ELECTRONIC RECORDS MANAGEMENT SYSTEMS AND PRACTICES

Challenges and opportunities in a rapidly evolving digital landscape

Khanh Nguyen
Senior Officer, Information Transformation
RMIT University
WHAT IS A RECORD

Records have existed for as long as humans have lived.

Our skills and methods in capturing the stories have evolved over centuries becoming more sophisticated.

1866
Melbourne City Plan

3000 – 3200 BC
Ivory plaque of Menes

PROV, VPRS 8168/ PS item MELBRL, record 14

3000 – 3200 BC
Ivory plaque of Menes

400,000 BC
Cave paintings in Zimbabwe

This Photo by is licensed under CC BY-SA

This Photo by is licensed under CC BY-SA

250 AD
Oldest paper book

This Photo by is licensed under CC BY-SA

This Photo by is licensed under CC BY-SA
WHAT IS A PUBLIC RECORD?

The Public Records Act 1973 defines a public record as:

(a) any record made or received by a public officer in the course of his duties; and
(b) any record made or received by a court or person acting judicially in Victoria.

“Recordkeeping deals with the ‘making and maintaining of complete, accurate and reliable evidence of business transactions in the form of recorded information’” Public Record Office Victoria

Retention and Disposal Authority (RDA)

<table>
<thead>
<tr>
<th>PROS 07/01</th>
<th>PROS 16/07</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention and Disposal Authority</td>
<td>Retention and Disposal Authority</td>
</tr>
<tr>
<td>for Records of Common Administrative Functions</td>
<td>for Records of the Higher and Further Education Functions</td>
</tr>
</tbody>
</table>

Other RDAs
HOW RECORDS ARE MANAGED IN THE 21\textsuperscript{ST} CENTURY

Electronic Document and Records Management Systems are widespread across sectors covered by the Public Records Act

Common EDRMS capabilities and implementations

- Manages both physical and electronic documents
- Centralised
- Compliant management of lifecycle of records
- Retention and disposal
- Approval workflows
- Sophisticated access controls
- Ability to integrate with various tools
- Support for long term preservation

HPE Content Manager (a.k.a. TRIM/Records Manager)

\[ \text{75\% of federal agencies use an EDRMS}^{1} \]

\[ \text{70\% of these agencies use TRIM} \]

\[ ^{1} \text{http://www.naa.gov.au/naaresources/documents/2016Survey-Findings.pdf} \]
DIGITAL REVOLUTION - THE WORLD AROUND US

The digital age is rapidly constantly shaping how we think, work and live.

Global connectivity
- Growth of digital information platforms
- Machine learning and artificial intelligence

Computing power
- Flexible and working remotely

Global competition

Social media
- Big data
- Mobile computing

Exponential growth of digital information

90% of the data in the world today has been created in the last two years.¹

Exponential reduction in storage costs

IMPACT ON CONSUMER EXPECTATIONS

Digital revolution has continually influenced and shifted consumer expectations.

Key drivers
Rapid technology advancement
Global competition and connectivity

Expectations
• Intuitive
• Features
• Aesthetics
• Responsiveness

How important is user experience?

Windows 3.0 (1990)
Windows 10 (2015)

iPhone (2007)
iPhone X (2017)
EMERGING CHALLENGES FOR RECORDS MANAGEMENT SYSTEMS

Rapid growth of data

“current records management practices are not sustainable due to the rapid growth of government data.”

Department of Finance, Feasibility Study¹

Complexity of how information are captured

Changing consumer expectations

Growth and availability of simpler, more intuitive tools

Competition and tighter budgetary constraints

“What does this look like in a digital world?”

“The chains of habit are generally too small to be felt until they are too strong to be broken.”

Tom Brokaw
Television journalist and author
(Former managing editor and anchor NBC Nightly News)

¹ Source: Finance wants one cloud-based digital document system for the entire APS

This Photo by is licensed under CC BY-SA
"... successful records management initiative is to use automation to minimize users' involvement in classification activities. Relying on humans to classify content and records is not optimal."¹

**OPPORTUNITIES – USER EXPERIENCE AND AUTOMATION**

1. **Simplify** the user experience
2. **Automate** capability, where possible
3. **Motivate** affected employees

---

³ Source: Follow Three Principles to Improve User Adoption of Records Management Tools, Gartner 2017
² Source: Finance declares end of TRIM era, wants a new way forward for government records’ IDM 2017, [link](#)
³ Source: Finance declares end of TRIM era, wants a new way forward for government records’ IDM 2017, [link](#)
² Source: Digital Continuity 2020, Australian Government, National Archives of Australia, [link](#)
OPPORTUNITIES – RETHINKING RETENTION AND DISPOSAL

Exponential reduction in storage costs opens up possibilities of rethinking our approach to retention and disposal – an option that was not available to paper records.

90% of the data in the world today has been created in the last two years. ¹

Growth of digital information

<table>
<thead>
<tr>
<th>Year</th>
<th>Storage costs per Gigabyte (in USD)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>$10,000,000.00</td>
</tr>
<tr>
<td>1970</td>
<td>$1,000,000.00</td>
</tr>
<tr>
<td>1980</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>1990</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>2000</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>2010</td>
<td>$0.10</td>
</tr>
<tr>
<td>2020</td>
<td>$0.01</td>
</tr>
</tbody>
</table>

¹ Source: Storage and memory costs through the years John C. McCallum, IDC
OPPORTUNITIES – REDEFINING THE BOUNDARIES

EDRMS

- Access control
- Support and maintenance
- Migrations and integration
- EDRMS uptake

Information platforms

- Information governance and policies
- Information capability
- Information literacy
- Digital preservation, archival and retrieval

- Value driven information retention and disposal
- Information lifecycle management
- Accessibility and discoverability

- Perceived value add
  - Operational
  - Strategic

Record keeping policies

- Records classification, retention and disposal
- Record keeping compliance

Operational

Strategic
SURVIVING IN A DIGITAL WORLD

IS IT POSSIBLE AND WHAT DOES THIS MEAN?

ENVIRONMENT

CHALLENGES

OPPORTUNITIES

CHANGE IS GOOD.
You go first!

RMIT UNIVERSITY
“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change”

Charles Darwin