

COMMISSIONED BY

SMDIA

RESEARCHED BY

Driving Data in the APAC Public Sector: Balancing Governance and Innovation



Catalyst

In May 2023, Qlik commissioned Omdia to undertake a survey of senior executives with data management responsibilities within the public sectors of Australia, India, and Singapore.

This was built on a comparable survey undertaken in 2021, to identify trends in public sector data maturity in the Asia Pacific region.





Regional Differences

There is remarkable consistency in most areas of public sector data management with similar challenges across the region.

However, while this report is a regional assessment, it is important to identify some notable differences between countries.

AUSTRALIA EMBRACES DATA BUT STRUGGLES WITH UNDERSTANDING

In the coming year, Australian organisations will prioritise data-driven insights and service delivery (60%), data maturity assessment (57%), and data strategy development (50%). While 94% have clear data objectives and 98% enforce data governance, 53% admit limited understanding, necessitating ongoing promotion and education. Organisations are actively involved in regulation and standards with only 9% abstaining from standard-setting bodies. Yet, 13% find their public data regulations unfit, demanding constant vigilance.

INDIA HAS CLEAR OBJECTIVES BUT COMMUNICATION LAGS

Over 90% of regional organisations indicate they have defined clear roles and objectives for data, but over half (54%) indicate that these are not widely understood. This is even more pronounced for India – where 72% believe data goals and objectives are not widely understood and there is a need to promote the criticality of data to delivery.

Indian organisations identified different data priorities for the coming 12 months with developing a data strategy (65%), implementing a governance board (55%), and creating an enterprise data architecture (55%) being the top 3, closely followed by developing and deploying analytics tools (51%).

Multi-cloud deployments are becoming the norm across the region; India is further ahead in this respect with only 2% of organisations indicating they use only one cloud platform.

SINGAPORE LOOKS TO RAISE DATA GOVERNANCE **AND MATURITY**

In terms of understanding data strategy, Singapore is ahead of the regional average, with nearly half (49%) of the organisations reporting their strategy is widely distributed and understood. However, even in Singapore, 15% don't have a data strategy and 7% have no data governance practises.

A similar picture emerges for data-sharing, where 82% indicate they have data-sharing and open-data publishing arrangements, but 13% rely on legacy approaches and a further 5% have no data-sharing or open-data arrangements.

Over the next 12 months, Singaporean organisations will prioritise conducting a data maturity assessment (56%) and using data insights to drive decision making and citizen service delivery (52%). This confirms the importance of data to most organisations, but those currently lagging must lift their maturity.





Key Findings

GOVERNANCE FOCUS CAN STIFLE INNOVATION

There is increased emphasis on governance reflected in Chief Data Officer (CDO) reporting lines and resource allocations. A third of agencies (33%) use a governance title for their senior data executive, compared to 15% in 2021. Furthermore, 55% of data executives report through a security, risk, or compliance channel, compared to 21% in 2021.

It is to be expected that public sector organisations are 'governance focussed' but being too cautious can stifle innovation.

⊘ RECOMMENDATION:

Ensuring appropriate governance is 'baked into' procedures, policies and toolsets will ensure agencies remain agile.

VALUE OF DATA IS UNDERSTOOD, BUT STRUGGLE PERSISTS **IN DISSEMINATION**

While there is universal high-level acceptance of the importance of data in delivering outcomes, agencies face challenges in disseminating their strategy.

Over 90% of organisations have a clear data strategy with defined roles and objectives. However, just over half (54%) indicate these are not widely understood. There is significant variation between countries with 49% of Singaporean organisations believing goals and objectives are widely understood, 41% for Australia and falling to 20% for India.

Given the criticality of embedding data management and analysis in daily operations, this risks undermining delivery.

⊘ RECOMMENDATION:

Data management policies and procedures should be embedded into analytical systems to assist dissemination through a 'learning by doing' approach.

ORGANISATIONS VALUE ANALYTICS BUT SKIMP ON CAPABILITIES

Most organisations have identified the importance of analytics for delivery but have better resourcing for governance.

This is consistent with a culture that sees data as a 'risk to be managed' rather than an 'opportunity to be exploited'. CDOs are more likely to have the organisational capabilities for governance activities (77%) than either analytics (63%) or data literacy initiatives (57%).

© RECOMMENDATION:

Given the challenges of constrained budgets, organisations need to ensure that analytics capabilities are widely available, easy to use, and integrated into daily operations.







