



# Assessing records management requirements for records in the cloud – findings of InterPARES Trust

Corinne Rogers  
InterPARES Trust  
International Symposium  
Havana, Cuba  
18 February 2019

# “City of Edmonton migrates office tools to Google cloud”\*

- In 2012 the City of Edmonton became the first Canadian municipality to migrate its email and office applications to the Google cloud
- It began with email and calendar functions, and as of 2018 includes all office document systems – born-Google and uploaded
- Success story or cautionary tale?

\*IT World Canada 2012

InterPARES  
Trust



# Edmonton's experience

- Needs were financial and functional; goals were to cut cost and increase productivity and efficiency for 10,000 employees
- Project driven by IT; approved by the Corporate Leadership Team
- A privacy risk assessment was conducted
- Contract was negotiated (not boilerplate) and “painstakingly examined”
- Records management not mentioned in the Google Procurement Process Review (2014)





# Challenges: data-centric thinking

- Most challenges discussed represent present concerns with current data (data-centric thinking):
  - Is data secure from alteration or interference?
  - Can personal privacy be protected?
  - Can regulations and laws be observed in the face of cross-jurisdictional data transfer?
  - What guarantees of continuity of service exist?
  - How will data breaches be handled?





# Chain of custody

- We keep records (sometimes over long periods of time) as evidence of activity, and as memory of action, & to prove accountability – we must trust them
- In archival terms, we trust records based on proof of records' authenticity, reliability, & accuracy
- In legal terms, trust is expressed through rules of admissibility of documentary evidence (common law systems)
- Demonstrable chain of responsible custody is key to both



# Records management themes\*

- Risk analysis and risk management
- Legal issues
- Information governance
- New approaches to manage retention and disposition in the cloud
- Records classification

\*Patricia C. Franks (2015) "New Technologies, New Challenges: Records Retention and Disposition in a Cloud Environment." Canadian Journal of Information and Library Science, Vol. 39, No. 2: 191-209.

InterPARES  
Trust



# Challenges: records-centric thinking

- Recordkeeping challenges look beyond the immediate present, reaching into the past, and projecting into the future (record-centric thinking)
  - Can context of records be protected?
  - Can provenance be demonstrated?
  - Can retention & disposition be carried out?
  - Can access and usability be assured over time?
  - Can intellectual rights be respected?





# Trustworthy records systems: Managing records wherever they are

- Whether managing records in a paper-based in-house system, or managing any valued organizational asset, a management framework consists of:
  - Laws & policies establishing accountability
  - Standards & practices for management
  - Systems & technologies for implementation
  - People
  - Organizational structure
  - Awareness & continuing education

*Managing Records of Citizen Engagement Initiatives: A Primer*

[https://interparestrust.org/assets/public/dissemination/EU08\\_1aaS\\_Checklistv1.2\\_.pdf](https://interparestrust.org/assets/public/dissemination/EU08_1aaS_Checklistv1.2_.pdf)



# Tools for evaluation

- Regardless of the degree of cloud adoption, InterPARES Trust has developed tools to evaluate the benefits and risks from the perspective of *recordkeeping* based on *archival science*
  - Checklist for evaluating cloud service provider contracts
  - Checklist for evaluating retention & disposition capacity



# 1. CSP contracts as instruments of trust

- To explore the contract – specifically the contract between a client and a cloud service provider – as a tool for building trust
- How effectively do cloud service contracts meet the needs of records managers, archivists, and information governance professionals?





# Contracts review

- Findings:
  - Several legal documents exist
    - Terms of Service
    - Service Level Agreements
    - Privacy Policies
    - Acceptable Use Policies
  - Little standardization of terms
  - “Often incomprehensible to majority of users”
  - Wide-ranging exclusions of liability favor the providers
  - Terms may change



# Comparative Analysis

- Regardless of jurisdiction, sector, or industry, common risks to records exist:
  - Unauthorized access
  - Privacy breach
  - Loss of access, control
  - Lack of transparency of service
  - Lack of ability to negotiate service
  - Location ambiguity
  - Contract ambiguity
- Issues of records management generally not addressed (data-centric, not records-centric)



# Specific Considerations

- Data ownership
- Availability, retrieval and use
- Data storage and preservation
- Data retention and disposition
- Security, confidentiality, privacy
- Data location and cross-border data flow
- End of service; contract termination





