Digital Curation – Digital Archiving

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Key Message no. 1

Digital archiving is one form of digital curation

- the two are not synonymous

Key Message no. 2

Digital archives are different from digital libraries

Key Message no. 3

Digital archiving requires active archival intervention across the entire records continuum

Improving Recordkeeping in the Australian Government

•1990s - NAA repositioned itself as a proactive enabler of good recordkeeping in agencies, providing standards/guidelines

• Response to deteriorating recordkeeping practices and the digital challenge

• Conceptual framework based on AS 4390 (1996)

  • Functional approach to recordkeeping

  • “DIRKS” methodology

Improving Recordkeeping in the Australian Government (2)

- 1998 – NAA/Monash Uni training course
- 2000 – Release of *e-permanence* suite of standards and guidelines on NAA website
- 2002+ - Audits of government recordkeeping by Auditor-General
- 2007 – “Check-up” – Recordkeeping health check self-diagnostic toolkit
- 2007 – Australian Compliance Standard for ISO 15489

NAA Digital Preservation Strategy

- Project commenced, 2001
- Green paper, 2002
- Uses open source XML technology to wrap and store ‘normalised’ digital records created in proprietary data formats
- Recommended standard archival data formats for use with digital records that are required for long-term retention/access
- Xena version 1.0 tools for normalising digital records, launched September 2004 - now up to Xena 3.0
- NAA digital repository/laboratory, 2005

Migration Strategies – just say no

- Use of File Format Registries (eg PRONOM)
- Has to be repeated every 3-5 years
- Expensive to maintain over the long term
- Every migration is ‘lossy’
- Perpetuates a reliance on proprietary software

Digital Records are Different

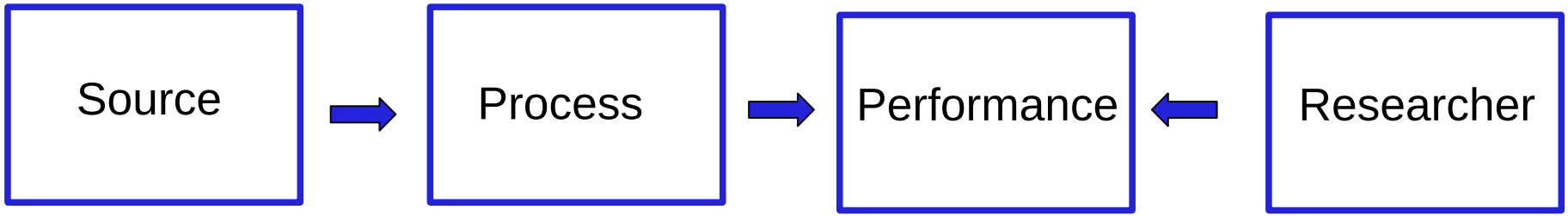
- Digital Records are *mediated* by technology
- Preserving the object is meaningless

Need to focus on:

- Interaction between data and technology that interprets the data
- Determining what is archivally important about that interaction and its context (the *essence* of the record)
- Creating and maintaining ability to repeat essence on demand in a sustainable manner

Digital Records are ‘Performances in Context’

Researcher experiences the record via a performance



Preserve the performance and the contextual metadata and you have preserved the record

The NAA and ODF

- NAA joined OASIS Technical Committee in 2003

- A large percentage of government records are created using office applications (DOC, XLS, PPT)

- Xena OpenOffice plug-in uses a Java application with OO2.0 to produce normalised objects in ODF

- Over 30 other file formats can be normalised using other Xena plug-ins (eg MS Outlook, Project, HTML)

NAA Digital Preservation Workflow

- Transfer, 4 Weeks Quarantine, and Ingest
- Normalisation of archival masters
- XML wrapping and retention of original bitstream
- Authenticity mechanisms – checksums
- Secure offline storage of preservation masters
- Access copies stored in separate access repository

Wider Application of Xena

- Anyone with Java programming skills can use or extend/enhance the Xena source code, because it is open source
- The NAA has developed a “Xena lite” for use by Australian Government agencies to preserve non-archival digital records that need to be kept long term
- The NAA wants others to experiment with Xena
- A number of digital preservation initiatives are now basing their approach on open standards.

Total Digital Archiving

- Digital preservation is just one component of end-to-end digital archiving

- MADIRA Project – Managing Digital Records for Access

- Australasian Digital Recordkeeping Initiative – http://www.adri.gov.au

Final Thoughts

- Digital archiving capabilities are in short supply
- Just throwing software at the problem solves nothing
    - You have to know what records you need and how you are going to capture and manage them over time
- Its all about change management
- Records systems are social systems – encourage peer and management pressure by making it easy for people to do the right thing
- Need for industrial scale implementations, not just research projects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...THEY'RE ALL ON THE COMPUTER!
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