AGENCIES CRAVE DATA-SHARING, YET FEW INCORPORATE IT INTO SERVICE DEVELOPMENT

Organisations understand the benefits of data sharing, but only 35% actively incorporate this into service development, reflecting the strong governance and data-protection emphasis.

THE USE OF MULTIPLE PUBLIC CLOUDS FOR DATA STORAGE **IS UBIQUITOUS**

The use of private cloud and on-premises repositories has substantially reduced as agencies embrace multicloud deployments.

O **RECOMMENDATION:**

Given the benefits of data-sharing and open-data publication, connecting, integrating, and publishing needs to be as frictionless as possible.

O **RECOMMENDATION:**

As more agencies use multiple public clouds, integration and inter-operation are key capabilities.

APAC ORGANISATIONS HAVE MATURED THEIR DATA MANAGEMENT CULTURE

There has been a significant increase in organisational data governance, while data management and analytics capabilities have remained consistent.

O **RECOMMENDATION**:

Now that governance regimes reflect public sector culture, resources need to be targeted at lifting data awareness and literacy.







The Role of the Chief Data Officer (CDO)

The last two years have seen a maturation and consolidation of the senior executive data management role in public sector organisations. CDOs surveyed have been with their organisations for an average 8 years and in the role for 3 years. This implies internal recruitment, or development of existing staff.

PUBLIC SECTOR CDOS ARE GOVERNANCE DRIVEN

Whilst most organisations stick to 'traditional' titles, a third of agencies use a governance-related designation, underscoring its importance to the public sector.



SOURCE: OMDIA

Figure 1: What best describes your title/role?







Since 2021, there has been a notable surge in governance-focused approaches. Back then, a mere 15% held a 'governance' title, but now public sector organisations view data predominantly through the lens of governance.

Approximately 55% have the CDO function report through risk/governance and compliance channels, such as risk or security – compared to 21% through similar governance channels in 2021.

In 2021, there was considerable ambiguity as to how to execute the CDO role, with only 55% responding that they understood their role, and how to deliver against it.

In 2023, 78% have a clear role description that is widely disseminated.

This is reinforced by the fact that 84% report their role is fully or generally supported within their organisation, with only 16% reporting their role to be unsupported.

Figure 2: Who does your role report to?

Head of risk / compliance / governance

Chief Executive Officer (CEO) / Head

Chief Information Officer (CIO) / Chief Technology Officer (CTO)

Chief Information Security Officer (CISO) / Chief Security Officer (CSO)

SOURCE: OMDIA



NICMC





Figure 3: Does your role have a clear description and is this widely recognised?



SOURCE: OMDIA

Figure 4: What is your perceived understanding of your role?



SOURCE: OMDIA







Data Strategy

PROGRESS MADE, BUT UNDERSTANDING LAGS

A similar picture emerges for organisational data strategy, with only a very small percentage (10%) reporting that their organisation does not have a data strategy. Whilst this is positive, more than half of respondents (53%) indicate this is not widely distributed or understood so more work is required.

Over 90% of organisations have governance frameworks in place - although over half report they are still maturing these. This represents a substantial increase in maturity over 2021, where 62% reported that they had no governance body.

Is there a clear data strategy within your organisation?

37%

Yes

We have clear goals and and these are widely dis understood across the c

How does your organisation approach data governance?

45%

Yes

We have a clear data gov framework in place that is and procedures for data privacy, and ethics.

	53%	109
d objectives, stributed and organisation.	Yes We have clear goals and objectives, but these are not widely distributed or understood across the organisation.	N My organisatic does not have clear data strateg

	52%	3
vernance	Yes	Ny organisation h
includes policies	We have some policies and procedures in	not adopted any da
a quality, security,	place but are still maturing our framework.	governance practice









Over 70% of organisations have identified the importance of analytics for delivery. However, when asked about organisational capabilities, organisations have better This is consistent with the 2021 survey that confirmed the benefits available by resourcing for governance (77% agree or strongly agree) than they do for analytics using analytics to support delivery. (63%) or data literacy (57%). Ensuring that constrained resources are targeted at delivery capabilities remains one of the key challenges for CDOs.

Figure 5: What is your organisations approach to data analytics?



