



GOVERNMENT OF
WESTERN AUSTRALIA



STATE RECORDS

OFFICE OF
western australia

State Records Office of Western Australia

BORN DIGITAL

Managing Government
Information and Data



PURPOSE

This document sets a new strategic direction for the effective management of government digital information in Western Australia. It supports the State government's aim of achieving a digital transformation by aligning public sector technology and business functions to improve service delivery to the community.

The State Records Office operates under the *State Records Act 2000* on behalf of the State Records Commission, to regulate recordkeeping, information and data management through the development of a whole-of-government framework.

This document provides direction for all government agencies to work towards establishing fully digital information management environments. This means moving from paper-based records management to digital information management.

Achieving the objectives of this strategy is a serious undertaking requiring process and systems change. However, many agencies are already in this transition process as a result of improving their business practices. Agencies still in early stages of this process are encouraged to work towards achieving digital transformation for their information assets in a timely but considered manner, and within their resources.

“Our society is in the midst of a digital revolution which has transformed how we live our lives, how we communicate and how we use information. Technology gives government agencies the opportunity to develop new business processes and deliver improved services to the community – services that are more effective, more cost-efficient and more responsive to the needs of citizens. In a digital age, the effective management of government information is essential to supporting this digital transformation.”

Chris Field, Chairperson, State Records Commission

BACKGROUND

What is digital information and why is it important?

Digital information comes in many forms such as documents, spreadsheets, emails, data in business systems, web resources and social media messages. All such information created or received by government is a State record and must be managed appropriately. It is incorrect to think State records are just those captured in an agency's electronic document and records management system (EDRMS) or are just documents. By law, State records are defined as any form of information created or received by government agencies. State records encompass all digital information and data generated through government's activities, communications and transactions.

