

Cloud Services for Records Storage

Cloud Services for Records Storage – Use of Economic Models in Decision-Making

We invite you to participate in a survey as part of the InterPARES (International Research on Permanent Authentic Records in Electronic Systems) Trust project exploring issues concerning digital records and data entrusted to the Internet (<https://interparestrust.org/>). Its purpose is to explore the use, or otherwise, of economic models in making decisions about adopting external, third party cloud services for storing organisations' records, and to identify case examples that illustrate the role of economic models in cloud storage decision-making. The research is being conducted by Professor Julie McLeod, Northumbria University (julie.mcleod@northumbria.ac.uk) and Ms Brianna Gormly, University of British Columbia, Canada (brianna.gormly@alumni.ubc.ca). The survey should take 15-20 minutes of your time. It does not ask for organisational or personal identifiers unless you are willing to take part in a short follow-up interview to provide a case example. Case examples can be anonymised should you wish. The data from the online survey tool will be stored securely in Canada. The research has been approved by the Northumbria University's Ethics Committee.

Part 1: About Your Organisation

Which of the following categories best describes your organisation?

- Governmental
- Intergovernmental
- Private
- Non-Profit
- Public
- Education
- Other, please specify... _____

**What is the approximate number of persons employed by your organisation?
(Please choose only one of the following)**

- Less than 100
- 100-299
- 300-499
- 500-999
- 1,000-4,999
- 5,000-10,000
- More than 10,000

**Please state the country where you work. If you work in multiple countries
please state the country where you are based.**

- Afghanistan
- Albania
- Algeria
- Andorra
- Angola
- Antarctica

- Antigua and Barbuda
- Argentina
- Armenia
- Australia
- ... 171 additional choices hidden ...
- United Kingdom
- United States
- Uruguay
- Uzbekistan
- Vanuatu
- Venezuela
- Vietnam
- Yemen
- Zambia
- Zimbabwe

Use of Third Party Cloud Service Providers for Records Storage in Your Organisation

Does your organisation use an external third party cloud service provider for storing any of its records? (Third party cloud services include public cloud, community cloud, or hybrid cloud as well as private clouds managed by a third party.)

- Yes
- No
- In the past but not now
- Don't know

Why? (Choose all that apply)

- Cost savings in hardware & software
- Cost savings in human resources
- Trust in cloud computing deployment models
- Trust in cloud service providers
- Increased flexibility; energy savings
- Sustainability; access to specialised services
- Access to specialist skills
- Improved reliability of service; backup
- Disaster recovery/business continuity
- Improved scalability of IT infrastructure
- Enhanced availability
- Other, please specify... _____

Why not? (Choose all that apply)

- Negligible or insufficient financial savings
- Negligible or insufficient savings in human resources and time

- Legal/regulatory requirements
- Lack of trust in cloud service providers
- Loss of specialist IT skills
- Transfer of costs from capital to operating budget
- Other, please specify... _____

Why did you stop?

Which cloud service model does/did your organisation use?

- Public
- Private
- Community
- Hybrid (i.e. a combination of more than one of the above)

What factors did your organisation consider in deciding whether or not to use an external third party cloud service(s) for storing some/all of its records?

(Choose all that apply)

- Capital cost (i.e. fixed, one-time investment)
- Operating costs (i.e. ongoing expenditure)
- Technology suitability
- Stakeholder impact
- Socio-political benefits
- Risks
- Responsibilities
- Other, please specify... _____
- Don't know

Which departments in your organisation are involved in decision-making about the adoption (or not) of third party external cloud services for storing some/all of its records? (Choose all that apply)

- Administration
- Archives/Records Management
- Audit
- Finance
- IT
- Legal
- Information governance and/or security
- Risk management
- Senior management
- Other, please specify... _____
- Don't know

Which department in your organisation plays the lead role in adopting (or choosing not to adopt) third party external cloud services for storing some/all of its records? (Choose only one)

