WESTERN AUSTRALIA'S AI STANDOFF: DATA GAPS, WORKFORCE SKEPTICISM, AND THE HIGH COST OF HESITATION

RESEARCH INNOVATION COUNCIL ANZ BRIEF | VOL.15 | CURTIN UNIVERSITY

EXECUTIVE SUMMARY

This research brief explores responsible AI implementation in WA government, focusing on governance, policy and AI's evolving role in public sector innovation. Participants from government, academia and industry examined AI's dual role in optimising internal government processes and enhancing citizen interactions. Key themes included regulatory challenges, AI adoption readiness and domain-specific applications in finance, public safety and education. The discussion highlighted the balance between innovation and risk management, particularly concerning AI-generated content, workforce efficiency and ethical considerations.

FUTURE RESEARCH AND DISCUSSION

Sovereign AI Infrastructure: Addressing Compute Shortages and Data Sovereignty: Australia's limited access to high-performance computing (HPC) resources presents a major challenge for AI adoption in government. Future research should explore strategies to expand sovereign AI infrastructure, including investment in national GPU capacity, partnerships with cloud providers, and policy frameworks ensuring AI processing capability within Australia.

AI Governance and Compliance: Balancing Risk and Innovation: AI adoption in government is hindered by regulatory uncertainty and the absence of structured compliance frameworks. Research should examine approaches to sector-specific AI regulation, risk classification models for government AI deployments, and strategies for publicly trusted assurance.

AI for Government Knowledge Management and Decision Support: Government agencies struggle with fragmented information systems, leading to inefficiencies in decision-making and policy implementation. Future research should focus on AI-powered knowledge management systems that consolidate institutional knowledge, improve inter-agency collaboration, and reduce reliance on long-tenured staff for precedent-based decisions.

AI-Enabled Workforce Transformation and Productivity Gains: Workforce skepticism towards AI's efficiency benefits is a key adoption barrier. Research should investigate AI's role in augmenting, rather than replacing, public sector roles—focusing on training programs, change management strategies, and approaches to embedding AI as a co-pilot.

Cybersecurity and AI: Safeguarding Against Deepfake and Fraud Risks: The rise of AI-driven fraud, such as deepfake impersonations of senior officials, presents significant cybersecurity risks. Future research should explore AI-powered fraud detection mechanisms, identity verification safeguards, and adaptive cybersecurity policies to mitigate AI-enabled threats.

By **Patrick Joy** | Head of Research & Analysis | **Public Sector Network**

KEY THEMES AND INSIGHTS

AI FOR INTERNAL GOVERNMENT OPTIMISATION

Participants identified AI's potential to streamline bureaucratic inefficiencies, particularly in knowledge management, regulatory decision-making and document retrieval. Government agencies generate vast amounts of data, yet accessing relevant insights remains a challenge. AI could help by:

- automating administrative processes, reducing clerical workloads and enhancing internal collaboration
- assisting regulators by analysing historical case patterns to improve policy consistency
- implementing AI-powered chatbots to facilitate information retrieval across government departments.

AI FOR PUBLIC-FACING GOVERNMENT SERVICES

AI has the potential to enhance citizen engagement through automation and personalised interactions. Key areas identified included:

- AI-driven legal assistance to simplify government processes and improve access to legal aid
- AI in healthcare to streamline diagnostics and improve patient care
- AI-powered public service chatbots to guide citizens through complex bureaucratic processes, ensuring equitable access to information.

