

Australian Information Industry Association

Submission on the

2024–25 Budget Priorities

25 January 2024

2024-25 Budget to Drive Productivity through Critical Technologies Adoption and Enhanced Cyber Security, a Long-Term Strategy for Economic Resilience

Introduction

The Australian Information Industry Association (AIIA) thanks the Commonwealth Treasury for the opportunity to respond to the 2024-25 Budget consultation. Governments worldwide are investing significantly in building a robust technology sector, recognising its potential as a competitive advantage for generating national income and reserves. These reserves, in turn, play a crucial role in navigating future economic challenges, including downturns and rising costs of living.

The AIIA represents approximately 90 per cent of Australians employed in the tech industry across a diverse group of members, an invaluable asset to similarly enable productivity and economic resilience in Australia. The 2024-25 budget presents an opportunity to invest in essential national infrastructure and drive critical technologies¹ adoption while preventing unintended consequences such as personal data breaches and job disruptions. For these reasons, we recommend urgent Government's attention and funding in three critical areas:

1. Establishing an independent Government body to coordinate the implementation of newly launched technology-focused initiatives, ensuring coherence, agility and continuity. This body should begin with strengthening essential national (technology) infrastructure.
2. Formulating an industry-focused policy and funding to cultivate globally competitive companies.
3. Implementing a skills-focused strategy to mitigate disruptions in an ever-changing job market.

By addressing these critical areas, Australia can secure an orderly environment to inform business investments and skills retraining. The significantly enhanced Australia's technological capabilities and resulting meaningful employment will pave the way for sustained economic growth and prosperity.

Priority 1. Establish and fund an independent central Government body to coordinate the implementation of technology-focused initiatives for coherence, agility and continuity.

Problem statement 1: Multiple initiatives and information causing confusion to the industry.

There is a high risk of poor implementation of newly launched strategies and responses i.e. Data and Digital Government,² Cyber Security,³ Quantum,⁴ Privacy Act changes and Migration⁵ strategies. This is compounded by anticipated changes in areas such as the National Robotics Strategy⁶, digital identity

¹ Department of Home Affairs, [List of Critical Technologies in the National Interest](#), 19 May 2023. List includes advanced manufacturing and materials technologies, artificial intelligence (AI) technologies advanced information and communication technologies, quantum technologies, autonomous systems, robotics, positioning, timing and sensing, biotechnologies, clean energy generation and storage technologies.

² Minister for Public Service, [Data and Digital Government Strategy](#), 15 December 2023.

³ Department of Home Affairs, [2023-2030 Australian Cyber Security Strategy](#), 21 November 2023.

⁴ Department of Industry, Science and Resources, [National Quantum Strategy](#), 3 May 2023.

⁵ Department of Home Affairs, [Migration Strategy](#), 11 December 2023.

⁶ Department of Industry, Science and Resources, [National Robotics Strategy Consultation](#), May 2023 and accessed in 24 January 2024.

reforms,⁷ climate reporting reforms,⁸ and government procurement reforms.⁹ Currently, these changes comprise of regulatory and industry policy updates and are led by different departments, including Finance, Home Affairs, and Industry. The absence of coordination can result in inconsistent decision-making or delays caused by mistiming project dependencies as well as confusion.

A timely example highlights this issue. Within a week, the industry received two updates on Artificial Intelligence (AI) guardrails from different government sources. The first update, announced by Industry and Science Minister Ed Husic on January 17, 2024,¹⁰ expressed the government's commitment to consider mandatory guardrails for AI development and deployment in high-risk settings and a voluntary AI Safety Standard in collaboration with the Australian industry. The second update, published by the Australian Signals Directorate in collaboration with international partners on January 24, 2024, provided a guideline titled 'Engaging with AI.'¹¹ While both government bodies possess crucial and specialised information for the industry, the fragmented and possibly contradictory dissemination of information in different sets of guidelines creates confusion rather than providing clarity to the industry. Such an outcome can be debilitating, contrary to the intentions and significant efforts of the government in these areas.

Problem statement 2: Strategies and action plans failing to survive Government transitions, causing resource wastage and opportunity costs in this fast-moving industry.

There have been substantial opportunity costs to the economy when government technology sector focused strategies and consultations were subsequently abandoned, often due to changes in government during our short election cycles. Not only does this add to the confusion and frustration within the technology industry and results in wasted efforts and missed opportunities in Australia, the economy is seeing a decline in skills development, critical technology adoption and productivity benefits.

