



NATIONAL ARCHIVES OF AUSTRALIA - SUBMISSION

Productivity Commission – Issues Paper on Data Availability and Use

Context

The National Archives of Australia (Archives) is pleased to provide this submission to the Productivity Commission on the *Inquiry into Data Availability and Use*.

As the lead agency for information management in the Australian Government, and the custodian of the most valuable government information and data, the Archives is central to the future of public sector data availability and use. Government information and data is both a valuable national resource and a key business asset as Australia moves into the global digital economy.

Research indicates there is a compelling argument for realising expected benefits when information is made open and available online. Gruen et al¹ suggest that more vigorous open data policies could provide returns on current investment in Australian government and publicly funded research data of around \$240 billion (Net Present Value) over 20 years. Open data creates value by reducing the cost of existing government services, enabling new services, improving transparency and accountability and engendering trust (and therefore greater participation) in government. The benefits can include direct values (e.g. investment value and market value), as well as indirect values (e.g. wider social and economic impacts from data use).

A 2013 report by McKinsey researchers estimates \$3 to \$5 trillion in economic value annually from open data across seven sectors in the United States. In Australia, the Centre for Strategic and Economic Studies found the net cost to the Australia Bureau of Statistics for making publications and statistics freely available and adopting creative commons licensing was about \$3.5 million a year – but the benefits to the public and to government, were even greater. The immediate costs savings to users was around \$5 million per annum and the measurable annualised benefits were around \$25 million². In 2015, Deloitte reported that the economic benefits of digitising customer transaction

¹ Gruen, N., Houghton, J. & Tooth, R. (2014). 'Open for business: how open data can help achieve the G20 growth target', *Lateral Economics*.

² Turnbull, M. (2014). 'National Archives Conference Address - Open for business in the digital economy,' viewed 23 July, 2015 from <http://www.malcolmturnbull.com.au/media/national-archives-conference-address-open-for-business-in-the-digital-econo>

services for Australian federal and state government departments could be valued at more than \$20.5 billion over the next decade³

In keeping with the Australian Government's Digital Transformation agenda, the Archives is leading the information governance agenda across all Commonwealth Government agencies by providing standards, policies and guidance for sustainable digital information management.

The Archives would be pleased to collaborate in any initiatives related to national standards and policy for information and data management, metadata and interoperability that enable data discovery, sharing, analysis, access and re-use.

Key points:

1. Archives as trusted repository of high value public sector data

High value, long-term and permanent information assets in the Australian Government are determined by agencies' business needs, broader organisational accountability requirements and community expectations. The Archives, together with individual agencies, make these value-based decisions determining what is kept in the 'national archives' for public consumption.

In the interest of accountability and transparency, government has an obligation to ensure that authentic and reliable information is created and managed over time. The Belcher Red Tape Review⁴ highlighted the need for the Archives to work with agencies to ensure government information and data is usable for the future.

The Archives is active in providing digital information management policy, standards and products to improve interoperability and enable discoverability of information within government.

Given the exponential increase in Government produced digital information, the Archives is investigating machine-learning processes to automate the selection process, and is exploring opportunities both with industry and agencies to further this body of work. Benefits such as efficiencies of identifying high value public sector information are expected from this research.

To maximise data quality and availability for distribution, a consistent whole-of-Government approach through governance, standards, processes and interfaces is essential. Ongoing partnerships between the Archives, the Department of Finance, the Digital Transformation Office and the Public Data Office at Prime Minister and Cabinet; is the way forward for an efficient data sharing and access environment.

³ Deloitte (2015) 'Digital government transformation', viewed 30 July 2015 from <http://www2.deloitte.com/au/en/pages/economics/articles/digital-government-transformation.html>

⁴ Belcher, Barbara, (2015). *Independent Review of Whole-of-Government Internal Regulation, Report to Secretaries' Committee on Transformation*, Volume 1, p. 38.

2. Strategies to ensure the ongoing preservation and sharing of valuable digital government information

The Archives has developed a digital preservation process to ensure that valuable digital government information continues to be accessible to support government accountability and transparency.

In its advisory and policy setting capacity, the Archives also embeds strategies for agencies to manage the full digital information life cycle, particularly at point of system design that considers data collection and management processes. This proactive approach is far more cost effective and allows for adequate discovery mechanisms, avoidance of format and technology obsolescence, and enables information distribution.

Interoperability of data and systems based on standards is a key Archives strategy to allow data discovery, sharing, analysis and reuse, as well as enabling data to be stored, controlled, managed, understood and preserved over time. Agreed standards also enable data sharing for business continuity purposes and disaster planning and recovery. Metadata is crucial for interoperability and agreed metadata standards are essential to achieve efficient sharing of information and data.

Recently the Archives released a minimum metadata set based on its Australian Government Recordkeeping Metadata Standard (AGRkMS 2.0) that identifies the essential metadata systems needed to allow easy and defensible capture, retrieval and disposal. It supports effective migration and transfer of information and records within and between agencies, including transfer to the Archives.

The Archives' Australian Governments' Interactive Functions Thesaurus (AGIFT) also improves the accessibility and discoverability of Government online resources. AGIFT has been recently developed as a linked data platform that will enable meanings of Australian Government functions to be computer processed and available to the web for use by Australian datasets, such as those found on data.gov.au.