AI ADOPTION AND GOVERNANCE

Despite AI's potential, its integration in government remains constrained by regulatory uncertainty, workforce resistance, and security concerns. Key barriers include:

- **Regulatory uncertainty**: The absence of a comprehensive AI governance framework in Australia fosters hesitancy in adoption. While the EU AI Act imposes strict regulations, the US is pursuing a more flexible, sector-driven approach.
- **Workforce scepticism and readiness**: Government employees remain hesitant about AI adoption, particularly in areas such as decision-making and automation. Mismatched expectations, limited training, and concerns about reliability contribute to slow uptake of tools like Microsoft's Co-Pilot.
- **Data sovereignty and security**: Hosting AI models within sovereign data centres is critical, yet limited national GPU infrastructure poses a challenge. Ensuring compliance with privacy laws and mitigating risks such as deepfake fraud are ongoing priorities.
- **Ethical concerns and bias risks**: AI models trained on biased datasets risk reinforcing systemic inequalities, particularly in public service delivery and automated decision-making. Clear accountability mechanisms and sector-specific regulations—akin to medical device certifications—are needed.

INNOVATIVE IDEAS AND CASE STUDIES

1. AI IN REGULATORY DECISION-MAKING

Participants highlighted AI's ability to support regulatory agencies by analysing patterns in historical decisions and automating knowledge retention, especially those handling large volumes of environmental assessment reports. AI could improve efficiency by:

- extracting key patterns from prior decisions to ensure consistency
- evaluating the long-term effectiveness of past regulatory measures.

2. AI IN PUBLIC TRANSPORTATION AND SAFETY

Transport agencies discussed AI's role in predictive maintenance and safety enhancements. Current projects include:

- CCTV and behavioural analytics: AI-enabled video analytics can detect potential safety risks and mitigate accidents before they occur.
- Predictive asset management: AI models can forecast infrastructure wear and tear, reducing downtime and costs.

3. AI IN EDUCATION AND WORKFORCE DEVELOPMENT

Education professionals emphasised the importance of AI literacy among teachers and students. AI-driven learning platforms can:

- provide personalised education pathways
- support neurodivergent students with interactive learning assistants
- reduce teacher workload by automating administrative tasks such as lesson planning.

STRATEGIC OUTCOMES AND RECOMMENDATIONS

IMMEDIATE ACTIONS

- Conduct AI adoption readiness assessments across government agencies to identify gaps and training needs.
- Establish AI governance committees to oversee responsible AI integration.
- Develop AI-assisted public service portals to improve accessibility and efficiency.

MEDIUM-TERM GOALS

- Implement AI-driven internal knowledge management systems to retain institutional expertise.
- Create AI literacy programs for public servants to enhance adoption and mitigate misinformation risks.
- Encourage AI-enabled co-production in public services, allowing citizens to contribute to government decision-making.