For instance, following a public submission process to develop the AI Strategy and Action Plan in 2020, the 2021 federal budget allocated \$121 million to a series of AI projects. However, only two projects received funding: the establishment of an AI Centre by CSIRO and support for a limited number of post-graduate scholarships in AI research. Four years of budget cycles, a change in government, and a new policy approach later, the industry is only now starting to receive the funding for the commercialisation, adoption, and growth of AI in Australia. The wasted four years feel like an eternity for the fast-moving technology sector, contributing to Australia being placed second last of the 13 countries assessed in deploying and exploring AI, according to the 2022 IBM Global AI Adoption Index.¹²

⁷ Parliament of Australia, [Digital ID Bill 2023 and the Digital ID \(Transitional and Consequential Provisions\) Bill 2023](#), 30 November 2023.

⁸ Commonwealth Treasury, [New climate reporting reforms for a stronger financial system](#), 12 January 2024.

⁹ Small Business and Family Enterprise Ombudsman, [Ombudsman launches Inquiry into Commonwealth Procurement](#), 30 March 2023.

¹⁰ Minister for Industry and Science, [Action to help ensure AI is safe and responsible](#), 17 January 2024.

¹¹ Australian Signals Directorate, [Engaging with Artificial Intelligence \(AI\)](#), 24 January 2024.

¹² IBM Global AI Adoption Index 2022, <https://www.ibm.com/downloads/cas/GVAGA3JP>.

Recommendation: Establish an Independent Central Government body to enable a stable environment and coordinate the implementation and communication of newly launched initiatives.

These issues emphasise the urgent need for an independent central government body to coordinate and implement technology-focused initiatives. It should be founded on the basis that the body is the single source of truth, responsive and led with a balanced set of expertise i.e. governmental, technical and commercial understanding. Applying these principles, we can ensure coherence, agility, and continuity in the implementation.

Investing in the momentum of transformation

Quick execution maintains the momentum for digital transformation, which is critical in a rapidly advancing sector. However, the complexities of tech initiatives have deepened, making quick execution a difficult task. In the newly launched strategies in December 2023, the action plans therein included both regulatory and industry policy items. This meant a greater need for coordination beyond just between regulators as we had proposed in the 2023-24 Pre-Budget Submission.

Notwithstanding the construct of the body (e.g. a Council of Tech Regulators or similar mechanism), it is critical that decision making timeframes from policy development to funding is reduced from the three/four years to 12 months. The body could also conduct and compare the cost-benefit analysis of all policy projects in flight to advise the Treasurer on the right priority as part of the coordination. This will inform the Government the optimal budget allocations according to the strategic needs of the country. This also ensures a policy project dependency is quickly completed such that the next important policy project can be launched.

Investing in proven expertise to drive transformation and communication.

This body should be independent and an effective bridge between the Government, industry and the citizen to align efforts. For this reason, it is important for the leadership has deep expertise in both technology commerce experience and technical knowledge.

The body should also initiate a joint task force or committee with private sector, state and federal representatives, to establish a digital backbone strategy and roadmap that can support business and citizen digital infrastructure needs to 2030 and beyond. This task force or committee can provide invaluable advice and help complete a feasibility study to build out the digital backbone, establish the national vision, identify the changes required to current digital infrastructure and capabilities, what bodies need to exist to build and run this backbone, and define the investment roadmap to achieving the vision.

Modern role of the Government

The Singapore case study in the next page shows the critical role of the Government in facilitating the adoption of technology for productivity, and innovation, training future workforce and creating overseas business opportunities in addition to local procurement opportunities. It includes creative industry support, both through Government diplomacy and incentives or co-funding.

Case Study: Singapore's Digital Transformation Journey

Benefit to the economy and income generation

Consistently ranked top three in global digital competitiveness and/or innovation,¹³ Singapore's digital economy (SGDE) is now about 17.3% of Singapore's gross domestic product (GDP) in 2022.¹⁴ Overall, SGDE grew at a compound annual growth rate of about 12.9% per annum since 2017, outpacing the overall economy.¹⁵ Showing how its 40-year investment in the technology sector has been a game changer, the country with no natural resources now has a GDP per capita (USD 82,807.6) higher than Australia's (USD 65,099.8), according to the World bank.¹⁶

Benefit to the local workers

The share of technology professionals out of total employment reached 5.2% in 2022, up from 4.2% in 2017. The demand for technology professionals over the past few years has benefited local workers, with the latter accounting for more than 70% of overall technology jobs and enjoying good wages.¹⁷

Future-readiness: Invest early, fast, long-term, and abroad.