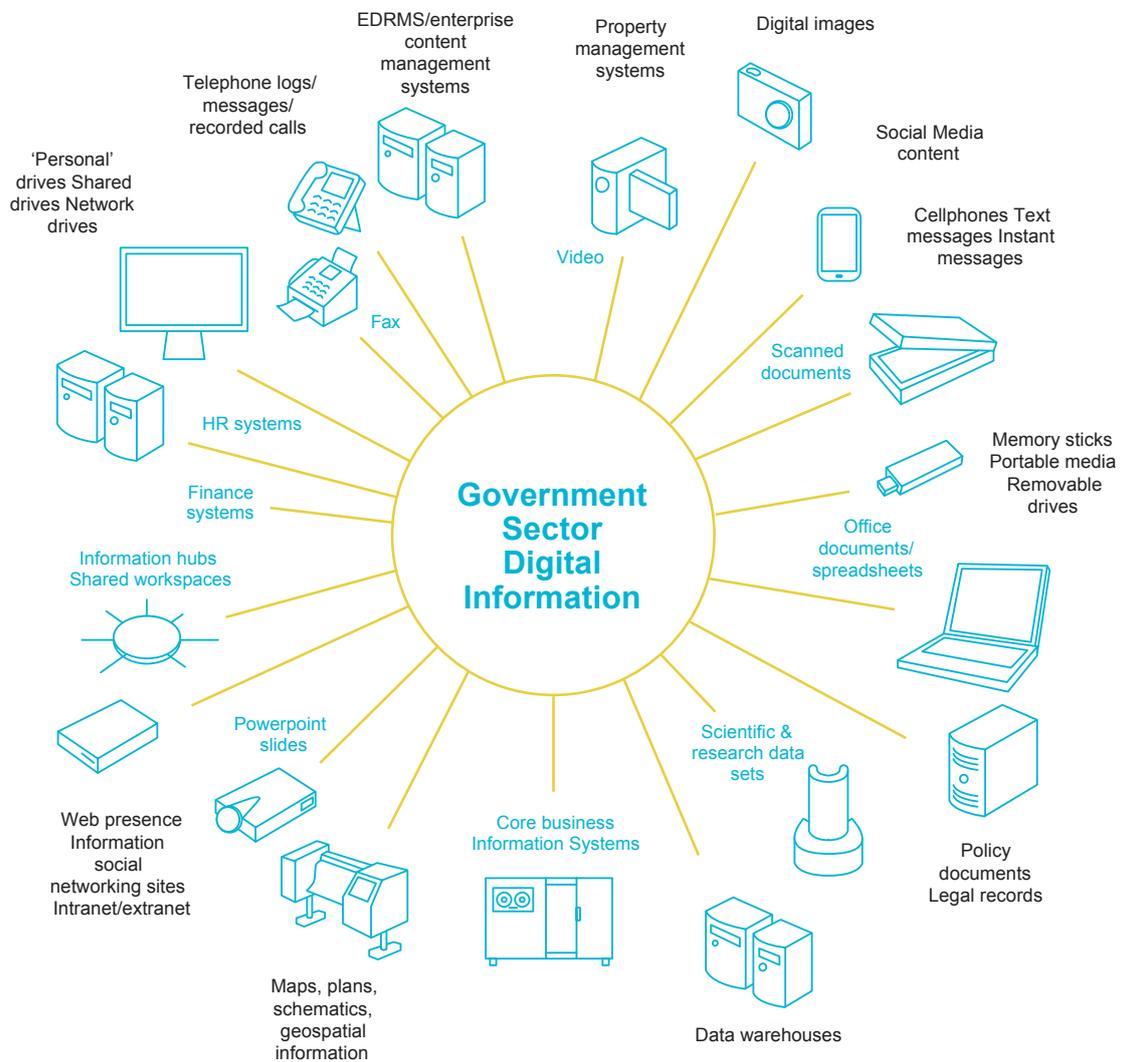


Figure 1: Government's digital information comes in many shapes and formats (image courtesy of Archives New Zealand).

The WA government is creating information at an unprecedented rate. The quantity, type and diversity of digital information is growing exponentially. Unless properly managed, this information may not be locatable, become unreadable, be unusable or be lost and may also lose any future use and value.

Information is an asset which supports informed decision-making, accountability and service delivery. In a digital world it makes good business sense for agencies to properly manage their digital information assets from point of creation.

To protect government information assets agencies must take a pro-active approach to managing information properly ensuring that:

- Government digital information assets are authentic, reliable and accessible when needed
- The WA community has trust in the processes of government
- Potential efficiencies are realised

What is digital transformation?

The State government's *Digital WA: State ICT Strategy*¹ defines digital transformation in government as public sector agencies aligning their technology and business functions to transform the way public services are designed, supported and delivered for a community living and working in a digital world. The transformation of government agencies from a paper or a hybrid paper/digital environment to a fully digital environment will support this outcome.

Born Digital: Managing Government Information and Data will help agencies fulfill the following key principles in the *Digital WA: State ICT Strategy*:

- **Principle 1:** Enhance agencies' ability to collaborate and share data
- **Principle 2:** Comply with whole-of-government standards, methods and frameworks
- **Principle 4:** Treat information as one of the State's most important assets
- **Principle 5:** Design government services to be digital by default
- **Principle 7:** If it can be shared, make it available to be shared
- **Principle 11:** Encourage use of human-centric design and machine-centric automation
- **Principle 12:** Keep things we control simple; coordinate complexity we don't control to interface simply
- **Principle 13:** Better align and streamline the way in which the public sector implements records management for business efficiency
- **Principle 15:** Make decisions that are environmentally aware and socially responsible

From a legislative basis, the *Born Digital* objectives are underpinned by the *State Records Act 2000* which allows for the creation and keeping of government information in the digital domain, as well as the *Electronic Transactions Act 2011* which supports government transactions in a purely electronic form. The *State Records Act 2000* does not require that government records must be kept in hardcopy.

¹ Office of Digital Government, *Digital WA: State ICT Strategy 2016-2020 (2016)*

Why digital transformation is important

Digital transformation is dependent on the provision of appropriate ICT infrastructure and systems to deliver government services as well as the effective management of the digital information which informs and supports that transformation.

While government agencies are currently in transition toward full digital information management, a review of agency practices shows that most agencies are continuing to create and maintain paper-based records. Creating records in paper or other hardcopy formats can result in inefficiencies such as unnecessary duplication, increased storage costs, and unreliable or inaccessible information that cannot be easily found, shared or backed up for business continuity.

In contrast, digital information is much more usable and can be shared more easily and at less cost. In order to achieve digital transformation for Western Australia, State government agencies must transform to full digital information management. Agencies must ensure their information and data is well managed, trusted and authentic.