# The Checklist - sections

- Agreement
- Data Ownership and Use
- Availability, Retrieval, and Use
- Data Storage and Preservation
- Data Retention and Disposition
- Security, Confidentiality, and Privacy
- Data Localization and Cross-border Data Flows
- End of Service; Contract Termination



# Integration & Review

- Integrated with NA03: Standards of Practice
- Integrated with NA06: Retention & Disposition checklist
- Released for comments in fall 2015
- Presented at ICA in Reykjavik, Iceland
- Tested and applied in several venues including the International Federation of Red Cross and Red Crescent Societies
- Translated into French, Spanish, Dutch



## 2. Retention & disposition checklist

- How does the use of cloud services affect retention & disposition 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?





# Overview

- Survey of members of ARMA International: 168 respondents
- 62% worked in government
- 60% used some aspect of cloud computing
- 92% confirmed their organization has a retention policy
- 50% confirmed that the policy applied to records in cloud storage
- 20% were involved in the decision to adopt cloud services
- 69% said that vendor terms and conditions were not consistent with their policies, or they did not know
- 81% said dispositions on cloud content had not yet been performed, or they did not know



# A few comments about contracting services

- “IT and Legal did not ask me for my opinion”
- “Records Management is not invited in the decision process for IT business solutions”
- “IT made the decision”
- “RIM is typically the last to know anything. Personally I think we ask too many good questions and our Enterprise is just looking for less expensive storage as most companies are doing today”



# A few comments about retention and disposition

- “Most systems don’t have disposition built in or have unknown disposition capabilities. This happens when contracts and agreements are put in place without regard to record retention and disposition as a main requirement”
- “Only physical records under our control follow the retention /disposition schedule. All e-records are currently not managed by Records but by the end-user themselves. Our State has a difficult and cumbersome requirement to purge electronic with minimal support and instructions on how to effectively complete this process”





# Internal & external obstacles

- External factors are risk related, or imposed, including:
  - Potential move to the cloud “depends on Federal and State acceptable security guidelines.”
  - Lack of standardization
  - Risk of cyber attacks
  - Most cloud computing is outside of the jurisdiction we operate thus exposing the company to a new set of information laws and regulations
  - Breach of Canadian privacy legislation that requires personal information to be retained in Canada only



# Internal & external obstacles

- Internal factors reveal level of cloud maturity knowledge, including:
  - Differences in IT and RIM culture
  - Decisions often cost-driven, or made solely by IT department
  - Lack of knowledge about cloud computing, functionalities and limitations
  - Passivity of records managers



# Retention & disposition: questions for evaluation of service

- Privacy and security
- Establishing disposition authorities
- Applying disposition authorities
- Executing disposition authorities
- Documenting disposal actions
- Reviewing disposition
- System integration





# Recommendations

- Retention and disposition must be considered before cloud services are contracts
- Training for RM
- RM must be more proactive:
  - Become an integral member of the IG team
  - Working with stakeholders
- Vendors need to work with records professionals
- Organizations need to incorporate RM in risk assessments



# Back to Edmonton

- 2014 audit found savings not as expected due to number of licenses and duplication of service with Microsoft during transition
- By 2018 CoE was using Google docs, sheets, & slides: RM challenges included
  - Fixity
  - Metadata
  - Format preservation
- Good for productivity; challenging for RM



# Take aways

- Involve records management experts at the design stage
- Consider records management and archival functions
- Negotiate service contracts to include RM functionality

...in other words...

***Preservation begins at creation!***

InterPARES  
Trust





# Conclusion: Who is responsible? *Caveat emptor, or caveat venditor?*

- Selected tools include, InterPARES Trust, <http://interparestrust.org> – dissemination/InterPARES Trust Research Documents
  - Checklist for ensuring trust in SaaS (EN, SP)
  - Checklist for comparative analysis of governmental e-services
  - Checklist for single sign-on systems
  - Economic models for cloud storage decision-making
  - Archival standard of practice
  - Functional requirements for retention & disposition in cloud
  - Managing records of citizen engagement initiatives: a primer
  - Checklist for evaluating cloud contracts (EN, AP, FR, NL)



[www.interparestrust.org](http://www.interparestrust.org)

[www.interparestrust.com](http://www.interparestrust.com)

[corinne.rogers@ubc.ca](mailto:corinne.rogers@ubc.ca)



**InterPARES**  
Trust

