THE DATA WE HAVE, THE INSIGHT WE DON'T: VICTORIA'S DATA DEBT, TRUST DEFICITS AND THE RACE TO REAL-WORLD AI

RESEARCH INNOVATION COUNCIL ANZ BRIEF | VOL.16

EXECUTIVE SUMMARY

Victorian public sector organisations are at a pivotal moment in leveraging data and AI to improve service delivery, detect risk, and build future-ready institutions. While many agencies report early-stage data maturity, strong progress is being made in structuring data assets, creating trustworthy pipelines, and exploring practical use cases. The conversation highlighted five critical themes: the importance of foundational data governance, the dual imperative of productivity and public trust, emerging collaboration models with universities, the challenge of scaling innovation responsibly, and the growing gap between AI hype and implementation readiness.

FUTURE RESEARCH AND DISCUSSION

Data stewardship and trust frameworks: Agencies are seeking to increase data sharing while maintaining strong governance. Further discussion is needed on developing practical models for data custodianship, metadata standards, and secure access. Roundtables could examine approaches that build interagency trust while managing privacy risks in high-sensitivity environments.

Translating AI use cases into scalable government products: Agencies are trialling AI applications, but translating pilots into operational tools remains challenging. Future roundtables could explore how AI products—such as document intelligence, case triage and fraud detection—are being developed, evaluated and scaled in the public sector. Sessions could also examine shared evaluation methods and cross-sector collaboration.

Designing human-centred AI for public services: AI should enhance—not replace—human service delivery. Forums could focus on responsible AI design that supports frontline staff, improves customer service outcomes, and reflects ethical and inclusion standards. Examples include augmenting call centre teams or case officers with intelligent information retrieval tools.

Integrating AI with existing systems and platforms: Legacy systems and fragmented platforms remain a barrier to AI adoption. Roundtables could explore how agencies are embedding AI functionality into existing enterprise tools—without compromising data quality or governance.

Improving data exchange and cross-agency collaboration: Secure data exchange is essential to improving government services. Discussions could focus on enabling real-time, standards-based data sharing across departments through APIs, common data models, and governance frameworks. This includes understanding value cases and legal considerations.

Assessing AI readiness and organisational maturity: Public sector agencies are at different stages of AI adoption. Future working groups could co-design practical maturity models to assess readiness in areas such as governance, data quality, workforce capability and ethical implementation. These could support consistent progress tracking across jurisdictions.

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

KEY THEMES AND INSIGHTS

BUILDING A DATA FOUNDATION: FROM SILOS TO SYSTEMS THINKING

Organisations across the Victorian public sector are mapping, cleansing, and restructuring their data environments. Many participants reported surprise at the extent of fragmented reporting, legacy repositories, and inconsistencies in data definitions. In one case, a small agency discovered over 190 bespoke reports and 42 active datasets after an internal audit—far exceeding initial assumptions. This drove a push toward standardised reporting dashboards, data dictionaries, and metadata registries.

Agencies emphasised the need to decouple data domains from system ownership and instead model them around core services or business functions. This shift was seen as key to future-proofing platforms and enabling reusability across analytics, AI, and reporting functions.

PUBLIC TRUST AND PRIVACY AS STRATEGIC ANCHORS

Multiple participants reinforced that success with AI depends on community trust, especially in data-rich domains like identity, taxation, mobility, and justice. The public sector, they noted, holds a disproportionate level of personal and sensitive information. Many use cases—for fraud detection, identity verification, or service tailoring—depend on this data being accurate, appropriately governed, and used in line with legal and ethical expectations.

To balance utility and privacy, participants emphasised data minimisation, selective sharing, and use-case-specific agreements. Some are exploring differential access models based on roles, trust levels, and specific AI applications. One organisation stressed, “Don’t keep what you don’t need,” as both a cyber resilience and ethical design principle.

AI IS HERE, BUT CAPABILITIES ARE UNEVEN

While general interest in AI is high, few agencies described themselves as fully AI-mature. A common refrain was: “Everyone wants to do AI, but few know where to start.” A small number of teams are implementing machine learning or large language models (LLMs) for summarisation, chat interfaces, or recommendation engines—typically within narrowly defined domains.

