Perspectives on the archival horizon: Preservation in the cloud

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A few questions…

- What is trust?
- What are our archival functions & ethical obligations wrt trustworthy digital material?
- Perspectives of preservation – what are we preserving?
- (Are we asking all the right questions?)

What is trust?

- Archival understanding of trustworthiness derives from Roman law

Trustworthiness = authenticity + reliability

- Professional codes of ethics require archivists and records managers to protect authenticity, integrity, reliability of records

What is trust?

What is trust?

Trustworthiness = confidence + control

- Reputation
- History of performance
- Management of past mistakes
- Influence of friends, celebrities, experts

What is trust?

Trustworthiness = confidence + control

- Policies & procedures, standards
- Sanctions
- Physical security
- Technological security

These are also subject to confidence measures!

What is trust?

Trustworthiness = confidence + control

Constrained by "affordable complexity"

Tested in the courts through assessment of admissibility and determination of weight

What guidance do we have for trusting cloud services for records?

"You have to know the past to understand the present" *Carl Sagan (1980)*

- OIPC
- NIST
- InterPARES Trust

OIPC – Cloud Computing Guidelines for Public Bodies

- Public bodies required to protect personal information in their custody or control

- Reasonable security in context of cloud computing usually requires review of key areas:

  - Governance – policies, procedures, standards

  - Identity and access management

  - Infrastructure security

  - Encryption – personal info should be encrypted during transmission as well as in storage

  - Contractual provisions

NIST – Cloud Computing Synopsis and Recommendations

- Distinguishes on-site (private or community cloud) vs outsourced (private, community, or public cloud) cloud computing
- Terms of Service/Terms of Use govern:
  - Promises of provider
  - Limitations afforded the provider
  - Obligations of the client

NIST – Open Issues

- Computing performance
- Cloud reliability
- Economic goals
- Compliance
- Information security

NIST - Recommendations

- Management
- Data governance
- Security & reliability
- Virtual machines
- Software & applications

PaaST*

- Preservation as a Service for Trust
(see Adam Jansen's presentation, ACA 2015, session 2a)

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Cloud Service Provider Contracts*

- Sections
  - Agreement
  - Data ownership and use
  - Availability, retrieval and use
  - Data storage and preservation
  - Data retention and disposition
  - Security, confidentiality and privacy
  - Accreditation and auditing
  - Data location and cross-border data flows
  - End of service, contract termination

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Retention & Disposition*

- How does the use of cloud services affect our ability to retain and dispose of records in accordance with the law and other applicable guidelines?

- What can be done to mitigate any risks arising from the gaps between our ability to apply retention and disposition actions to manage records residing within the enterprise and those residing in the cloud?

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- "Twitter is just a multiplayer notepad" *Ben Maddox (Global Technology Officer, NYU)*

Social Media & Trust in Government*

- Can social media be used by local government to increase citizen trust?

- Analyze the citizen experience with government social media tools and use

- Openness, transparency, accountability, and authenticity

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How trustworthy is the cloud?

- Transactions enacted through or recorded by "traditional" records

- "Performances" enacted through participatory social media

- Tested in the courts through assessment of admissibility and determination of weight

- Still too few critical incidents tested in arenas of authority or change

The right questions...

- Digital communication as oral as much as textual
- How does the orality of digital communication impact our practice?
- Can theories of oral history motivate our research?
- Emerging case law into admissibility of Aboriginal oral history in Canadian courts offers new perspectives on authenticity and reliability

References

- Cofta, Piotr. "Confidence, Trust and Identity." *BT Technology Journal* 25, no. 2 (April 2007): 173–78.

- Frogner, Raymond. "'Lord, Save Us from the Et Cetera of the Notary': Archival Appraisal, Local Custom, and Colonial Law." *Archivaria* 79, no. Spring (2015): 121–58.

- National Institute of Standards and Technology. "Cloud Computing Synopsis and Recommendations." Special Publication 800-146. Gaithersburg, MD: NIST (May 2012).

- Office of the Information & Privacy Commissioner for British Columbia. "Cloud Computing Guidelines for Public Bodies" (February 2012).

References – InterPARES Trust

- NA05 Social Media and Trust in Government
- NA06 Retention and Disposition in the Cloud
- NA09 Establishing Retention and Disposition in Digital Environments
- NA12 Preservation as a Service for Trust
- NA14 Contract Terms for Cloud Computing

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Thank you!

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