Well-managed digital information:

- Is accurate, complete and can be trusted
- Is secure from unauthorised access, alteration and deletion, being managed through an information security policy or framework which ensures confidentiality, integrity and availability
- Contains adequate metadata to ensure meaning and context is associated with the digital record and that it can be proven to be genuine
- Can be digitally linked to other relevant records or datasets
- Can be found when needed.

At what stage should digital information be managed?

Digital information must be well-managed from the point of creation with a structure containing enough descriptive metadata to allow for its continued use, legal discovery, appropriate and authorised destruction or permanent retention, ensuring it retains its evidential value. A proactive approach to the management of digital information is required: **Do nothing and risk losing everything.**

Most digital information has only temporary value and should be destroyed after its authorised retention period has expired. The unplanned retention of data in a backup solution presents government agencies with many risks.

A proactive approach to the disposal of digital information is required. Unless authorised disposal is carried out in a timely manner, agencies will meet unnecessary costs in storing such information. Over time this situation will become unmanageable. The scenario of 'digital landfill' makes digital discovery and retrieval highly inefficient. Subsequent decisions about disposal of poorly managed data become a high-risk, high-cost endeavor as knowledge of the value of the information has been lost.

“A backup solution is intended to satisfy short-term needs for operational recovery. On the other hand, an archive solution is designed to meet long-term retention and retrieval requirements, which include assurances that obsolescence and data corruption will not compromise the archive.”

Oracle Corporation - Backup is not Archiving²

While agencies will still manage and retain government records in traditional formats for the foreseeable future, the *Born Digital* objectives aims to significantly reduce **adding** to an organisation’s physical holdings and to ensure a well-managed transition to maintaining government information in the born-digital form.

The *Born Digital* objectives do not require government agencies to digitise all the physical records in their control. While agencies may choose to conduct imaging projects where it meets their business needs and provides a value-for-money outcome, the focus is to ensure a planned transition away from generating any future hardcopy records.

How to maximise information benefits in the future

There is a strong business need for a robust Digital Archive for WA Government, to protect permanent-value government digital information assets. A centralised Digital Archive comprises systems, infrastructure, processes and services to preserve permanent-value information and ensure it is fully accessible in perpetuity. This capability will allow agencies to transfer their permanent-value information to the digital State Archive Collection in a cost-effective and coordinated manner, alleviating the ongoing burden on individual agencies of managing their key information assets over time. It is important to note that a Digital Archive is more than a data centre or a data storage solution and that in this context the term “archive” does not have the same meaning as the ICT usage of “archive”³.

Unlike paper-based records, digital information can be used more easily in different ways to meet government, industry and community purposes. Digital information supports digital transformation allowing multiple agencies to use common information and datasets to support better coordinated activity and services. Such interoperability of information needs to be underpinned by appropriate protocols, standards and connected systems.

High-value information will have ongoing use beyond its immediate business purposes. Open data initiatives, Digital Archive capability and future government strategies will allow for the re-use of digital information in ways not yet imagined.

² <http://www.oracle.com/us/products/servers-storage/storage/tape-storage/backupnotarchivefinal-120513gc-2083314.pdf>

³ The ICT use of the term “archive” is taken to mean data is stored away from the computer on which it was created for backup copies of files or for files that are no longer in active use. The files on the computer are then erased. In the ICT field, “archive” is not generally taken to mean the active management of the data to ensure it is both accessible and readable over the long term.

"Archives reveal the past and help us understand the present. Archives hold the stories of governments and people and provide us with a sense of belonging. This is as true today, with digital archives, as it was hundreds of years ago with parchment. Our digital archives consist of data which will be used and re-used for centuries to come in ways we have yet to imagine."

Cathrin Cassarchis, State Archivist

ACHIEVING DIGITAL TRANSFORMATION

Transitioning from a paper-based or hybrid paper/digital business model to a fully digital model will be challenging, but government agencies cannot afford to delay this transition. There are significant benefits to starting down this path as soon as possible in a planned, considered manner, to address the duplication of information across formats and associated costs.

Digital transformation is dependent upon agencies committing to the objectives outlined in this document and their willingness to own and drive change. Implementing a new business process without executive support for cultural change is unlikely to achieve the kinds of efficiencies and innovation which the government and community expect from digital transformation.

