

InterPARES Trust

Retention & Disposition in the Cloud—*Do you really have control?*

Franks Patricia, San Jose State University, San Jose, USA
and Alan **Doyle**, University of British Columbia, Canada

October 23, 2014 | ICCSM 2014



Research Questions

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

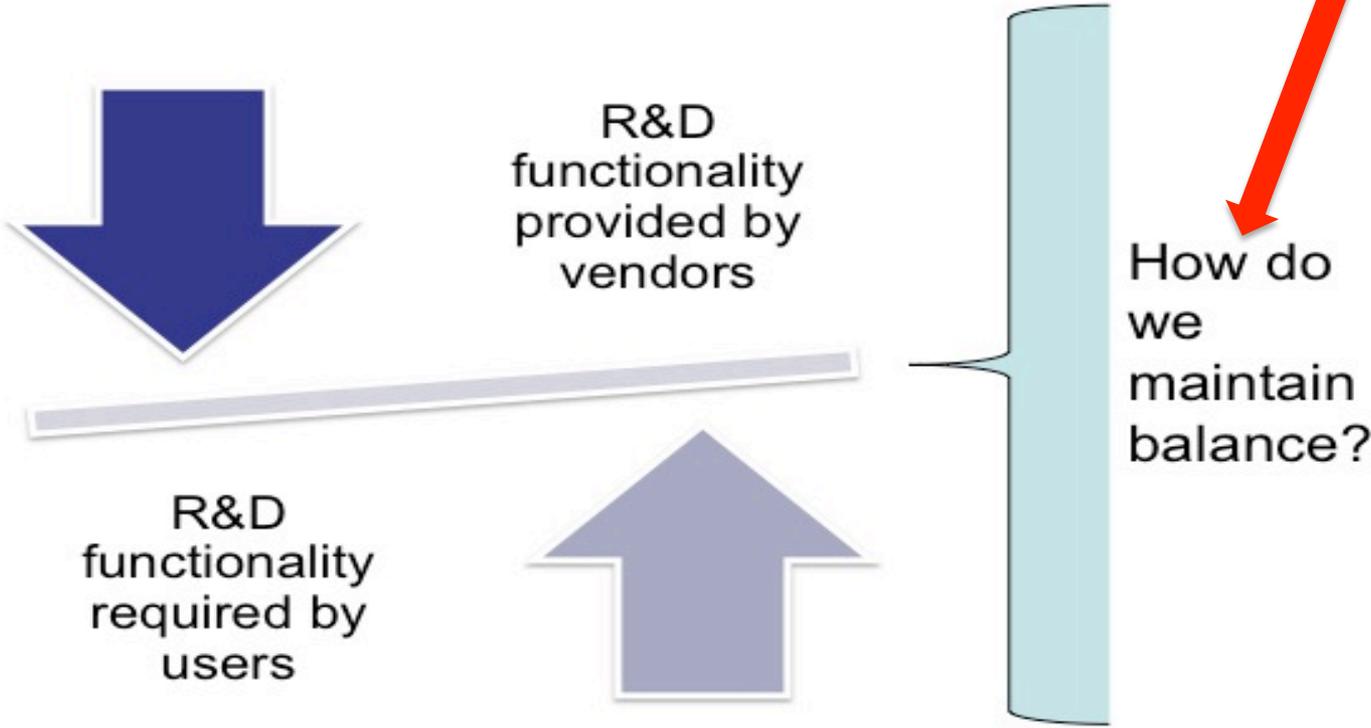
“What can be done to mitigate any risks arising from the gaps between our ability to apply retention and disposition actions to manage records residing within the enterprise and those residing in the cloud?”

InterPARES
Trust



Retention & Disposition in a Cloud Environment

to mitigate risk



Retention & Disposition Defined

Retention is the continued *possession, use, and control* of the records that must be kept to meet administrative, fiscal, legal, or historical requirements.

Disposition includes the “range of processes associated with implementing *records retention, destruction or transfer decisions* which are documented in disposition authorities or other instruments.”

