IAG and Transurban, measures and tracks how well organisations are designing and implementing Responsible AI systems. Responsible AI systems are designed with careful consideration of their fairness, accountability, transparency, and impact on people and society

The Index is based on a survey of 439 executive decision makers responsible for AI development.

The mean Responsible Al Index score for Australian-based organisations is 62 out of 100 (unchanged since 2021).



MATURITY SCORE OUT OF 100

Four levels of Responsible AI maturity are identified: i) Planning, ii) Initiating, iii) Developing and iv) Maturing. Compared with 2021, fewer organisations are in the planning stage and more have shifted towards initiating AI projects. There are also fewer in the Maturing segment. This suggests that more organisations are initiating action on AI initiatives, but there is still opportunity for business leaders to drive action on critical AI initiatives to increase Responsible AI maturity.

The more mature segments are markedly different in their approach to the development of Al systems reflecting their greater level of experience and a tendency to have the business leadership involved in the organisations overarching strategy for Al.

Planning & Initiating (Less Mature)

- Early stages of AI deployment
- Focussed on quickly reaping commercial benefits of Al automation
- May have lack of confidence, leadership support and/or knowledge of responsible Al

Developing and Maturing (More Mature)

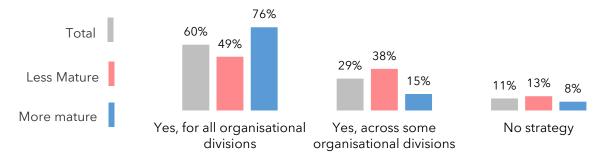
- Implemented auditing processes for Al and/or developed guidelines for responsible use of Al
- Strong focus on the moral and ethical implications of using AI technologies
- Strong culture of data protection and security
- Use external specialists and advisors



ORGANISATIONAL STRATEGY FOR AI

Three-fifths (60%) of organisations surveyed have an enterprise-wide AI strategy that is tied to their wider business strategy, compared with just over a half (51%) in 2021. Around three quarters (76%) of the more mature segments have an enterprise-wide AI strategy.

DO YOU HAVE A STRATEGY FOR THE DEVELOPMENT OF AI THAT IS TIED TO YOUR WIDER BUSINESS STRATEGY?

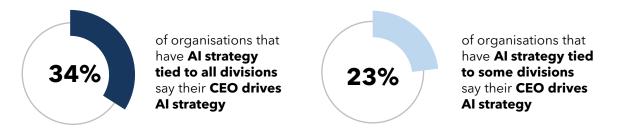


In order to be more mature in responsible AI, the less mature organisations need to transition from opportunistic and tactical AI decision-making to a more strategic orientation.

THE INFLUENCE OF THE CEO

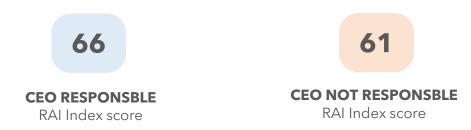
The CEO plays a pivotal role in how organisations implement an effective responsible AI strategy. Having a CEO driving AI strategy ensures accountability and a more strategic AI orientation across the business.

Just over a third (34%) of organisations that have an enterprise-wide AI strategy have a CEO personally invested in driving the strategy, compared with 23% where the AI strategy is tied to some divisions.



Organisations where the CEO is responsible for driving the AI strategy have a higher RAI Index score of 66 compared with a score of 61 for those where the CEO is not taking the lead.

Organisations that have the CEO leading the AI strategy are more likely to invest in developing their culture and governance processes so as to elevate RAI practices to a level of standard routine.





AUSTRALIA'S AI ETHICS PRINCIPLES & ACTIONS

Most executives agree that their organisation is broadly following the stated intent of the <u>Australian Al Ethics Principles</u>. The table below compares perceptions of how Al systems have been designed and how they are performing, and the actions that have been taken to ensure Al systems are developed responsibly.