There was broad consensus that practical, domain-specific AI—applied to fraud detection, eligibility verification, and knowledge search—offers the most immediate value. However, these benefits depend on clean, contextualised data, clear outcome definitions, and risk-managed AI governance.

WORKFORCE, TALENT, AND ETHICAL AUTOMATION

As AI and analytics mature, participants raised concerns about both entry-level and leadership capability gaps. Many saw student placements and academic partnerships as a “low-cost on-ramp” for experimentation and recruitment. Others raised deeper concerns about the ethical implications of productivity gains that result in workforce reductions, particularly in economically sensitive regions.

There was widespread support for “augmenting, not replacing” human expertise. Several organisations are exploring copilots or assistant-style AI to support case workers and service agents. This was described as enabling “better focus on complex, high-value work” rather than full automation.

KEY THEMES AND INSIGHTS

COLLABORATION, SHARING, AND CROSS-GOVERNMENT INNOVATION

Data sharing remains inconsistent across government. Participants identified metadata discovery, shared API layers, and agreed definitions as key enablers for reuse and collaboration. Technical infrastructure alone was not sufficient; several contributors noted that "data sharing is a change management problem, not just a technical one."

Risk aversion, privacy obligations, and lack of incentives were identified as systemic blockers. However, success stories in fraud detection, compliance enforcement, and federated digital identity highlighted the potential of coordinated efforts. Pilot use cases, "safe to fail" sandboxes, and executive sponsorship were seen as critical ingredients.

CHALLENGES AND BARRIERS

- **Data Sharing Constraints**: Agencies cited unclear governance, lack of role clarity, and the time burden of data-sharing agreements as barriers. Even when legal, sharing was often not prioritised.
- **Metadata and Standards Gaps**: The absence of discoverable metadata and shared vocabulary makes collaboration inefficient. A push for domain-based modelling and common definitions was seen as essential.
- **Perceived Risk vs. Real Risk**: Fear of breaches or misuse often overrides the perceived benefits of sharing—even when de-identification or secure environments are used. This results in underutilised datasets.
- **Leadership Literacy and Buy-In**: Some data leaders reported low levels of executive understanding about what AI can and cannot do, leading to unrealistic expectations or reluctance to invest.
- **Ethical and Workforce Tensions**: Productivity gains often come with complex ethical questions about job design, regional employment, and what constitutes an "entry-level" role in a digital government.

INNOVATIVE IDEAS AND CASE STUDIES

- **Unstructured Data Unlocking**: Agencies are experimenting with tools to extract insight from meeting minutes, customer service notes, and scanned documents. Approaches ranged from open-source LLMs to private instance deployments, depending on sensitivity.
- **Low-Risk AI Prototyping**: Universities demonstrated examples of conversational agents, document summarisation, and retrieval-augmented generation systems used in public settings like open days to demonstrate risks and utility of AI.
- **Fraud Detection via Cross-Domain Data**: One agency successfully linked licensing, advertising, and enforcement data to detect unlicensed activity. The model was held up as a replicable example of predictive analytics with regulatory impact.
- **Student Partnerships as Capability Accelerators**: Student placement programs, ranging from undergraduate computing projects to Master of AI internships, are proving effective in delivering lightweight prototypes while building the public sector pipeline.

STRATEGIC OUTCOMES AND RECOMMENDATIONS

IMMEDIATE ACTIONS

- Conduct data maturity assessments using accessible tools to map current gaps.
- Create internal metadata registries for existing datasets, enabling discovery before full data sharing.
- Partner with universities on student projects and research sprints to prototype AI use cases in low-risk environments.
- Launch safe-to-fail AI pilots, such as internal copilots or summarisation tools.
- Clarify roles for data stewardship, ownership, and accountability across functions.

MEDIUM-TERM GOALS

- Develop AI policies that reflect specific operational contexts, with safeguards around hallucination, data leakage, and model transparency.
- Standardise domain-based data models to increase reusability across use cases and systems.
- Increase leadership capability through executive education in data, analytics, and AI.
- Embed ethics-by-design in project scoping and procurement processes.
- Build layered access models to balance security with utility.