(ISO 15489-1 2001, p. 3)

InterPARES
Trust



Retention & Disposition 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

InterPARES
Trust



Not all info is equal

- Records and information created within the organization and transferred to a cloud vendor can be categorized and registered with a records management system before exiting the enterprise.
- Records and information generated in the cloud are under the physical control of a third party and must be captured after creation and then categorized and managed.
- Industries that produce big data—e.g., transportation, utilities, and biosciences—must capture and categorize information and records electronically and automatically (without human intervention to impose retention rules).
- Not all information in the cloud rises to the level of a record; however, the organization is still responsible for managing nonrecord content.



Nonrecords & ephemeral records

- A **nonrecord** is any document, device, or item, regardless of physical form or characteristic, created or received **that does not serve to document** the organization, functions, policies, decisions, procedures, operations, or other activities of the organization
- Nonrecords are termed **ephemeral records** by some organizations and included on a disposition authority, such as one developed by the Government of Western Australia. They have **no continuing value**, are generally only needed for a few hours or a few days, and may not need to be placed in the official recordkeeping system—examples include mailing lists stored in cloud email systems and rough drafts of reports held in file hosting services (storage utilities).

InterPARES
Trust



What does the Government of Australia say about Ephemeral Records?

Such records may be destroyed once reference ceases, as specified in the General Disposal Authority for State Government Information and the General Disposal Authority for Local Government Records.

<http://www.sro.wa.gov.au/state-recordkeeping/recordkeeping-faq>



RETENTION & DISPOSITION SYSTEM REQUIREMENTS

InterPARES
Trust



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).



Retention & Disposition System Requirements

- Establishing disposition authorities
- Applying disposition authorities
- Executing disposition authorities
- Documenting disposal actions
- Reviewing disposition

ISO 16175 - Parts 1, 2, and 3



Questions to be asked/answered

1. Can retention periods be applied?
2. Can destruction actions be automated?
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?
5. Can records be deleted (including backups) according to the schedule?



Questions (cont.)

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)?
8. Are disposal actions documented in process metadata?
9. Can all disposal actions be automatically recorded and reported to the administrator?
10. Can the system provide audit trails or other methods to track completed disposition actions (e.g., metadata, reports)



OVERARCHING ISSUES

InterPARES
Trust



Cloud Complexity

Privacy

Variety of cloud computing deployment models

Multi-tenancy

Cross-border legal issues (jurisdiction)

Implementing legal holds

Multiple locations

Security

Systems architecture (multiple cloud components)

Variety of cloud computing service models

Terms of service agreements

Multiple copies

Trust

InterPARES Trust

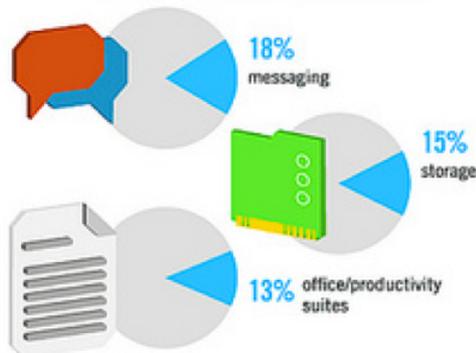


5 Reasons Businesses Use the Cloud

Every year, more and more businesses are adopting cloud. While traditionally thought of as an IT decision, cloud is increasingly being considered a business decision to enable company functions. Take a look at five reasons why more businesses are adding the cloud to their technology arsenals.

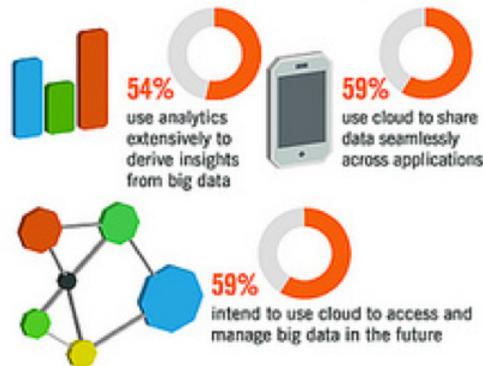
3 It can support a variety of business needs

Companies are forging a tighter link between technology and business outcomes. Take a look at the business functions companies have migrated to the cloud.