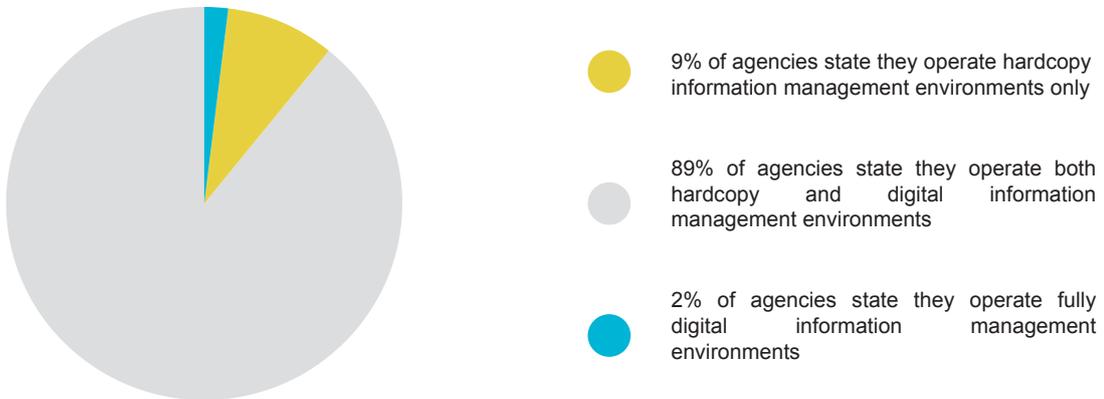


AGENCY READINESS

The State Records Office surveyed State and local government organisations to assess digital information management capabilities across government. The survey results identified current issues and risks and have been used to formulate the objectives outlined in this document.

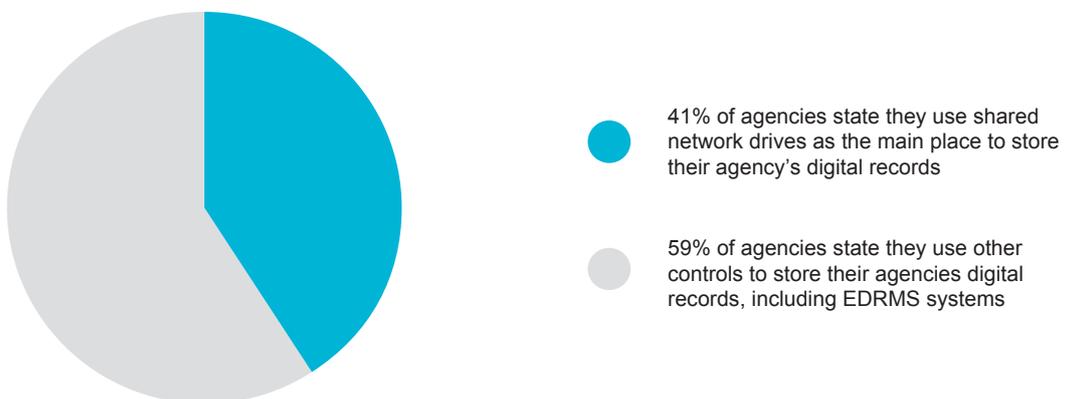
The Paperless Office

Most agencies are still creating and managing information in hardcopy. Only 2% of agencies reported that they have achieved the 'paperless office'.