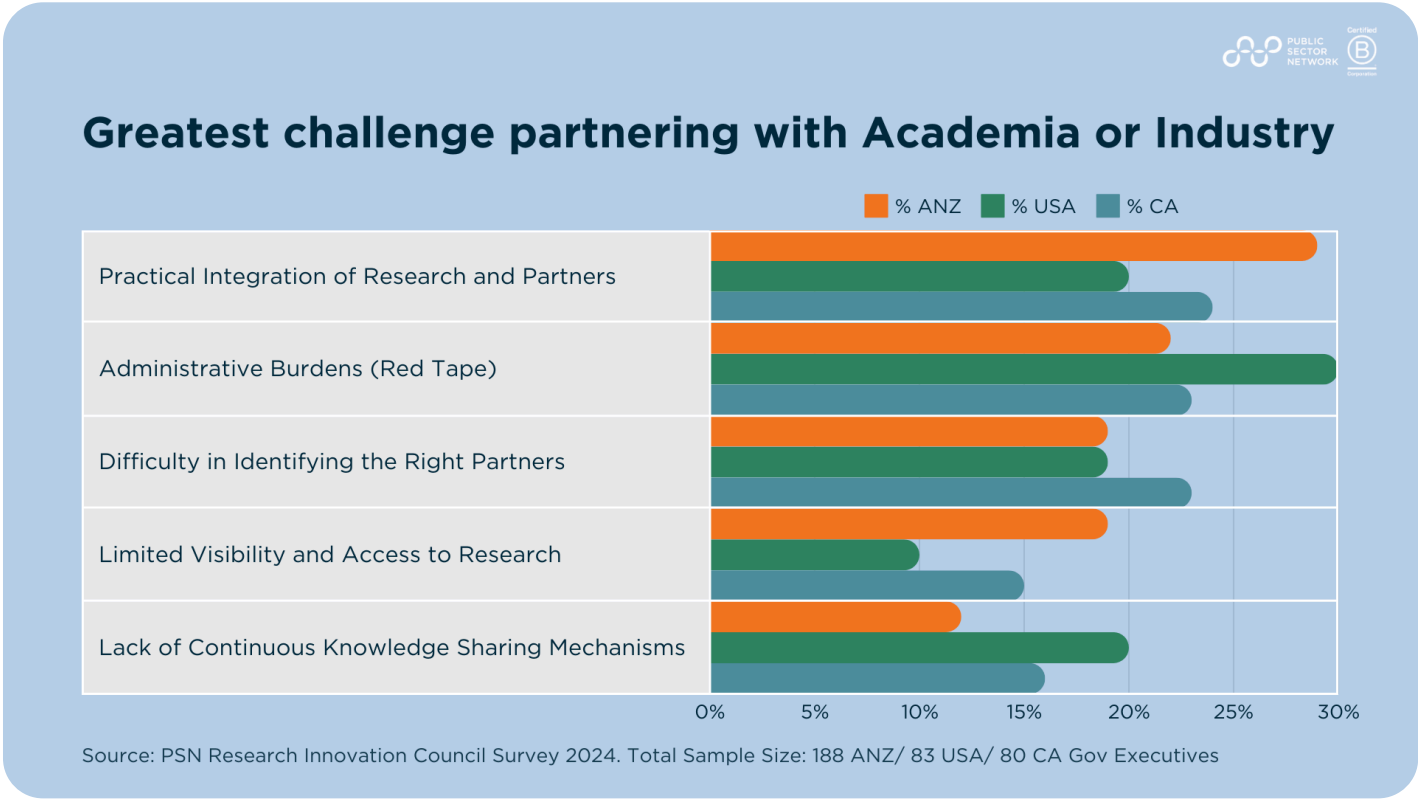
LONG-TERM VISION

- Transition from siloed reports to intelligence ecosystems, where structured and unstructured data can be used to anticipate needs and support decision-making.
- Create shared data infrastructure and APIs with clear governance across agencies.
- Foster public trust through transparency, citizen engagement, and demonstrable safeguards.
- Establish sovereign AI capability through long-term partnerships, secure environments, and ethical frameworks for generative models.

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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