1 It offers better insight and visibility

Businesses are using cloud technology to support their analytics efforts. Of leading organizations:



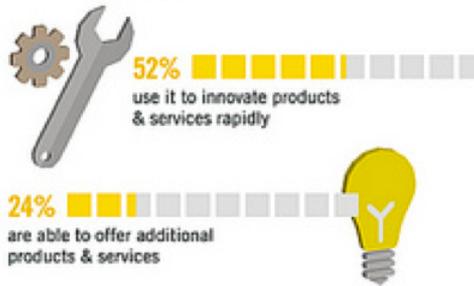
2 It makes collaboration easy

Cloud allows work to be accessed from anywhere on multiple devices, making cross-functional collaboration much easier. Here's what leading organizations—those that are gaining competitive advantage through cloud—cited as popular uses:



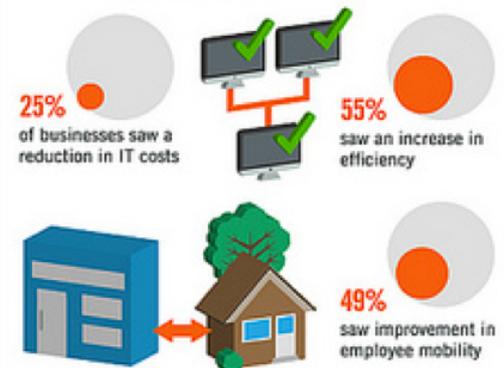
4 It allows for rapid development of new products and services

The cloud offers businesses valuable capabilities. Here's what leading organizations say it enables them to do:

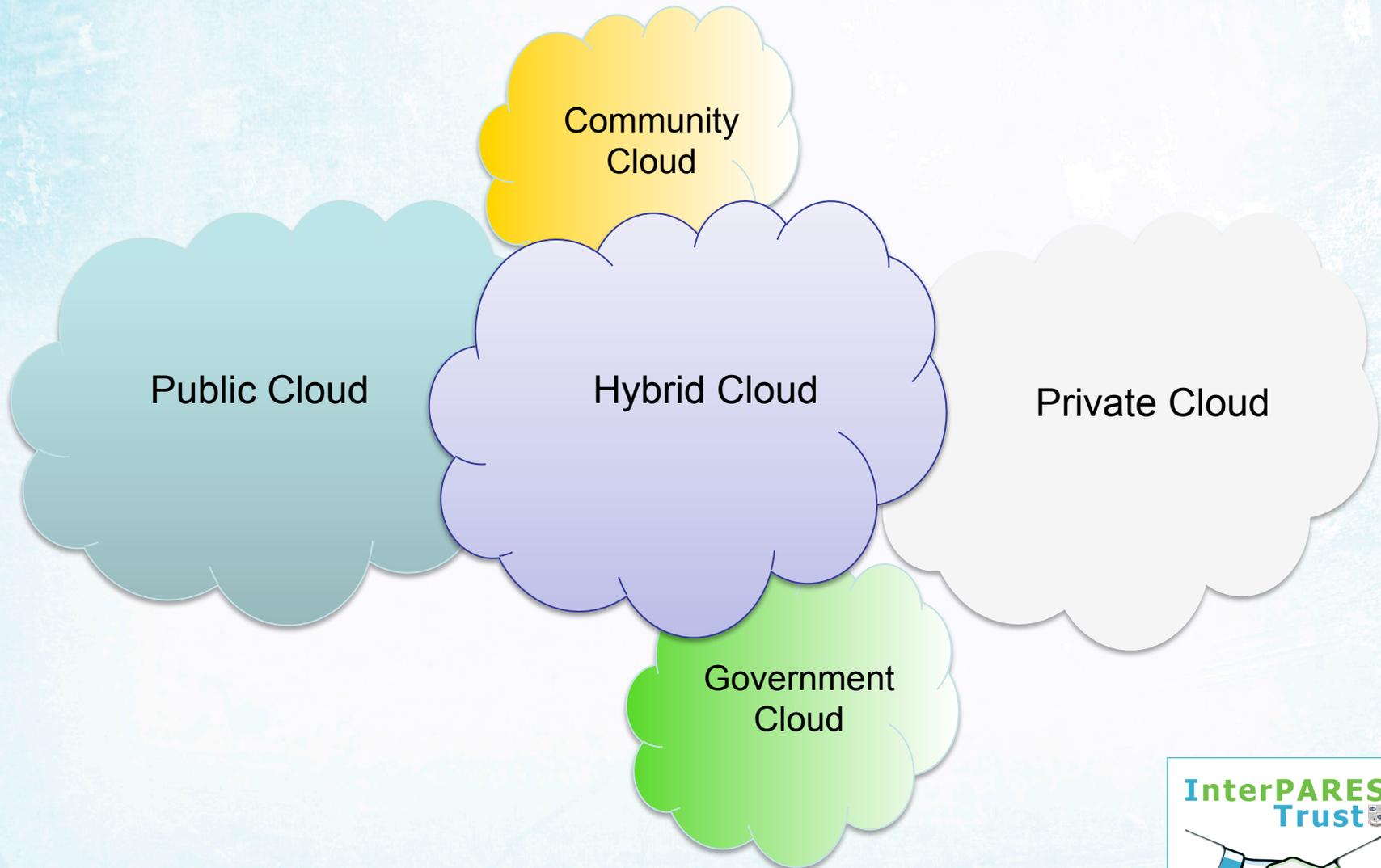


5 The results are proven

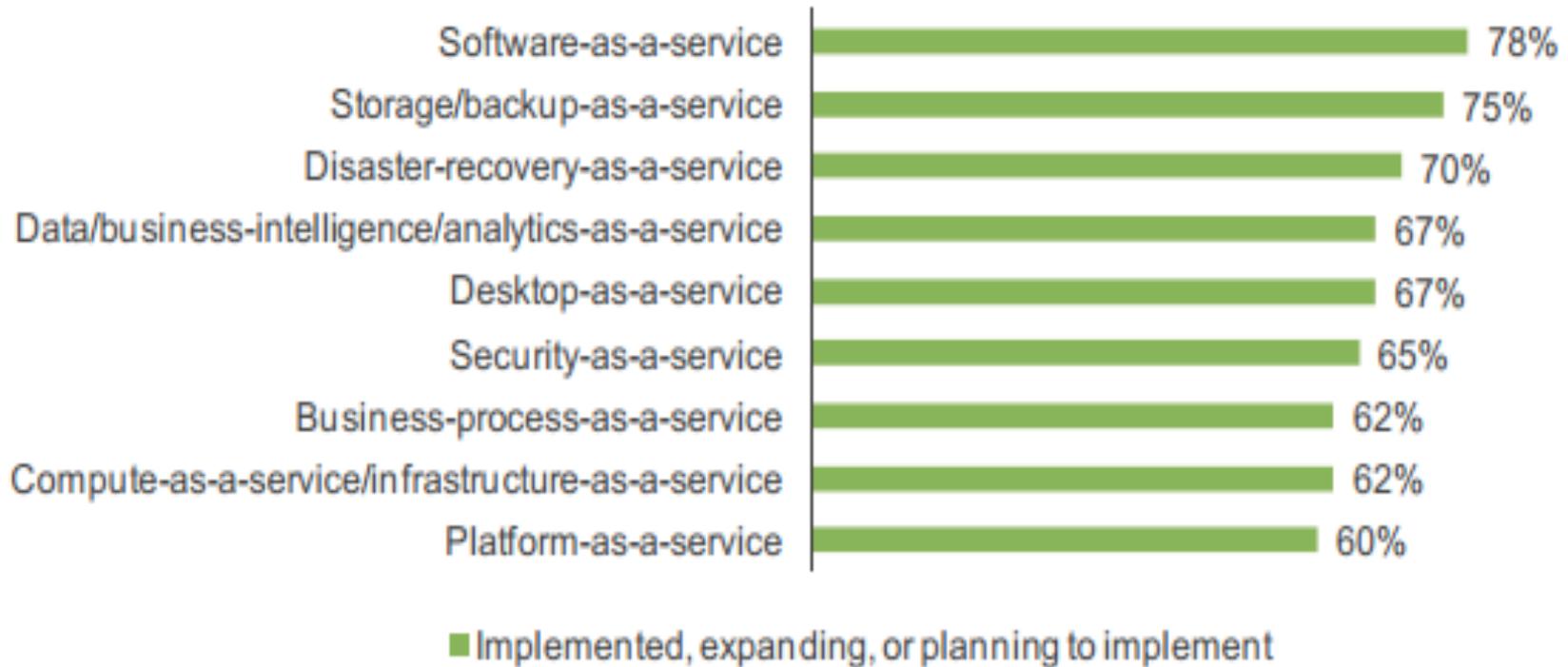
From business growth to increased efficiency, businesses using cloud are realizing benefits across the company.



