AGENTIC AI IN SOUTH AUSTRALIA: **BUILDING CONFIDENCE IN CITIZEN-FACING APPLICATIONS**

RESEARCH INNOVATION COUNCIL ANZ BRIEF | VOL.13 | TORRENS UNIVERSITY AUSTRALIA

EXECUTIVE SUMMARY

The South Australian Research Innovation Council, hosted by Torrens University Australia, convened a session to explore the capabilities and challenges of implementing responsible AI in the public sector. Key participants included representatives from government agencies, industry leaders, and academia, offering diverse perspectives on AI's transformative potential and associated risks.

The discussions highlighted the urgent need for robust data frameworks, workforce upskilling, and ethical AI governance. Participants stressed that AI adoption in the public sector must balance innovation with equity and transparency, ensuring public trust while addressing critical challenges like systemic bias, data quality, and workforce readiness. Concrete examples, such as AI applications in health diagnostics, child protection, and urban planning, illustrated both opportunities and barriers to implementation. Actionable outcomes centered on co-designing policy frameworks, enhancing public and private sector collaboration, and prioritizing AI literacy and data governance as foundational pillars for successful AI integration.

This session underscored the importance of moving beyond theoretical discussions to practical implementations, setting a precedent for a responsible and collaborative approach to AI in South Australia.

FUTURE RESEARCH AND DISCUSSION

Data management and data science capabilities: The discussion highlighted the need for improved data management, data quality, and data science resources within government agencies to effectively leverage AI.

AI governance and ethics frameworks: The group discussed the importance of developing comprehensive AI governance, regulation, and ethical frameworks to guide responsible AI adoption.

AI skills and workforce readiness: Upskilling the existing workforce and preparing the future workforce for AI-enabled roles emerged as a key priority.

AI use case development and proof-of-concepts: The group emphasised the value of focusing on specific AI use cases and running proof-of-concept projects to demonstrate the benefits and learnings.

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

KEY THEMES AND INSIGHTS

BALANCING INNOVATION

AI's rapid development poses significant governance challenges, particularly in ensuring ethical use and maintaining public trust. Participants emphasised the necessity of:

- **Transparent Decision-Making:** Clear guidelines on how AI-driven decisions are made, particularly in sensitive areas like child protection and health care.
- **Example:** AI systems for child protection require robust frameworks to prevent perpetuating systemic biases while supporting clinical decision-making.
- **Ethical AI Frameworks:** Establishing principles to mitigate risks, such as biases in training data, and ensuring fairness in AI applications.
- **Case Study:** U.S. research highlighting racial discrimination in AI language models was discussed as a cautionary example.

DATA AS A FOUNDATIONAL ASSET

Data quality and accessibility emerged as critical enablers of effective AI implementation. Participants called for:

- **Enhanced Data Governance:** Investment in centralised data management systems to improve interoperability and reduce redundancy.
- **Example:** SA health data offers potential for predictive modeling but lacks the necessary infrastructure for real-time analysis.
- **Addressing Data Bias:** Ensuring data sets represent diverse populations to avoid reinforcing inequalities.

WORKFORCE CAPABILITY AND AI LITERACY

AI adoption requires a workforce capable of leveraging its potential responsibly. Key recommendations included:

- **Upskilling Public Sector Employees:** Embedding AI training in education systems and professional development programs.
- **Example:** Initiatives like Torrens University's integration of responsible AI in its curriculum were highlighted as exemplary.
- **AI Awareness for Citizens:** Engaging the public to demystify AI and build confidence in government-led AI initiatives.

COLLABORATIVE POLICY DEVELOPMENT

Participants stressed the need for co-designed policies that incorporate input from government, industry, and academia:

- **Unified Frameworks:** Harmonising AI governance across jurisdictions to streamline implementation.
- **Example:** The AI cabinet submission process in South Australia aims to address gaps and align strategies across sectors.
- **Dynamic Policy Structures:** Flexible guidelines that can adapt to AI's evolving landscape.

INNOVATIVE IDEAS AND CASE STUDIES

1. AI IN HEALTH DIAGNOSTICS

- **Application:** Machine learning for faster diagnostic workflows, reducing delays in care.
  - Example: AI models designed to analyse thousands of health documents, cutting processing times from years to months.
- **Challenge:** Clinician resistance to AI recommendations, requiring trust-building measures and validation frameworks.

2. PREDICTIVE MODELS IN CHILD PROTECTION

- **Application:** Risk assessment models using AI to predict families at risk of prolonged child protection involvement.
- **Outcome:** Improved resource allocation and targeted interventions.
- **Barrier:** Limited data quality and systemic biases that could impact decision accuracy.

