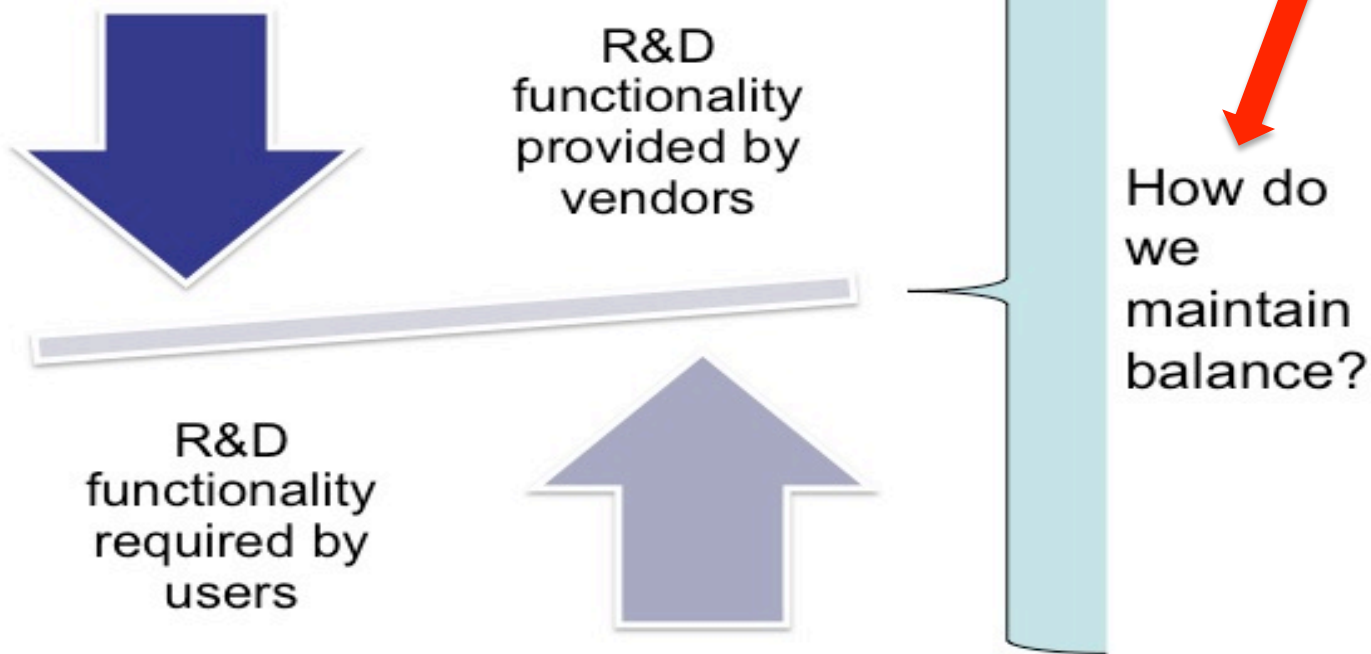# Retention & Disposition of Records Residing in a Public Cloud: *A Risk Management Approach*

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International Symposium
October 17, 2014

Not all information in the cloud rises to the level of a record according to the definition in use; however, the organization may still be responsible for managing non-record content.

Obligations of the Organization

Retention

An organization shall retain its information for an appropriate time, taking into account all operational, legal, regulatory and fiscal requirements, and those of all relevant binding authorities.

Disposition

An organization shall provide secure and appropriate disposition for records that are no longer to be maintained by applicable laws and the organization's policies.

~ARMA International, The Principles

Retention & Disposition
System Requirements

Retention & Disposition System Requirements

"Record systems should be capable of facilitating and implementing decisions on the retention or disposition of records. It should be possible for these decisions to be made at any time in the existence of records, including during the design stage of records systems. It should also be possible, where appropriate, for disposition to be activated automatically. Systems should provide audit trails or other methods to track completed disposition actions" (ISO 15489-1 2001, p. 10).