Cloud Computing Deployment Model



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



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)

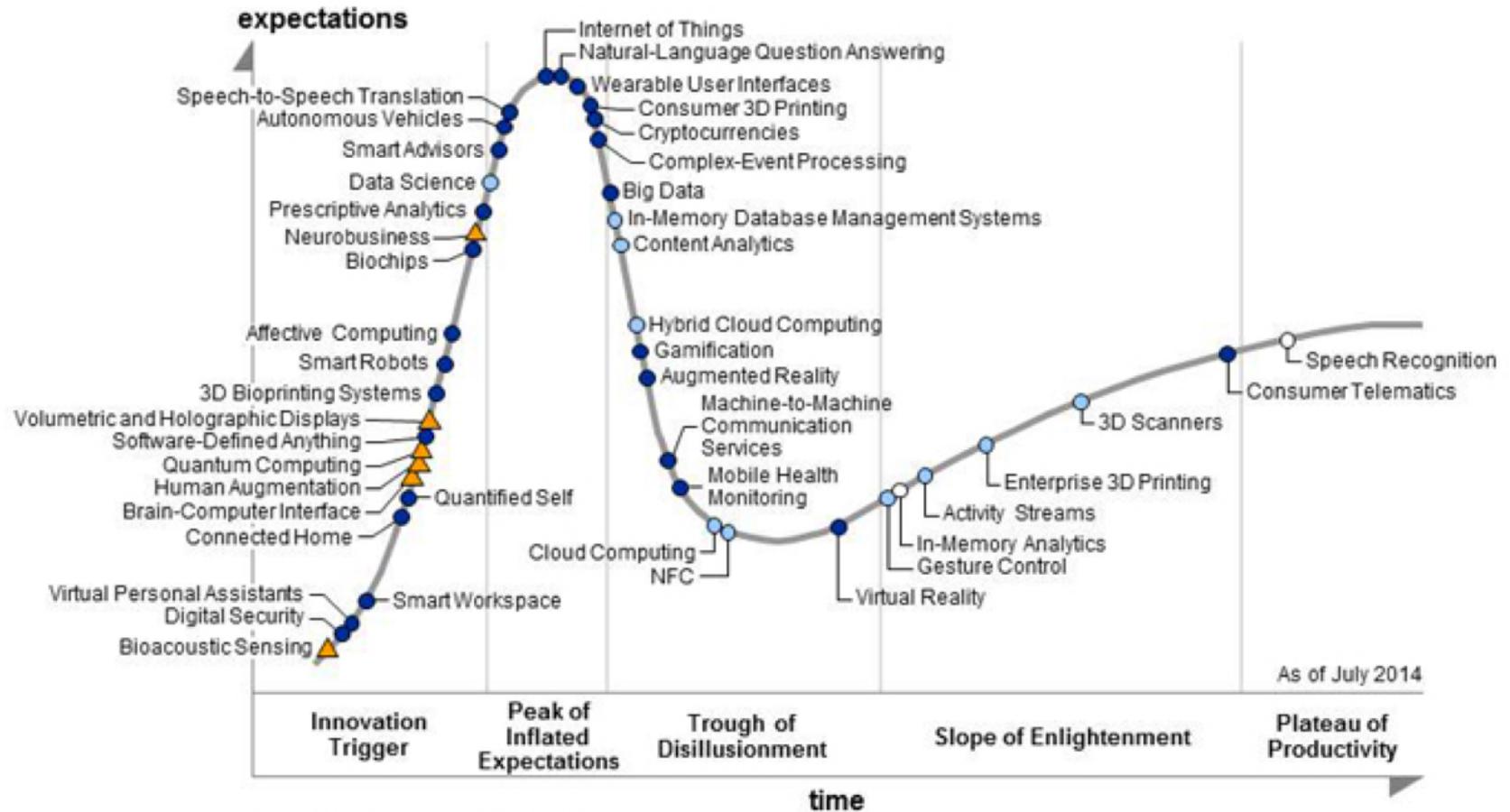




TOP 20 ENTERPRISE CLOUD SERVICES

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





Source: Gartner Hype Cycle for Emerging Technologies 2014



Short-term requirements

- Short-term records have a limited useful life and are retained only as long as needed for the primary purpose for which they were created; they have administrative (operational), legal (regulatory), and/or fiscal value.
- Organizations operating in heavily regulated industries, such as the Finance Industry, may receive guidance to help them manage records created when they utilize blogs, microblogs and social networking sites to reach out to current and prospective clients.



Ex. SaaS (Social Media) and FINRA Guidance



The Finance Industry Regulatory Authority's *FINRA Regulatory Notice 12-29*, February 4, 2013, categorizes communications shared by the finance industry as *retail communications* since they are distributed or made available to more than twenty-five retail investors within a thirty calendar-day period. Social media communications fall in this category and are exempt from pre-use approval requirements; must be managed "after" posting; must comply with NASD Rule 2210(b)(4)(A) concerning recordkeeping requirements; and must be retained for a period of three years (two years on the premises).

The Bottom Line: For business communications made via social media, even if only distributed internally, records must be kept. Most firms have chosen the "safe" route and capture all social media communications, similar to what is presently done for email.



Short term requirements (cont.)

Short-term records also include those generated dynamically by applications deployed in the cloud as a result of business transactions. This data can be downloaded to an enterprise content management system or managed within the cloud environment.



Business Process as a Service (BPaaS) -Salesforce

Explore our products, and see what Salesforce can do for you.

SALES CLOUD

Welcome to Sales Cloud, built on the Salesforce1 Platform. A new world, and a better way to sell. Where field sales sells only on mobile devices. And inside sales is fed nothing less than the best leads. It's sales managers knowing which deals will close. And when. A world where lead and contact information is always fresh and complete. And everyone performs like an "A" player.

[Learn more about Sales Cloud >](#)

[View demo >](#)

[Editions & pricing >](#)

[Guided tour >](#)



SERVICE CLOUD

Build customer loyalty. Increase first call resolution and agent productivity. Improve customer satisfaction by 37%. All while delivering fast customer service from anywhere with Service Cloud, built on the Salesforce1 Platform.

[Learn more about Service Cloud >](#)

[View demo >](#)

[Editions & pricing >](#)

[Free trial >](#)



InterPARES
Trust



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



Integrate with anything



4.1 – Short term requirements (cont.)

Legal concerns related to internal operations include updating records schedules to reflect new records series resulting from cloud applications and implementing access policies for data hosted by third parties. External considerations that must be resolved include accepting only vendor Terms of Service Agreements (TSAs) and Service Level Agreements (SLAs) that are consistent with the organizations goals and objectives.



TSAs and SLAs - AWS as an example

Analyst firms such as

Gartner have declared the AWS service level agreements (SLA) useless.

There have also been complaints that buying cloud services from AWS involves “*take it or leave it*” terms and conditions that do not fall down well with larger enterprises. (June 2013).