Singapore's transformation journey shows the Government's long-term vision and careful coordination. It can be broadly divided into five phases, starting with the National Computerisation Plan and Civil Service Computerisation Programme in 1980 and is now in the Smart Nation phase.¹ Since 2014, the Smart Nation Singapore has been tasked to coordinate strategic national projects and monitors their progress in transforming the Government, businesses and citizens simultaneously. Due to its early investments in digitally enabled lives, the country was already well-prepared to transact online when a global crisis like Covid-19 hit the country in 2020.¹⁸

Apart from investment in critical infrastructure and digital skills, the Singapore Government also provides tailor-made solutions¹⁹ to develop local businesses and set their employees up for success. For examples,

- **Productivity Solutions Grant (PSG)** offers relevant solutions to enhance business productivity and provides up to 50% funding support to offset solution costs.
- **Germany-Singapore SME Funding programme** enables local startups to partner with German companies on joint innovation projects for R&D, commercialisation and business expansion. For Singapore companies, up to 70% of project costs may be supported. Singapore also has a similar arrangement with India.
- **Local Enterprise and Association Development Trade Fairs & Business Missions Funding** to support enterprises to access overseas markets and defray up to 70% of eligible expenses.
- **Global Ready Talent Programme** nurtures young talents in Singapore enterprises through internships and overseas work opportunities.

¹³ IMDA, [Our Achievements](#), accessed on 24 January 2024.

¹⁴ IMDA and National University of Singapore, [Singapore Digital Economy Report 2023](#), accessed on 24 January 2024, page 1.

¹⁵ Ibid.

¹⁶ World bank, [GDP per capita \(current US\\$\)](#), accessed on 24 January 2024, page 1.

¹⁷ IMDA and National University of Singapore, [Singapore Digital Economy Report 2023](#), accessed on 24 January 2024, page 1.

¹⁸ Youtube, Smart Nation Singapore Channel, [The Story of Our Smart Nation](#), accessed on 24 January 2024.

¹⁹ Enterprise Singapore, [Find the right support for your business](#), accessed on 24 January 2024.

Priority 1b. Invest in essential national digital infrastructure and programs to drive cyber security or lower compliance burden, starting with myGov.

Investment in cyber security through myGov

There should be prioritised investment in essential national infrastructure, starting with the development of myGov to minimise data collection and bolster defences against online criminals while ensuring productivity gains.

Australia has seen tremendous economic losses from the lack of adoption of identity verification solutions and loss of personal data. the Australian Consumer and Competition Commission reported that Australians lost \$224M in payments redirection scams In 2022.²⁰ Worryingly, Scamwatch data shows that small and medium businesses (SMEs) also lost \$13.7M to scams in 2022, a 95 per cent increase compared to the previous year. The biggest contributor to these losses were also payment redirection scams.²¹ As an example, a demonstrable benefit of myGov is that citizens or businesses can thwart tax office impersonation scams because they can now expect the 'tax office' to use myGov to verify the customer and not request for sensitive information over the phone or via a suspicious hyperlink in text messages.

Furthermore, multiple studies estimated that the global digital identity solutions market to be worth about USD 33b by 2025,²² including growth opportunities for service providers in cloud, data security, biometrics, encryption, identity management, and Internet of Things security. The expansion creates further economic and employment opportunities for Australians. The Australian Government's investment in myGov would be complementary to its efforts in modernising the payments system. Another demonstrable benefit is an efficient end-to-end customer experience when accessing government service from logging to making a transaction.

The following Estonia case study shows how its digital identity system exceed its expectations, adding to cyber security and productivity gains by creating access to global technology talents worldwide. Compared to the sizeable savings from scams and potential economic gains, the published \$11.3M funding over two years to respond the findings in the Critical National Infrastructure myGov User Audit and expand myGov functionality in the Mid-Year Economic and Fiscal Outlook 2023-2024 could be considered an underinvestment. This example again shows the opportunity costs for Australia as a result of its underinvestment in its digital identity system.