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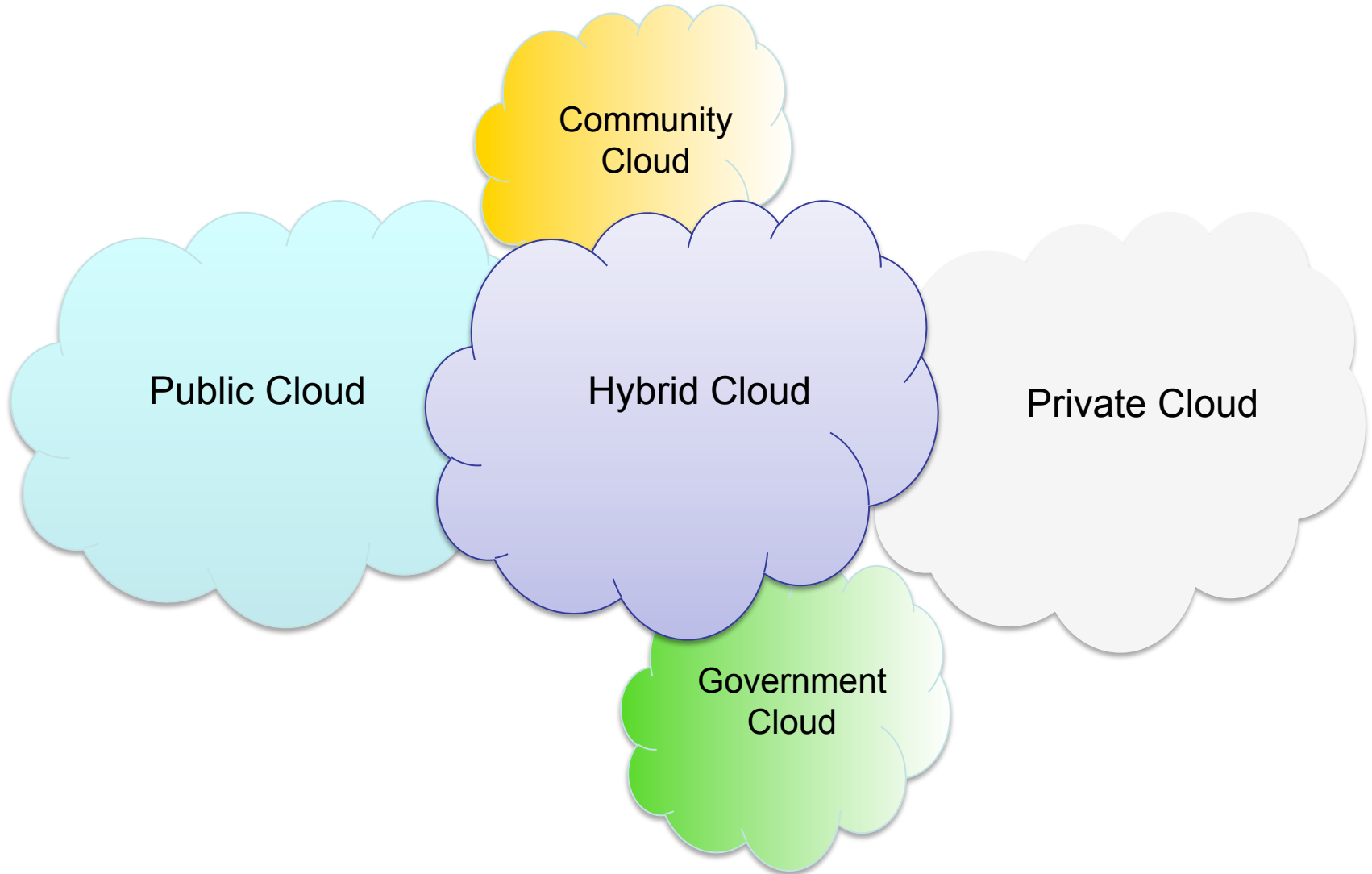
What's different about the Cloud Environment?