InterPARES
Trust



TSAs and SLAs - AWS 2014



[FIND SERVICES](#) ▾ [I WANT TO ...](#) ▾ [GET HELP](#) ▾ [SECURITY](#) ▾ [ABOUT US](#)

Amazon Web Services (AWS)

Amazon Web Services (AWS) Enterprise Agreement

In early September 2014, current AWS account holders should have received an email directly from Amazon Web Services, on Stanford's behalf, informing them of the new Enterprise Agreement negotiated between Amazon Web Services and Stanford University as of May 2014. Some of the new terms are significantly improved from the "click-through" consumer terms.

- Improved security, privacy, and audit protections
- FERPA specific protections
- Branding/trademark protection for Stanford University
- Longer net-payment terms (45 days)
- Longer termination notification lead-time
- Data Recovery: Guaranteed 30 days to retrieve data

Short term requirements (cont.)

The elastic nature of the cloud and the free (e.g., social networks) or low-cost cloud services (file storage services) available make disposition appear less urgent. Unless the location of all electronic records is known and rules are in place to dispose of these records automatically, disposition actions may be haphazard. The routine destruction of records is essential to a defensible records management program, yet many institutions effectively never destroy electronic records.



Identify & Manage all Cloud Content

Do you know where your records are???



Long term records issues and challenges

Ability to maintain the integrity of the records over the long term, migrate records to new file formats and systems, and export the records and associated metadata to the enterprise for long-term or permanent preservation. Standardized metadata is essential for system interoperability; however, proprietary systems do not adhere to a standardized records management metadata schema.



Long term records issues and challenges

Some archives not only protect their collections but also provide access for researchers and other interested parties. Providing access to digital collections in a cloud archive may be an added requirement when searching for a cloud preservation solution.



media compliance.

contracts or setup fees.

Why is 100% Authentic Capture a Requirement?



ArchiveSocial Named a Cool Vendor in Government by Gartner

Networks like Facebook are more than just a place to connect. Underneath every status update, profile, photo, and message, there is important metadata describing the content. It is important to have a complete record of your correspondence in order to satisfy long-term regulatory requirements.

ArchiveSocial saves this data in its native format, and applies a digital signature to each record in order to prove authenticity during legal situations. Unlike vendors that capture HTML snapshots - or convert the data into formats such as email - ArchiveSocial ensures you have 100% authentic social media records you can trust for compliance.





Search Results

21 - 30 of 840 results for *

- [Edit search](#)
- [Save search](#)
- [Export results](#)

You refined by:

Facebook Page Photos



Account Owners

Accounts

- Visit North Carolina (308)
- North Carolina Department of Commerce (198)
- Bev Perdue (160)
- Government & Heritage Library - part of the State Library of North Carolina (90)
- North Carolina Division of Tourism, Film and Sports Development (76)
- NC State Archives and Records Section (8)



Visit North Carolina

On the hunt for fall color this weekend? Try Chimney Rock. Pilot Mountain and Hanging Rock below was taken at Chimney



Oct 26, 2011

View previous comments



Ansley Herring Wegner go all the way up but en Oct 26, 2011



Kay Crump Sigmon I h mts. It was a long hard Oct 26, 2011



Michael Morgan Kitchens Oct 26, 2011



Rebekah Boan if anyone you should visit dehart b morning and got some G Oct 26, 2011



Judy Falconeiri Williams Beautiful color.. No color in the North East this year at all. Hurricane Irene ruined it!!!