SOURCE: OMDIA

Figure 6: Rate your level of agreement with the following statement: My organisation has the appropriate capabilities to use data to develop and deliver policy and/or services



SOURCE: OMDIA

60%







GAPS EXIST BETWEEN DATA SHARING ASPIRATIONS AND REALITY

Nearly all (96%) organisations recognise the need for data sharing and open data initiatives, but only 36% include data sharing in their service design. 50% have loose arrangements and 10% still rely on legacy import/export.

Given the efficiencies in real-time data sharing and the synergies possible when datasets are published, identifying low-friction publication mechanisms would deliver major benefits.



Figure 7: How will you share data with other agencies, organisations, and the public?

SOURCE: OMDIA

DATA STRATEGY, DATA MATURITY AND DATA INSIGHT ARE CURRENT PRIORITIES

- The top 3 activities for the coming year are to develop a data strategy (55%), use data for insight (54%), and conduct a data maturity assessment (51%). Lower priorities are decommissioning legacy technologies (35%) and publishing open data sets (32%).
- In 2021, priorities were to improve office's data quality (51%), introduce new technologies (49%), and achieve data strategy (42%). We see a maturing away from mechanical technology deployments to focus on twin priorities of governance and program delivery, with data dissemination and legacy updates becoming lower priorities.

Figure 8: In the next 12 months, what will be the key focus areas for your team?

NOTE: RESPONDENTS REQUESTED TO SELECT ALL THAT APPLY **SOURCE: OMDIA**

> **NICMC**









Cloud Adoption

ADOPTION REPLACES RELUCTANCE AS ORGANISATIONS EMBRACE CLOUD

A few years ago, there was widespread reluctance to use public cloud storage. Its use is now pervasive, with less than 1% of organisations reporting they are not using public cloud for organisational data storage. In addition, few organisations make significant use of private cloud and 45% of organisations have no onpremises repositories.

Not only has the adoption of public cloud become the norm but agencies are using multiple public clouds in a multi-cloud arrangement.

With 95% of organisations already using or planning to use more than one cloud platform, agencies will need to develop key analytics and reporting competencies that work across multiple cloud repositories.

Figure 9: Where is your organisational data stored? 17% Data in public cloud 5% 12% Data in private cloud 12% Data stored in on-premises repositories 10% 20% 0% Less than 20% 20-39% 60-79% 40-59% **SOURCE: OMDIA** What is your cloud arrangement or strategy? 5%

We use only one

Cloud platform.









There are still significant barriers to migrating data to the public cloud, including This includes an evaporation of concerns about jurisdictional and data sovereignty, which cloud vendors have effectively addressed by offering in-country data hosting security, skills shortages, and the effort required to migrate. However, as public cloud models become better understood, we are seeing a significant shift in perceptions. and 'community' clouds tailored for specific sectors.



Figure 10: What have been your three most significant barriers to using public cloud?

SOURCE: OMDIA



:

65%

SECURITY AND PRIVACY TOP OF MIND AS PROACTIVE MONITORING PREVAILS

Nearly all (97%) organisations are monitoring security and privacy issues. 67% of organisations are proactive, with government and health organisations being more proactive than education.

How does your organisation deal with public data privacy and security issues?

67%

We anticipate data privacy and security issues improve our responses.

Almost - regulations and standards are being developed and implemented to govern the collection, use, sharing, privacy, and security of public data

Yes - we have fit for purpose regulation and standards that govern the collection, use, sharing, privacy, and security of

Barely - existing regulations and standards that govern the collection, use, sharing, privacy, and security of public data are not fit for purpose

No - we do not have any regulation or standards that govern the collection, use, sharing, privacy, and security of public data

SOURCE: OMDIA



Figure 11: Are national regulations and standards around public data collection, use, sharing, privacy, and security sufficient for your organisations operating environment?







50%





AN OMDIA EBOOK | DRIVING DATA IN THE APAC PUBLIC SECTOR: BALANCING GOVERNANCE AND INNOVATION



Is your organisation an active contributor to national regulations?

32%

Yes

We participate regularly i reviews and reforms on i and standards around p collection, use, sharing, p security.

	56%	129
y in policy n regulations public data , privacy, and	Yes We occasionally participate in policy reviews and reforms on regulations and standards around public data collection, use, sharing, privacy, and security.	N We do not participat in policy reviews ar reforms on regulations ar standards around publ data collection, use, sharin privacy, and securit







DRIVING DATA IN THE APAC PUBLIC SECTOR: BALANCING GOVERNANCE AND INNOVATION AN OMDIA EBOOK

Key Takeaways



Public sector organisations should ensure their policy and technical environments support frictionless data-sharing and publishing to simplify service development and maximise the return on investment in obtaining and maintaining data.