Benefits of increasing data availability can only be realised with available skilled labour at every point of the information life cycle. This includes information governance advisers, business analysts, IT professionals, user design professionals, information managers, data scientists and knowledge professionals. From the 2016 survey of information and records management practices in Australian Government agencies, just over one-third of information management staff (35%) had a formal qualification related to information and records management, and just over half of agencies (53%) had at least one staff member with at least one qualification.

The Archives' [Digital Continuity 2020 Policy](#) recognises the need for skilled professionals to manage information and data, and currently is engaged with a cross-agency working group to formulate career pathways for future information professionals.

3. Collection and release of public sector data

Access to the Archives' collection is through a network of reading rooms and online via the Archives' website and the collection database, as well as a number of specialised websites on defence, immigration and education services. In the 2015-2016 financial year 10,579,254 records were accessed online, an increase of more than one million records from the previous financial year.

The Archives collects public sector data from a range of formats and realises the benefits of increasing access through digitising the non-digital collection. Large scale digitisation projects are making the most valued items of the collection discoverable. As at the end of September 2015 over 41 million pages were digitised. In the 2015-2016 financial year 14,405,638 pages were added online. By the end of 2018, the Archives has committed to digitising an additional 3 million pages and make them available online; and to have described 34% of the collection at item-level to facilitate discovery.

4. Innovation in the collection and release of public sector data

A key Archives' initiative that supports strong information governance is the development of an end-to-end system prototype for digital government information (born digital and digitised) that explores how the Archives can:

- provide appropriate online access to all information as soon as possible to the public utilising available communication technology, at the time the information is required, and in a format and on platforms that meet their requirements;
- incorporate mandated metadata enabling interoperability and sharing of information across Australian Government portals, and where appropriate, government business systems;
- ingest, preserve and manage the Commonwealth's digital records in the cloud ensuring their long term integrity, authenticity, and accuracy; and
- provide cost effective and efficient sentencing of Commonwealth agency digital information and their transfer to the Archives.

As part of this future model, the Archives is committed to working with government partners to identify distributed custody arrangements that support efficient and direct access to information federated search and discovery. This will allow the Archives to manage preservation risks while ensuring government agencies continual access to the information. This model would also be scalable for cross-government information sharing.

Criteria for the release of data

The Archives has a major role in the area of information privacy and is experienced in releasing public sector information through the open access period as defined by the *Archives Act 1983*. When the Archives examines information, it carefully balances the right of public access with the responsibility to protect information where its release would damage national interests or would be an unreasonable disclosure of a person's affairs.

Legislative reform

The *Archives Act 1983* provides a public right of access to Commonwealth records in the [open access period](#). The Act was amended in 2011 to reduce the open access period from 30 years to 20 for Commonwealth records, and for Cabinet notebooks from 50 years to 30, with the reduction being phased in over a 10-year period.

The Archives jointly with the Attorney-General's Department is currently developing a broad package of legislative amendments that will amongst other things, seek to address digital transformation related matters and improve equitable access to the Archives' collection for all Australians.

Recommendations

The Archives recommends that:

1. The Inquiry recognises the Archives' expertise in the collection, management and access of public sector data
2. The Inquiry recognises that public data availability and use rely on good information governance at both the whole-of-Government and agency level.
3. Metadata is crucial for data quality especially in relation to trust and reliability, and agreed metadata standards are essential to achieve interoperability that enables data sharing, which in turn, creates new economic opportunities.
4. Government supports digital continuity and the importance of integrating robust digital information management into all technology, systems and processes.
5. Government supports standards for interoperability to enable data discovery, sharing, analysis and re-use, as well as enabling data to be stored, controlled, managed, understood and preserved over time.
6. The Inquiry notes that the Archives would be pleased to collaborate in any initiatives related to national standards and policy for information and data management, metadata and interoperability that enable data discovery, sharing, analysis, access and re-use.

About the National Archives of Australia

The Archives is an Executive Agency in the Attorney-General's portfolio and was established under the *Archives Act 1983*. Its role is to promote the creation, management and preservation of authentic, reliable and usable Commonwealth records and facilitate Australians' access to the archival resources of the Commonwealth.

The definition of 'Commonwealth records' in the Archives Act covers all information in digital and non-digital formats that is created, used or received as part of Government business. As a result all data, including email, social media content, datasets, geospatial information, audio-visual and business-related information in any other format constitutes the records of the Commonwealth.

The Archives is a trusted source of public sector information and is internationally recognised for its leadership in providing access to its archival resources and developing digital information management capability in agencies.

The Archives' [Digital Continuity 2020 Policy](#) centres on digital information governance and complements the Australian Government's digital transformation agenda and the digital economy. Good information governance establishes trust in the quality and integrity of information and data, and is the mechanism for Government agencies to integrate standardised pro-disclosure processes into information life cycles.

The policy is based on three principles, with targets that agencies should reach by 2020, as well as pathways with interim targets. Its governance and interoperability related targets directly impact on public sector data availability, use and re-use by integrating robust digital information management into all technology, systems and processes.

Standards and other guidelines produced by the Archives provide a key resource for agencies in sharing information effectively. Through membership of Standards Australia, the Archives is an active participant in the development, endorsement and use of national and international standards related to information management. These include ISO 16175 *Functional requirements for records in electronic office environments* and AS 5044 *AGLS Metadata Standard to improve the accessibility and discoverability of online resources through search facilities*.

The Archives participates in policy and standards development and endorsement through the Council of Australasian Archives and Records Authorities and its working group Australasian Digital Recordkeeping Initiative.