FB PHOTO_10150367618954626.txt

```

now! : )", "id": "10150367618954626_5526265", "likes":
2, "can_remove": true, "from": {"id": "154793984540966", "category": "Home/
garden", "name": "Southern Way of
Life"}, "created_time": "2011-10-26T14:59:40+0000"}, {"message": "I was
there that day! Too afraid of heights to go all the way up but enjoyed
walking the
trails.", "id": "10150367618954626_5526363", "can_remove": true, "from":
{"id": "1639249314", "name": "Ansley Herring
Wegner"}, "created_time": "2011-10-26T15:16:02+0000"}, {"message": "The
rain cometh...get your shots in
early!", "id": "10150367618954626_5526362", "can_remove": true, "from":
{"id": "100001013201087", "name": "Jane
Cummings"}, "created_time": "2011-10-26T15:16:02+0000"}, {"message": "I
have been so blessed by God to live in the NC mts. It was a long hard
road to get here, and I thank him
everyday!", "id": "10150367618954626_5526417", "likes":
1, "can_remove": true, "from": {"id": "1354765302", "name": "Kay Crump
Sigmon"}, "created_time": "2011-10-26T15:25:59+0000"},
{"message": "Like!", "id": "10150367618954626_5526650", "can_remove": true, "
from": {"id": "1189077474", "name": "Michael Morgan
Kitchens"}, "created_time": "2011-10-26T16:08:04+0000"},
{"user_likes": true, "message": "if anyone lives around the louisburg
(franklin co) area, you should visit dehart botanical gardens off hwy.
401...i went this morning and got some GREAT fall color
shots! :)", "id": "10150367618954626_5526709", "likes":
1, "can_remove": true, "from": {"id": "1396643370", "name": "Rebekah
Boan"}, "created_time": "2011-10-26T16:20:49+0000"}, {"message": "Beautiful
color.. No color in the North East this year at all. Hurricane Irene
ruined
it!!!", "id": "10150367618954626_5527510", "can_remove": true, "from":

```

Long term records issues and challenges

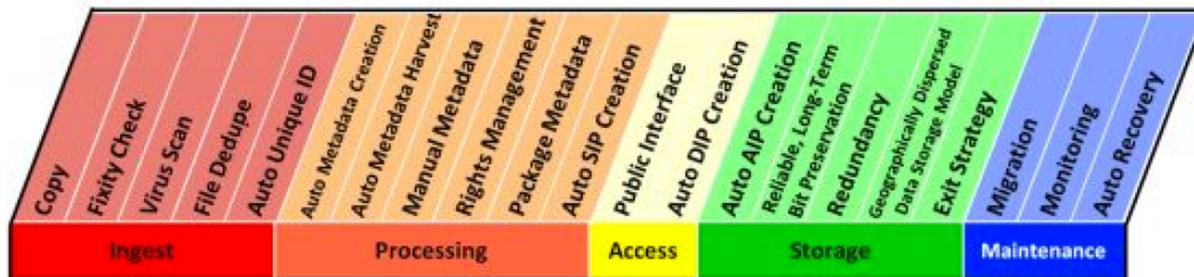
If a cloud preservation service is employed, the organization must be confident that the data is in the custody of a trusted provider that employs a preservation system that is compliant with the Open Archival Information System (OAIS) reference model and protected by a sound disaster recovery plan.

InterPARES
Trust



Preservation as a Service

Preservica's complete, out-of-the-box solution addresses **all 21 functions** in the POWRR Tool Grid comparison of Digital Preservation systems for small to mid-sized institutions with limited resources



InterPARES
Trust



Mixed trust response to cloud computing (Benefits vs. **Risks**)

- Privileged user access
- Regulatory compliance
- Data location
- Data Segregation
- Recovery
- Investigative Support
- *Long-term viability*



Building Trust

Venter et al., discuss that C-levels often report concern about data security and integrity in multi-tenancy and distributed storage environments. Consequently there appears to be a trend when dealing with the retention and disposition of sensitive and highly confidential information to *trust only a private cloud deployment* (Ferguson-Boucher et al.; Viewpointe) *or a hybrid configuration* (Géczy et al.; HP), over public cloud models that are mostly associated with multi-tenancy and distributed data centers.

Potential development of decision-modeling tools to aid in the cloud provider selection process and service agreement negotiations.



IN SUMMARY

InterPARES
Trust



The use of cloud services is driven by a desire to *improve processes* and *reduce costs* while *retaining control*.

Records that are allowed to escape the control of records managers and records schedules are records that could cost the enterprise *money*, *reputation*, or even its *survival*.