- Admin
- Archives/Records Management
- Audit
- Business users
- Finance
- IT
- Legal
- Information governance and/or security
- Risk management
- Senior management
- A combination of more than one, please specify... _____
- Other, please specify... _____

- Don't know

For which of the following does/did your organisation use a third party cloud service(s)? (Choose all that apply)

- Short term (i.e. 1-9 years) storage of ALL of its records
- Short term (i.e. 1-9 years) storage of SOME of its records
- Longer term (i.e. 10+ years) storage of ALL of its records
- Longer term (i.e. 10+ years) storage of SOME of its records
- Other, please specify... _____
- Don't know

For which of your organisation's functions are/were records stored with a third party cloud service(s)? (Choose all that apply)

- Administration
- Finance
- Personnel
- Facilities management
- Core business functions (e.g. manufacturing; sales; research)
- Other, please specify... _____
- Don't know

Does your organisation apply a security classification system to its records?

- Yes
- No
- Don't know

What are/were the categories of security classification assigned to records stored with third party cloud services? (Choose all that apply)

- Public

- Internal/confidential
- Restricted/sensitive/secret
- Highly confidential/top secret
- Other, please specify... _____
- Don't know

Does your organisation apply records access restrictions to its personnel?

- Yes
- No
- Don't know

For your organisation, how important are the following issues of trust in adopting (or not adopting) an external third party cloud service(s) for storing some/all of your organisation's records?

- Concerns about the service provider's offer of an economically viable service
- Concerns about the service provider continuing to deliver an economically viable service
- Concerns about the service provider continuing to deliver a sustainable storage service
- Vendor lock-in
- Unfavourable contractual terms offered by cloud service providers
- Negligible or insufficient financial savings
- Negligible or insufficient savings in human resources and time
- Lack of trust in cloud computing models (e.g. public, private, community, and hybrid models)
- Lack of trust in cloud service providers
- Concerns about the internal/organisational decision-making process

Answer choices for each of the above:

- Not (at all) important

- Slightly important
- Moderately important
- Very important
- Extremely important
- Don't know

Has your organisation considered other issues of trust not included in the above list?

What factors contribute to your organisation's trust in the decision-making process? (Choose all the apply)

- Service provider/ vendor reputation
- Robust internal processes
- Clear problem definition and/or goal
- Involvement of relevant stakeholders
- Thorough investigation of situation
- Analysis of alternatives
- Taking account of regulatory/legislative requirements
- Risk management
- Other, please specify... _____
- Don't know
- Trust in the decision-making process has not been considered

How would you characterize the impact of moving from capital (i.e. fixed, one time) cost investment to operating cost (i.e. ongoing expenditure) in storing records with a cloud service provider?

- Very negative
- Somewhat negative

- Neutral
- Somewhat positive
- Very positive
- Don't know

Use of Costing/Economic* Models in Adopting Third Party Cloud Services for Records Storage in Your Organisation

* Any model or calculation for determining the cost of cloud storage; this includes models underpinned by economic, financial or management accounting theories as well as those considering a wider range of costs, e.g. social and environmental costs

For your organisation, how important is cost in deciding whether or not to adopt an external third party cloud service(s) for storing some/all of its records?

- Not at all important
- Slightly important
- Very important
- Essential
- Critical
- Don't know

Does your organisation use any costing/economic model in deciding whether or not to adopt an external third party cloud service(s) for storing some/all of its records?

- Yes
- No
- Don't know

Which of the following models has your organisation used in deciding whether or not to adopt an external third party cloud service(s) for storing some/all of its records? Choose all that apply

- Discounted Cash Flow
- Net Present Value
- Differential Net Present Value
- Internal Rate of Return

- Monte Carlo models
- Kryder's Law
- Full Cost Accounting
- Total Cost of Ownership
- Acquisition interval (i.e. length of acquisition between purchase of additional storage)
- Relative cost of operations (i.e. comparison of costs that change between in-house and cloud, including service life of storage, redundancy copies, personnel and infrastructure)
- Non-financial factors (e.g. technology suitability, stakeholder impact, socio-political benefits, risks, responsibilities)
- Other, please specify... _____