²⁰ Australian Competition and Consumer Commission, [ACCC calls for united front as scammers steal over \\$3bn from Australians](#), 17 April 2023.

²¹ Ibid.

²² Strategy& (part of the PwC Network), [Digital identity: Opportunities and challenges](#), page 3.

Case study: Estonia and its Digital Identity Infrastructure

Benefit to the Economy and productivity

The Estonia electronic identity system, called e-ID, has existed over 20 years and enables citizens to access virtually all government services and hundreds of private companies services. With almost all public services online, Estonia reportedly saves 1407 years of working time annually.²³ With this success of e-ID, the Estonian government announced plans to establish the first “government start-up”, e-Residency, in 2014. E-Residency allows digital entrepreneurs all over the world to manage their Estonian business from anywhere, entirely online. It has since generated over a billion Euros²⁴ for the economy and attracted tens of thousands of foreign entrepreneurs.²⁵

Benefit to the citizens and businesses

Estonia's e-ID allows its citizens to vote online, submit tax claims, check health records, organise prescriptions and use digital signatures, all with a single ID and secret pin number. It removes the need to remember separate passwords or provide personal documents — such as passports or driver's licences — that can be easily copied and reused.²⁶ This reduces data collection and subsequently, online crimes such as scams and ransomware.

Apart from investing in essential national infrastructure, the AIIA notes that increasing the transparency of the Government's expenditure on cyber security at individual departmental or agency level will lead to greater Department focus and public trust.

Investment in lowering compliance burden through digital reporting

Another important project is to enable digital reporting, lowering compliance burden by equipping regulators with the ability to receive industry information digitally. A digital-by-design platform can, then, be paired with newly developed technologies such as AI for customer service or simple analysis in the first instance, improving efficiencies. Such a platform bodes well as the Government seeks important datasets in policy projects such as climate reporting to project business impact or inform public accordingly. One such platform, [Gprnt](#), has been tested and launched by the Monetary Authority of Singapore to help companies automate their ESG reporting process, and allow end users (such as financial institutions, regulators and large corporates) to access relevant data and timely insights to support their sustainability-related decision making. The platform will support enhanced data access and product innovation by the Environment, Social and Governance community.²⁷

²³ Metadium, [How Estonia is Pioneering the Digital Identity Space](#), 6 June 2019.

²⁴ Emerging Europe, [How 20 years of digital transformation made Estonia a model for dealing with international crises](#), 20 August 2020.

²⁵ ComputerWeekly, [How Estonia is Pioneering the Digital How Estonia's country-as-a-service scheme has attracted tens of thousands of foreign entrepreneursSpace](#), 20 September 2021.

²⁶ Australian Business Corporation News, [Estonians don't need multiple documents to prove their identity — should Australia follow their lead?](#), 29 October 2022, page 1.

²⁷ MAS, [MAS Launches Digital Platform for Seamless ESG Data Collection and Access](#), 16 November 2023.

Priority 2. Formulating an industry-focused policy and funding to cultivate globally competitive companies.

Problem statement 1: Government and industry runs on different time horizons and interests

Following the extensive reviews of multiple policy issues, the AIIA urges the Government to review the Australian industry policy in developing and funding the technology sector. As alluded to in earlier sections, there are systematic differences between the Government and industry, causing differences in expectations. The industry expects agile government responses to address rapid changes in the technology environment but the Government must consult broadly to ensure all stakeholders voices are heard. For this reason, the Government governance structure inevitably slows down the dissemination of funding, to the point that it is ineffective by the time it reaches the industry.

Problem statement 2: Competition with Government supported overseas counterparts while facing limited funding to scale operations

Both the Singapore and Estonia examples showed how their companies could have access to incentives and infrastructure to test new ideas and build their products and sales channels. Meanwhile, Australian world class businesses face difficulties to access funding and have to contend with turning to listing in sizeable stock exchanges overseas and which often, in turn, results in their move overseas and the loss of meaningful jobs.

Recommendation: Industry policy review to drive commercialisation and retained economic benefits

It is for these reasons that the AIIA has been calling for a wholesale industry reform, focusing on commercialisation. We recommend the following but note that the AIIA Whitepapers on '[Growing Globally Competitive Industries](#)' and '[Domestic Capability Framework](#)' contains further industry ideas for consideration.