Ensuring data value is widely understood and supported by toolsets that facilitate 'invisible' governance will ensure service benefits are realised throughout public sector organisations.



The increasing use of multi-cloud, multirepository environments in the public sector requires organisational toolsets that easily combine, load, visualise, and explore data wherever it resides, to identify hidden relationships and foster insights.





AN OMDIA EBOOK | DRIVING DATA IN THE APAC PUBLIC SECTOR: BALANCING GOVERNANCE AND INNOVATION

Appendix

Qlik ϿϺϽΙΛ





About

Qlik

Qlik, with the recent addition of Talend, delivers an industry-leading portfolio of solutions for data integration, data quality and analytics. This includes advancements in real-time data, AI, ML and automation. The most successful organisations are investing in data to make sense of the increasing amounts and varieties of data from diverse sources. The challenge is to effectively integrate, analyse and act on the data while ensuring its trustworthiness. With more than 40,000 active customers in over 100 countries, Qlik's solutions work with virtually any data source, target, architecture or methodology, to ensure customers have the data they need, whenever they need it.

- W Qlik.com
- **V** Qlik
- in Qlik

Omdia

Omdia is a global technology research powerhouse, established following the merger of the research division of Informa Tech (Ovum, Heavy Reading, and Tractica) and the acquired IHS Markit technology research portfolio*.

We combine the expertise of more than 400 analysts across the entire technology spectrum, covering 150 markets. We publish over 3,000 research reports annually, reaching more than 14,000 subscribers, and cover thousands of technology, media, and telecommunications companies.

Our exhaustive intelligence and deep technology expertise enable us to uncover actionable insights that help our customers connect the dots in today's constantly evolving technology environment and empower them to improve their businesses - today and tomorrow.

*The majority of IHS Markit technology research products and solutions were acquired by Informa in August 2019 and are now part of Omdia.





Methodology

Survey Date May 2023

Respondents: 326

Countries: Australia, India, Singapore

Interviewees: Senior managers with executive responsibility for data management and/or governance within their organisation. (Chief Data Officer or equivalent)

Sectors: Public Sector including, Local, State, Federal/National Government, Health, and Education.

Methodology: The survey was commissioned by Qlik and performed independently by Omdia. Omdia deployed a "double-blind" survey approach; the respondent did not know who was sponsoring the study and Omdia did not receive any personally identifiable information about the respondent.

Author

Al Blake



Principal Analyst and **Executive Advisor** Enterprise IT customersuccess@omdia.com







The Omdia team of 400+ analysts and consultants are located across the globe

Americas

Argentina Brazil Canada United States

Asia-Pacific

Australia China India Japan Malaysia Singapore South Korea Taiwan

Europe, Middle East, Africa

Denmark France Germany Italy Kenya Netherlands South Africa Spain

Omdia

- insights@omdia.com
- consulting@omdia.com
- W omdia.com

OmdiaHQ in Omdia

Citation Policy

Request external citation and usage of Omdia research and data via citations@omdia.com

COPYRIGHT NOTICE AND DISCLAIMER

Omdia is a registered trademark of Informa PLC and/or its affiliates. All other company and product names may be trademarks of their respective owners. Informa PLC registered in England & Wales with number 8860726, registered office 5 Howick Place, London, SW1P 1WG, UK. Copyright © 2022 Omdia. All rights reserved. The Omdia research, data and information referenced herein (the "Omdia Materials") are the copyrighted property of Informa Tech") and represent data, research, opinions or viewpoints published by Informa Tech, and are not representations of fact. The Omdia Materials reflect information and opinions from the original publication date and not from the date of this document. The information and opinions expressed in the Omdia Materials are subject to change without notice and Information and opinions from the original publication date the Omdia Materials or this publication as a result. Omdia Materials are delivered on an "as-is" and "as-available" basis. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in Omdia Materials. To the maximum extent permitted by law, Informa Tech and its affiliates, officers, directors, employees and agents, disclaim any liability (including, without limitation, any liability arising from fault or negligence) as to the accuracy or completeness or use of the Omdia Materials. Informa Tech will not, under any circumstance whatsoever, be liable for any trading, investment, commercial or other decisions based on or made in reliance of the Omdia Materials.

Sweden United Arab Emirates United Kingdom

