

Australia Drifting into the Age of Al

- Significant infrastructure investment needed to prepare for future AI demand
- Consideration of data centre placement to manage energy and water requirements
- Investment in whole-of-society AI literacy is a critical enabler for the age of AI

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Australia has been slow to prepare for the increasing adoption of AI and is drifting in this technological revolution, according to a new paper commissioned by the Actuaries Institute.

Al is already transforming business operations across all industries and mature organisations are using AI to optimise operations, enhance employee productivity and improve customer experiences, with innovators expected to increasingly use AI to release new products and disrupt existing markets.

In his paper, *Building Tomorrow: Preparing Australia for the Age of AI*, data science actuary Jon Shen argues Australia is lagging in its investment in infrastructure, talent and AI literacy and must act now.

"Large technology companies and global economies are investing billions of dollars into data centres. In contrast, the Australian Government has only committed to developing a National AI Capability Plan by the end of 2025 - we are lagging behind," he said.

"This investment is vital to prepare for future AI demand and enable data sovereignty in line with privacy legislation and regulatory requirements. This includes considering data centre placement to manage energy and water requirements, as well as rapidly embracing the transition to sustainable energy."

The paper points to a severe lack of AI expertise in Australia, with the talent gap projected to double from 19,000 in 2024 to 40,000 in 2027.

Mr Shen said immediate intervention is needed to prepare people for this rapidly changing technology, as it impacts both their personal lives and professional careers.

"The talent shortage is slowing down adoption and it is crucial that cultural adoption be addressed to ensure Australia can capitalise on AI. The benefits of AI won't be realised unless organisations invest in AI talent," he said.

"We need education across schools, the workforce and broader society, so everyone is equipped to understand the impending AI wave and how it will impact them. The development of skills such as critical thinking and adaptability will serve Australians well as technology continues to rapidly evolve."

The paper argues the AI literacy gap has downstream implications for organisations and there is a significant disconnect between leaders' and workers' feelings about AI. Recent surveys have shown that while most executives are investing in AI and feel an urgency to incorporate the technology into their business, many workers don't feel safe admitting they use AI and report a lack of in-house expertise.

Business is being urged not to treat AI like "just another technology project", as developing or integrating AI systems into business operations requires ongoing expertise and maintenance.

"The business case for launching an AI initiative should consider both the upfront and ongoing costs of deploying and running AI systems. This includes the financial outlays, the time and staff needed, and the risk controls required to ensure the system is resilient. The actuarial skillset, encompassing commercial acumen, technical modelling and risk management, is a key enabler for organisations seeking to successfully deploy responsible AI," Mr Shen said.

"Australia must act now to chart a course to the future we desire, a sustainable future with AI in business and society."

Access the Actuaries Institute's paper here.

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