Cloud Computing/Cloud Services

Cloud computing allows computer users to conveniently *rent* access to fully featured applications (SaaS), to software development and deployment environments (PaaS), and to computing infrastructure assets such as network-accessible data storage and processing (IaaS).

Cloud Computing Deployment Model

Community Cloud

Public Cloud

Hybrid Cloud

Private Cloud

Government Cloud

TOP SERVICES
by category

FILE SHARING

1. Dropbox
2. Google Drive
3. Box
4. OneDrive
5. eFolder
6. Yandex.disk
7. Goodsync
8. Solidfiles
9. Sharefile
10. 4Shared

COLLABORATION

1. Office 365
2. Gmail
3. Cisco Webex
4. Google Docs
5. Prezi
6. Yahoo Mail
7. Yammer
8. Evernote
9. Intralinks
10. Clearslide

SOCIAL MEDIA

1. Facebook
2. Twitter
3. Linkedin
4. Sina Weibo
5. Tumblr
6. Myspace
7. VK
8. LiveJournal
9. Renren
10. Foursquare

TOP 20 ENTERPRISE CLOUD SERVICES

1. Amazon Web Services	11. Concur
2. Office 365	12. Workday
3. Salesforce	13. MSDN
4. Cisco Webex	14. SAS On Demand
5. Box	15. Github
6. Yammer	16. Zendesk
7. ServiceNow	17. Informatica Cloud
8. SuccessFactors	18. Ariba
9. Adobe Echosign	19. Host Analytics
10. LivePerson	20. Intralinks

Risk Assessment Model

Risk Identification

- Identify sources of risk, areas of impact, and events and their causes and potential consequences
- Generate a comprehensive list of risks

Risk Analysis

- Consider the causes and sources of risk
- Determine the consequences and their likelihood
- Calculate their risk levels

Risk Evaluation

- Compare level of risk with risk criteria including risk tolerance and legal, regulatory, and other requirements
- Determine the need for treatment

Risk Identification

Store, Share, & Synchronize

Risk Assessment Matrix

		Severity of Consequences				
		Insignificant	Minor	Moderate	Major	Catastrophic
Probability of Occurrence	**Almost certainly in most circumstances**	High	High	Extreme	Extreme	Extreme
	Likely and frequently	High	High	High	Extreme	Extreme
	Possible and likely at some point	Significant	High	High	High	High
	Unlikely, but could happen	Moderate	Moderate	Significant	Significant	Significant
	May occur rarely or exceptional circumstances	Low	Low	Moderate	Moderate	Significant
		Levels of Risk				

Risk Assessment

**Confidential Information
High Probability of
Compromise**

Risk Evaluation

Gather Data

- Risk Description
- Source of Risk
- What could go wrong?
- Impact
- Likelihood
- Assurance

Develop Plan

- Inherent Risk Index
  - Likelihood x Impact
- Residual Risk Index
  - Likelihood x Impact x Assurance
- Further Mitigation Needed
- Action/Mitigation Plan
- Mitigation Activity Owner

Risk Evaluation & Mitigation

Confidential Information
High Probability of
Compromise

Retention & Disposition System Requirements

➢ *Establishing disposition authorities*

➢ *Applying disposition authorities*

➢ *Executing disposition authorities*

➢ *Documenting disposal actions*

➢ *Reviewing disposition*

Establishing disposition authorities (Retention and disposition schedules)

1. Can retention periods be applied?

2. Can destruction actions be automated?

Applying disposition authorities

3. Can a disposition authority – retention and disposition specifications – be applied to aggregations of records?

4. Can records be retained indefinitely, destroyed at a future date, transferred at a future date?

Executing disposition authorities

5. Can records be deleted (including backups) according to the schedule?

6. Are users alerted of conflicts related to links from records to be deleted to other records aggregations that have different records disposition requirements?