3. URBAN PLANNING AND COMPLIANCE

- **Application:** AI-powered decision-making tools for housing approvals and compliance checks.
- **Example:** Using computer vision to assess urban development proposals and ensure adherence to regulations.
- **Impact:** Enhanced efficiency and accuracy in regulatory processes.

STRATEGIC OUTCOMES AND RECOMMENDATIONS

IMMEDIATE ACTIONS

- Launch cross-agency working groups to identify and prioritise AI use cases.
- Develop AI literacy programs for public sector employees.

MEDIUM-TERM GOALS

- Invest in centralised data governance infrastructure to support AI initiatives.
- Establish South Australia-specific ethical AI guidelines and validation frameworks.

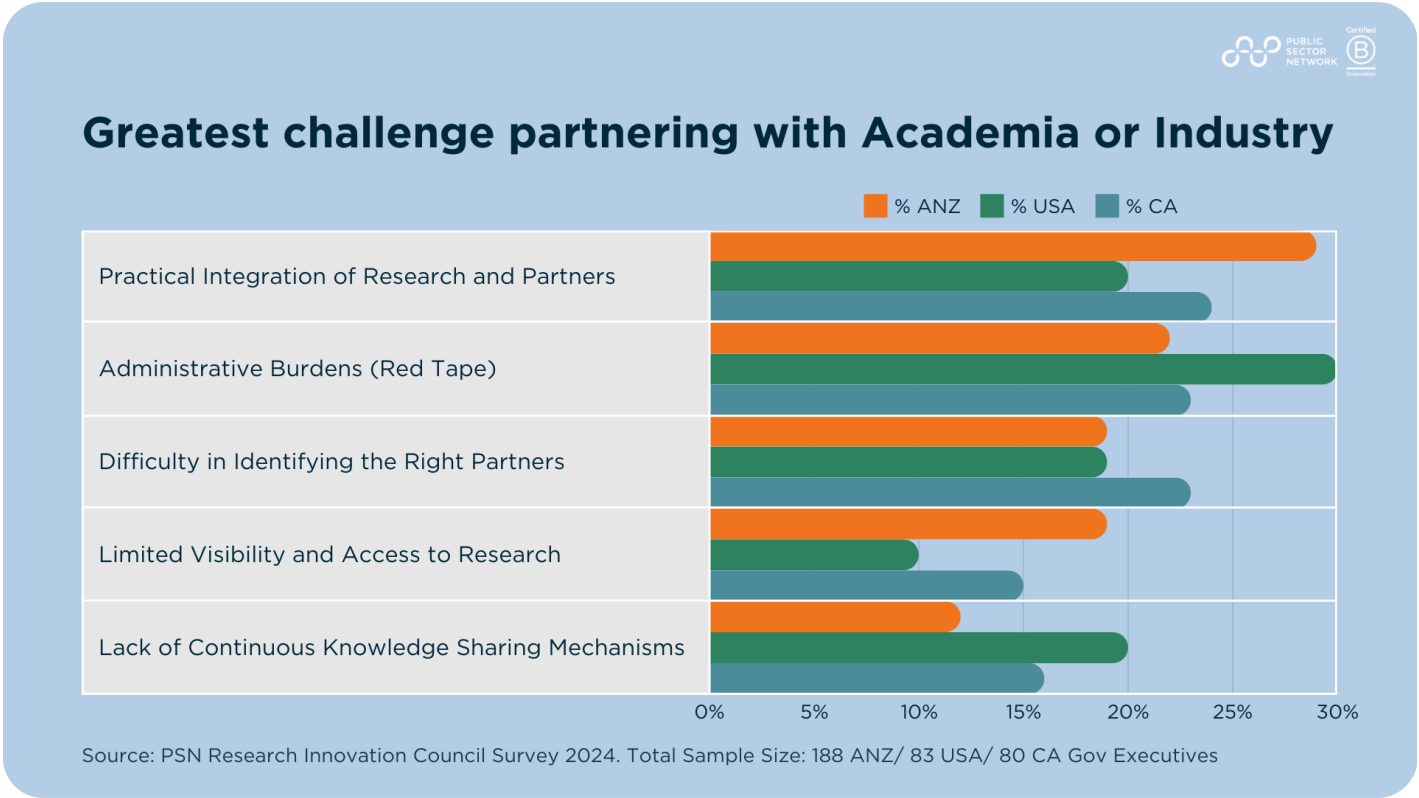
LONG-TERM VISION

- Create a South Australian AI Innovation Hub to foster collaboration between government, industry, and academia.
- Align AI strategies with national and global standards to ensure competitiveness and scalability.

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.

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