- The Federal Government commission a comprehensive review of how Australia supports innovation, from ideation through to commercialisation with the objective of creating a national framework for support and recommending how existing gaps can be addressed. This review must necessarily consult with key stakeholders including state governments, industry associations, research institutions and higher education and should cover tax incentives, grants and other government programs that currently support industry-based innovation.
- Government focuses immediate efforts on supporting and enabling industries of strategic importance to not only ensure sovereign and domestic capability, but to also make them globally competitive and act as exemplars for other Australian industries.
- Government works with industry and research organisations to develop mechanisms to foster greater collaboration.
- Government considers an innovative software development tax incentive or grant to support development of innovative software which does not qualify for the R&D Tax Incentive, but has the potential to create innovative products and services that will benefit the Australian economy.

- Government extends the ambit of the proposed patent box regime to patents relating to all sectors of strategic importance.

One key funding idea for consideration is establishing a Federal Digital Innovation Project Fund, modelled on the NSW Government's Digital Restart Fund. Similar to the quantum and AI funds, the digital innovation fund should earmark a portion of this Fund for Australian innovation and SMEs, to enable procurement pathways for Australia's tech start-up and scale-up community. The Government must ensure that the Fund is not 'raided' for business as usual (BAU) ICT funding and only used for transformational and innovative projects.²⁸

Finally, as part of the Australian Public Sector reform, the AIIA recommends a greater budget for senior government executives to visit jurisdictions with best practices to have first-hand experience of what good looks like and a benchmark of where Australia sits in the greater economy competitive landscape. Their crucial understanding will inform policymaking for the technology sector.

Priority 3. Implementing a skills-focused strategy to mitigate disruptions in an ever-changing job market.

The AIIA is pleased to see the consultation on National Skills Passport,²⁹ noting that an approach that enable career switching is important due to the fast-moving nature of the industry. In our 2020 Whitepaper on [Building Australia's Digital Future in a Post-COVID World](#), we support implementing a nationally recognised lifelong learning framework with skills passport to capture digital skills across VET, University and micro-credential certification.³⁰ In line with this, the AIIA also recommends that the current JobKeeper payment scheme be updated with a portion of the current funding allocated to training credits for employers to re-skill their workforce in critical technical skills.

The AIIA understands that paramount importance of a shift from 'career planning' to 'career portfolio'. Diversifying experiences and skills will equip future workforce with greater resilience and adaptability in the ever-changing job market. We are a committed partner of the Australian Government in tech capability uplift. We have prior experience in collaborating with the Queensland Government to deliver a novel microcredential courses that are employer-led. We have again recently been awarded a grant to deliver the course by the Queensland Department of Youth Justice, Employment, Small Business and Training. The AIIA is experienced and keen to work with the Government on digital skills matters.

Conclusion

The AIIA appreciates the opportunity to explain the systematic difficulties, leading to the slow pace of technology adoption for productivity gains. Through our recommendations for a suitable body or mechanism, we hope to create an orderly regulatory, policy and funding environment to implement the multiple tech-focused action plans the Labor Government launched in 2023, regardless of future change in

²⁸ AIIA, [Building Australia's Digital Future in a Post-COVID World](#), 2020.

²⁹ Department of Education, [National Skills Passport Consultation](#), 17 January 2024.

³⁰ AIIA, [Building Australia's Digital Future in a Post-COVID World](#), 2020.

government. Such continuity bodes well for business confidence to invest in new technologies and skills retraining.

Should you have any questions about the content of this submission please contact Ms Siew Lee Seow, General Manager, Policy and Media at siewlee@aiia.com.au.

Yours sincerely
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About the AIIA

The Australian Information Industry Association (AIIA) is Australia's peak representative body and advocacy group for those in the digital ecosystem. We are a not-for-profit organisation to benefit members, which represents around 90% of the over 1 million employed in the tech sector in Australia. Since 1978, the AIIA has pursued activities to stimulate and grow the digital ecosystem, to create a favourable business environment for our members and to contribute to Australia's economic prosperity.

We do this by delivering outstanding member value by:

- providing a strong voice of influence
- building a sense of community through events and education
- enabling a network for collaboration and inspiration; and
- developing compelling content and relevant and interesting information.

We are unique in that we represent the diversity of the tech ecosystem from small and medium businesses, start-ups, universities and digital incubators through to large Australian companies, multinational software and hardware companies, data centres, telecommunications companies and technology consulting companies.