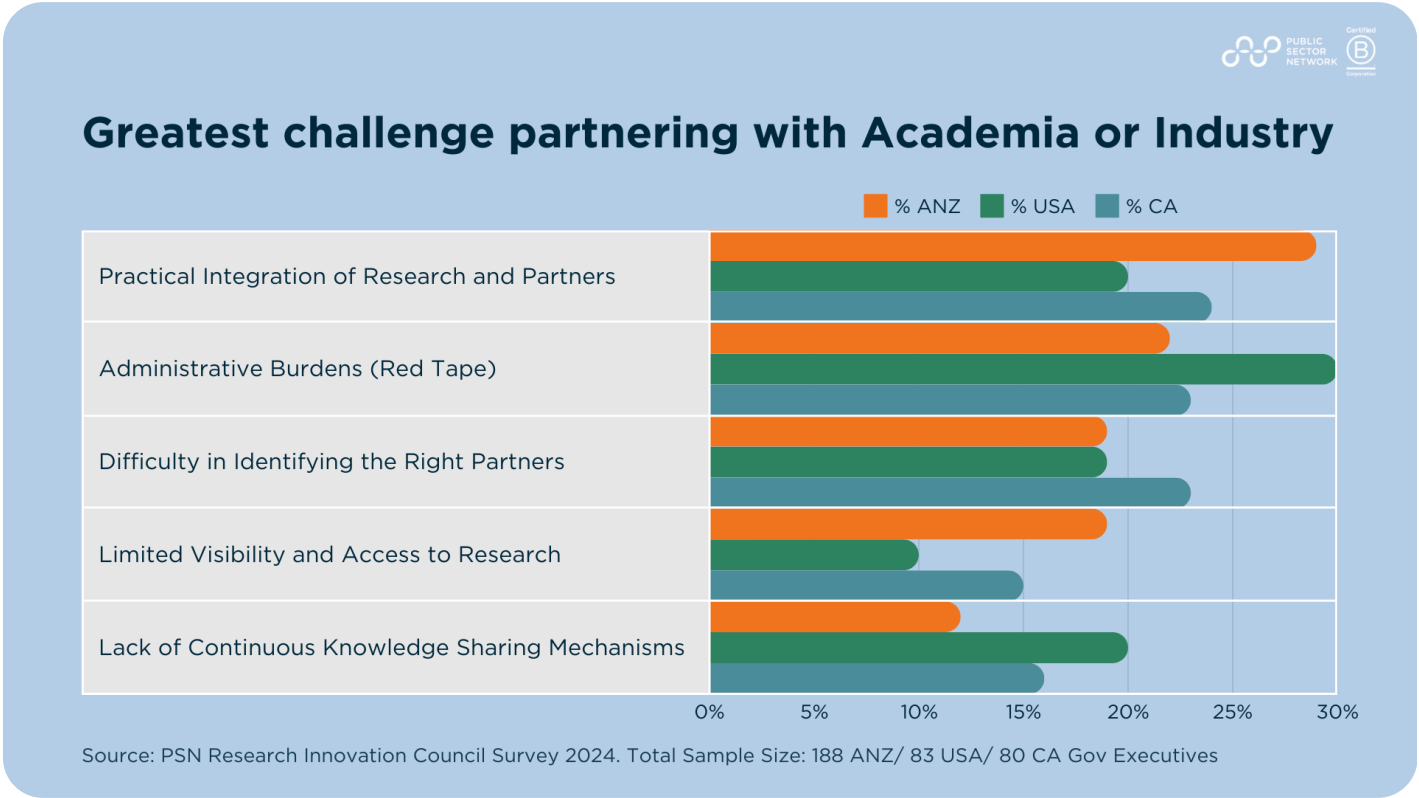
LONG-TERM VISION

- Invest in sovereign AI infrastructure, including domestic data centres and GPU capabilities.
- Promote AI research collaborations between academia, industry and government to address evolving challenges.

ABOUT THE RESEARCH INNOVATION COUNCIL

Connecting government, industry and academia: we've been able to engineer a new program antithetical to the classical red tape, administration, and risk-aversion that impedes innovation.

Our program offers senior executives a unique opportunity to gather monthly for PSN-facilitated roundtable sessions with colleagues, academics, and technologists. We run the program at no cost to government executives or academics, and provide attendees a private online group on our global insights exchange platform, access to research briefs, and expert engagement with PSN analysts and facilitators.



ABOUT PUBLIC SECTOR NETWORK

Public Sector Network is a research company that represents public sector professionals across Australia, Canada, New Zealand, and the USA. It develops roundtables, seminars, and conferences to suit current areas of interest to government agencies and their suppliers.

PSN's growing community spans across federal, state, and local government departments, healthcare, and education, allowing members to share information, access the latest in government innovation, and engage with other like-minded individuals on a secure and closed-door network.

AUSTRALIA / NEW ZEALAND
P +61 2 9057 9070
E INFO@PUBLICSECTORNETWORK.COM.AU

USA
P +1 (647) 969 4509
E HELLO@PUBLICSECTORNETWORK.COM

CANADA
P +1 (647) 459 8904
E CONTACT@PUBLICSECTORNETWORK.CO

Public Sector Network (Australia) Pty Ltd
ABN - 46 617 870 872 20-40
Meagher Street, Chippendale, Sydney NSW 2008, Australia