7. If more than one disposal authority is associated with an aggregation of records, can all retention requirements be tracked to allow the manual or automatic lock or freeze on the process (i.e., Freeze for litigation or legal discovery)?
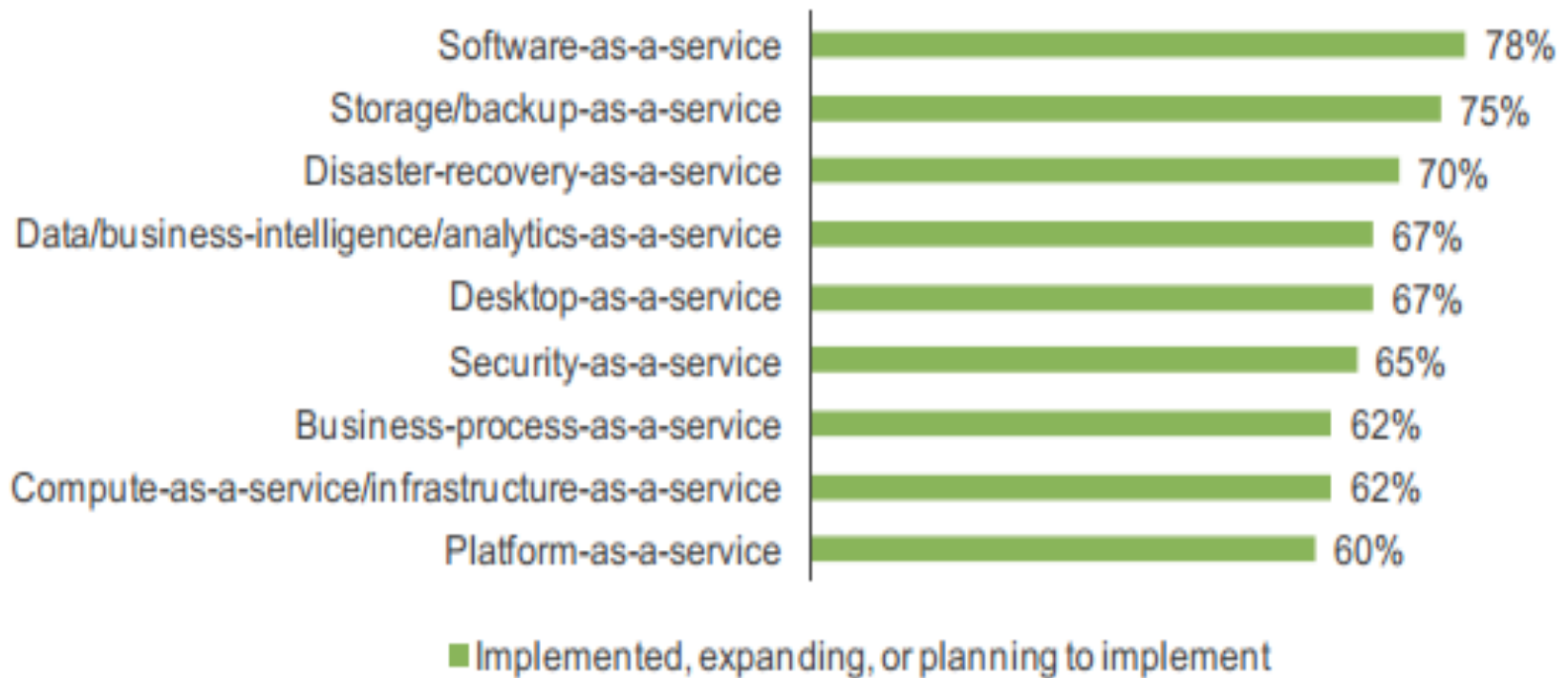
Documenting disposal actions

8. Are disposal actions documented in process metadata?

9. Can all disposal actions be automatically recorded and reported to the administrator?

Reviewing disposition

10. Can the system provide audit trails or other methods to track completed disposition actions (e.g., metadata, reports)