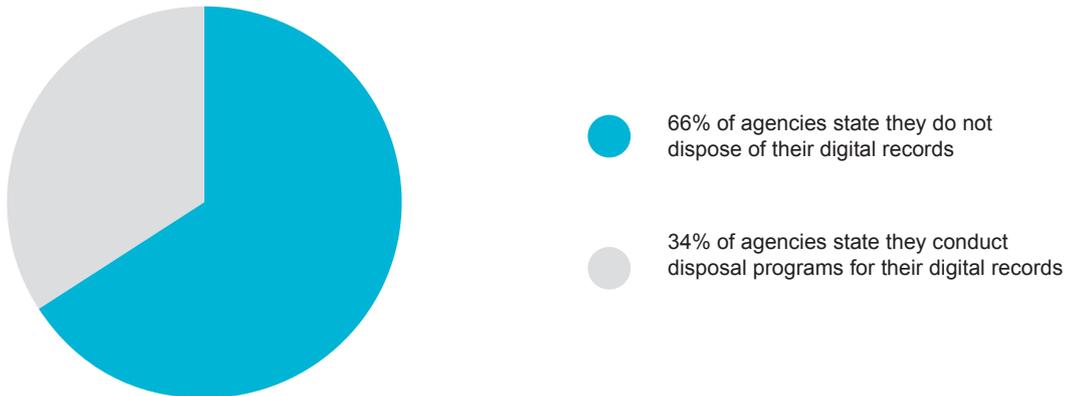
Control of Government Information

The proper management of electronic documents is currently variable, with 41% of agencies stating they use shared network drives as the main place to store their agency's electronic documents, potentially in an uncontrolled manner.



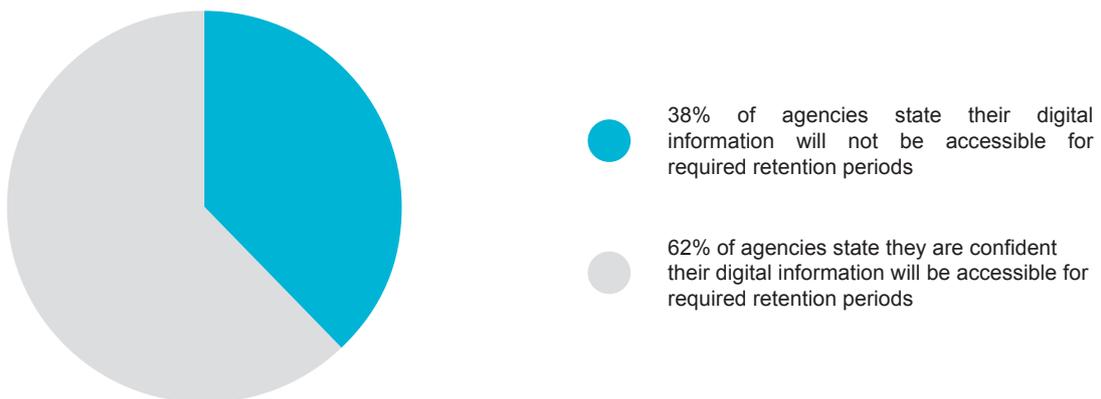
Legal destruction of digital records

Another indicator of the lack of digital maturity is that 66% of agencies reported they do not conduct authorised destruction of their agency's digital records. Unless addressed, this will invariably lead to a situation of 'digital landfill' with consequent risks for digital retrieval and legal discovery.



Future access to digital information

It is significant that 38% of agencies identified risks with not being able to maintain the accessibility of their digital information over time due to technology changes.



OBJECTIVES AND OUTCOMES

This document identifies broad digital information management objectives for implementation by all organisations. Agencies should work towards achieving these outcomes in a timely manner, subject to organisational planning and budget priorities.

Objective 1:

Government agencies implement fully digital information management environments

The following outcomes demonstrate Objective 1 has been achieved:

- An agency has a robust digital environment for all its information management requirements
- Information created in a digital format is managed in a digital format
- An agency no longer creates paper-based / hardcopy records⁴

Objective 2:

Digital information is well managed, trusted and authentic

The following outcomes demonstrate Objective 2 has been achieved:

- An agency captures and manages all digital information in accordance with State Records Commission Standards and State Records Office guidelines
- An agency's information and systems are demonstrated as being secure and unaltered
- An agency applies appropriate metadata to its digital records as part of standard business

⁴ In some instances, agencies may still be required to produce and maintain documents or legal instruments in hardcopy. The above outcome is not intended to override such a requirement in these special instances.

Objective 3:

Digital information can be used to meet multiple business needs and remains fully accessible for as long as required

The following outcomes demonstrate Objective 3 has been achieved:

- Where appropriate, an agency is able to exchange and share digital information between systems and with other agencies and the community, in accordance with access and data classification protocols
 - An agency has in place migration, data integrity and data audit processes and strategies to ensure digital information remains accessible for as long as required
 - An agency applies authorised disposal for digital information that is due for destruction
 - An agency is ready to transfer digital information designated as State archives to the digital State Archives Collection for permanent retention
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