Agreement With Statements About Al Performance		Principle	Actions Taken
81%	Our AI systems generate quantifiable benefits to humans, society and the environment that outweigh the costs.	HUMAN, SOCIAL AND ENVIRONMENTAL WELLBEING	Identified and assessed the risks and opportunities for human rights.
77%	Our Al systems are designed to be human-centered at their core.	HUMAN-CENTRED VALUES	Reviewed underlying databases for potential 23% bias.
79%	We have robust systems and processes in place to minimise the likelihood of our AI systems causing unfair treatment of individuals, communities or groups.	FAIRNESS	Reviewed AI algorithms for potential bias.
84%	Our Al systems comply with relevant privacy and security regulations.	PRIVACY PROTECTION AND SECURITY	Hired technical consultants or professionals.
84%	Our AI systems are designed to be safe and to not harm or deceive people.	RELIABILITY AND SAFETY	Monitored outcomes for customers or employees. 25%
84%	We are able to transparently show and explain how algorithms work.	TRANSPARENCY AND EXPLAINABILITY.	Developed supporting materials to explain the Al inputs and decision-making processes. 26%
80%	We have a timely process in place to allow people to challenge the use or outcomes of our AI systems.	CONTESTABIILTY	Set up recourse mechanisms. 23%
85%	Our leadership can be held accountable for the impact of their AI systems.	ACCOUNTABILITY	Engaged your business leadership on the issues around RAI.
82%	Average agreement with statements about Al performance	58 point gap	Average of RAI Actions taken 24%

This exposes a worrying 'action gap,'. Most executives believe they are adopting responsible AI practices. However, a more detailed examination reveals only a minority are taking action to ensure their own AI systems are developed responsibly. There is an average 'action gap' of 58 points across the 7 AI ethics principles.

Of particular concern is the reliability, safety and transparency of AI systems with only around a quarter of organisations taking meaningful actions to monitor outcomes and develop materials to explain AI decision making processes.

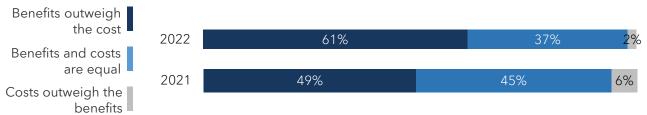
Responsible AI starts at the top, and encouragingly most executives agree that their organisation's leadership can be held accountable for the impact of their AI systems. However, less than a quarter have engaged the business leadership on the issues around RAI.



OUTCOMES OF RESONSIBLE AI

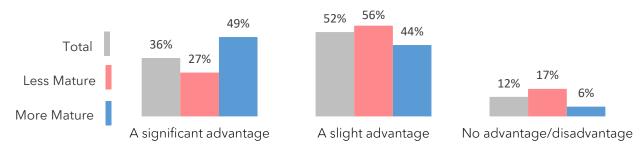
Compared with 2021, more organisations now believe the benefits of taking a responsible approach to Al outweigh the costs. Al executives may need resources and support to quantify the benefits of designing and building responsible AI systems in order to build the business case and obtain leadership support.

COSTS AND BENEFITS OF RESPONSIBLE AI



Organisations that are more mature in their deployment of Responsible AI, are likely to see significant gains in terms of competitive advantage, with the benefits outweighing the costs.

COMPETITIVE ADVANTAGE OF RESPONSIBLE AI



Organisations may be tempted to make some ethical sacrifices in order to expedite their Al projects and keep pace with competitors. However, the evidence indicates that there are significant returns to be gained from investing in a responsible approach to Al development, including increased competitiveness.

HOW TO BRIDGE THE RAI ACTION GAP

- 1. Assess impacts Understand the positive and negative impacts the system's actions will have on people so they can be prioritised and managed.
- 2. Mitigate unfair impacts Reduce the risk of the system introducing, perpetuating or amplifying societal inequalities.
- 3. Conduct pilot studies Test the assumptions of the system at a limited scale to reduce exposure to unforeseen impacts.
- 4. Monitor and evaluate continuously Oversee performance against both business and ethical objectives to ensure the system is operating as intended.
- 5. Make appropriate disclosures Inform users of an AI's operation to build trust and empower them to make effective decisions.
- 6. Raise awareness in Responsible AI Ensure that individuals are equipped to make ethical decisions when designing and deploying AI systems.
- 7. Establish roles and responsibilities Be clear about who is accountable for different aspects of the Al system's operation and impacts.

For a comprehensive description of how organisations can use tools and guidelines to connect the principles and practice of Responsible AI, see the forthcoming report Connecting Principles and Practice: Implementing Responsible AI in Business from Gradient Institute and the National AI Centre (hosted by CSIRO).

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