"What best describes your organization's current use/implementation of cloud services? (May include SaaS, PaaS, IaaS)"

Service	Implemented, expanding, or planning to implement
Software-as-a-service	78%
Storage/backup-as-a-service	75%
Disaster-recovery-as-a-service	70%
Data/business-intelligence/analytics-as-a-service	67%
Desktop-as-a-service	67%
Security-as-a-service	65%
Business-process-as-a-service	62%
Compute-as-a-service/infrastructure-as-a-service	62%
Platform-as-a-service	60%

■ Implemented, expanding, or planning to implement

Base: 154 US IT decision-makers at 500+ employee companies

Source: A commissioned study conducted by Forrester Consulting on behalf of XO Communications and Juniper Networks, July 2013

Forrester Consulting study "Building for the Future: What the New World of Cloud IT Means for the Network" (9/2013)

Cloud Challenges

Private Cloud

Public Cloud

Private Cloud

Records Management in the Cloud
Oregon State Archives

Initial Questions

How do we comply with the law?

How do we apply retention & disposition?

Identify an EDRMS provider, in this case HP TRIM, (HP Records Manager), and a SaaS hosting service, Synergy Data Center, Baker City, OR.

Records Management in the Cloud
Oregon State Archives - Outcomes

- Agencies manage all records in a single system from creation until final disposition

- Government is more transparent & efficient

- Litigation risk & E-discovery costs reduced

Contact: Mary Beth Herkert, Oregon State Archives, 503-378-5196, mary.e.herkert@state.or.us

Third-party provider considerations

- **System requirements**: security, data integrity, network dependency, and centralization

- **Provider services/sustainability**: business failure, modification of business model, business disaster & continuity plan, personnel policies

- **Legal challenges**: data location, data ownership, data segregation

- **Functional requirements**: accessibility, searchability, legally defensible retention and disposition, ability to override default settings (e.g., for legal holds)

- **Cost for services**: cost of storage, access, download, move to a new provider, cost per user

Public Cloud
Social Media

Social Media Records Management Challenges

- Capture of Content
- Ownership & Control of Data
- Implementation of Retention Policy
- Duplication of Content
- Management of Non-Record Content
- Disposition of Content

- E-Discovery & Public Records Requests
- Legal Issues
- Preservation (content includes posts, embedded files, links, photos, videos, etc.)
- Employee Use & Access
- Security

Industry-specific guidance

SEC Rule 17a-4: "electronic records are preserved exclusively in a non-rewritable and non-erasable format. This interpretation clarifies that broker-dealers may employ a storage system that prevents alteration or erasure of the records for their required retention period."

"Every firm that intends to communicate, or permits its associated persons to communicate, through social media sites must first ensure that it can retain records of those communications as required by Rules 17a-3 and 17a-4 under the Security Exchange Act of 1934 and NASD Rule 3110."

Social Media Records Guidelines from the Office of the Governor

The Office of the Governor of North Carolina issued "Best Practices for Social Media Usage in North Carolina" in 2012 that specifies that both posts by officials and comments made by the public are considered public records.

Social Media Records Retention Tips

- Determine what is a record
- Focus on function and content, not format
- Determine if the entire site be treated as one discrete record (e.g., a blog site)
- Determine if the existing records schedule can cover social media records; for example, possible retention categories:
  - Correspondence (e.g., Facebook posts)
  - Publications (e.g., Pinterest)
  - Core function (e.g., wiki part of project file)
  - Social Media Data (e.g., user agreements, data from input forms, user identification data)

- Archives Facebook, Twitter, LinkedIn, and YouTube

- Captures all metadata

- Time-stamped digital signature to authenticate

- Supports data export

E-Discovery & Social Media

- How, and to what extent, are your employees are using social media? Does their use potentially implicates company business? Note: different sites contain different types of information.

- Is reasonably foreseeable that an employee's social media postings may be relevant in a future litigation? Consider taking steps to ensure that the relevant information is properly preserved

- *Does your company anticipate seeking social media discovery from the opposition? If so, request early in the litigation that any relevant social media information be preserved.*
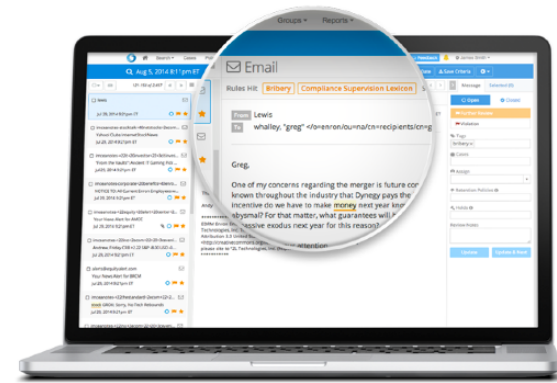
smarsh

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THE ARCHIVING PLATFORM

FEATURES   SUPPORTED CONTENT   WHY SMARSH?   PACKAGES   RESOURCES

Enable a unified compliance and e-discovery workflow across all content types within your organization. Search and review all of your content in one place, creating efficiency and providing peace of mind.

FEATURES DESIGNED FOR **SUPERVISION** AND **E-DISCOVERY**

POLICIES

Save time and money by utilizing the Archiving Platform's policy engine to improve review effectiveness and efficiency. Create rules based on virtually any criteria, and then configure those rules to take automatic action (ex. flag, classify, delegate, apply a legal hold or retention policy) on messages that match the criteria. Reviewers can view policy matches and highlighted keyword hits on each message during review.

Request Demo

SEARCH   REVIEW   POLICIES   CASES   QUEUES   REPORTS   ADMIN

FULL AUDIT TRAILS

Every action taken in the platform is documented and stored in a read-only format.

RETENTION POLICIES & LEGAL HOLDS

Messages are retained in accordance with client retention policies and active legal holds.

PERSONAL ACCESS

End-users may access their personal archive from any browser, mobile device, or plug-in.

The Cloud Your Way
Business Applications
Public – Private – Community

Business Process as a Service
(BPaaS) -Salesforce

Managing Records on Salesforce

Posted on 15 June 2014. Tags: cloud computing, Cloud CRM, Salesforce

You can create new records at any time on Cloud CRM, thanks to the Create New drop-down menu on the sidebar. You can also retrieve any records that you might have accidentally deleted, making managing your records very easy.

Create a New Record

To create a New Record:

- Got to your home page.
- Click on the Create New drop-down menu.
- Select Contact. This will open the New Contact page.
- Complete the all the fields with the necessary information.
- Click Save.

The new contact will be created and the Contact Details page will be opened.

Retrieve a Deleted Record

We've all done it. Deleting an important record and losing it can often affect the whole company. Don't worry about this on Salesforce though because the Recycle Bin stores contacts for up to 30 days when a record is deleted.

To retrieve a record from the Recycle Bin:

- Click the Recycle Bin button on the sidebar.
- Scroll through the list in the Recycle Bin until you find the correct record.
- Select the box in the Action column next to the record. You can select more than one record.
- Click the Undelete button to restore the record(s).

Is this really records management as you know it?

http://blog.denwa.uk.com/managing-records-salesforce/

Integrate with anything

Retention & Disposition in the Clouds
A Strategic Approach

- Identify records and information residing in the clouds that must be retained. Determine their retention requirements.

- Identify the functional requirements needed to accomplish retention and disposition regardless of location.

- Investigate cloud technologies employed and the functionality they provided to achieve retention and disposition goals.

- Identify the gaps between the two and the risks posed.

- Conduct a risk analysis and then make a decision to either mitigate risks or avoid them.

- Consult guidance provided by professional associations (ARMA's Recordkeeping Principles), regulatory agencies (FINRA), and the National Archives and Records Administration (NARA).

Thank you!

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