How does your organisation use/has your organisation used costing/economic models in the context of using external third party cloud service(s) for storing some/all of its records? (Choose all that apply)

- To estimate costs as part of the adoption decision-making process
- To estimate costs as part of an adoption business case
- To use in supplier contract negotiations
- To use for service level agreements
- To monitor costs post-adoption (i.e. estimated vs. actual)
- Other, please specify... _____
- Don't know

Part 2: About You

What is your area of responsibility in your organisation? (Choose only one)

- Administration
- Audit
- IT
- Legal
- Records / Archives (services/practice/advice)
- Records / Archives (teaching and/or research)
- Risk Management
- Finance
- Other, please specify... _____

How would you describe your level of responsibility in your organisation?

- Professional level
- Professional level with management responsibilities
- Senior management
- Other, please specify... _____

In which department/service do you work?

- Legal/Regulatory
- Finance
- Research
- Administration
- Facilities Management
- Quality Assurance
- Audit
- Communications / Public Relations

- IT
- Records / Archives (services/practice/advice)
- Academic (i.e. teaching and/or research)
- Risk Management
- Other, please specify... _____

If your department/service is located within a larger organizational function, in which function is it located?

- Legal/Regulatory
- Finance
- Research
- Administration
- Facilities Management
- Quality Assurance
- Academic (i.e. teaching and/or research)
- Other, please specify... _____
- Not applicable

Use of Costing/Economic* Models in Adopting Third Party Cloud Services for Records Storage in Your Organisation

* Any model or calculation for determining the cost of cloud storage; this includes models underpinned by economic, financial or management accounting theories as well as those considering a wider range of costs, e.g. social and environmental costs

How involved are you in decision-making about the adoption (or not) of third party external cloud services for storing some/all of your organisation's records?

- Largely involved
- Partly involved
- Not involved

Do you use any costing/economic model in deciding whether or not to adopt an external third party cloud service(s) for storing some/all of your organisation's records?

- Yes
- No

Which of the following models have you used in deciding whether or not to adopt an external third party cloud service(s) for storing some/all of its records? (Choose all that apply)

- Discounted Cash Flow
- Net Present Value
- Differential Net Present Value
- Internal Rate of Return
- Monte Carlo models
- Kryder's Law
- Full Cost Accounting

- Total Cost of Ownership
- Acquisition interval (i.e. length of acquisition between purchase of additional storage)
- Relative cost of operations (i.e. comparison of costs that change between in-house and cloud, including service life of storage, redundancy copies, personnel and infrastructure)
- Non-financial factors (e.g. technology suitability, stakeholder impact, socio-political benefits, risks, responsibilities)
- Other, please specify... _____

How involved are/were you in post-adoption evaluation/monitoring of the cost of third party external cloud services for storing some/all of your organisation's records?

- Largely involved
- Partly involved
- Not involved

How are you using/have you used costing/economic models in the context of using external third party cloud service(s) for storing some/all of your organisation's records? (Choose all that apply)

- To estimate costs as part of the adoption decision-making process
- To estimate costs as part of an adoption business case
- To use in supplier contract negotiations
- To use for service level agreements
- To monitor costs post-adoption (i.e. estimated vs. actual)
- Other, please specify... _____

For you, how important are the following issues of trust in adopting (or not adopting) an external third party cloud service(s) for storing some/all of your organisation's records?

Concerns about the service provider's offer of an economically viable service

Concerns about the service provider continuing to deliver an economically viable service

Concerns about the service provider continuing to deliver a sustainable storage service

Vendor lock-in

Unfavourable contractual terms offered by cloud service providers

Negligible or insufficient financial savings

Negligible or insufficient savings in human resources and time

Lack of trust in cloud computing models (e.g. public, private, community, and hybrid models)

Lack of trust in cloud service providers

Concerns about the internal/organisational decision-making process

Answer choices for each of the above:

- Not (at all) important
- Slightly important
- Moderately important
- Very important
- Extremely important
- Don't know

Have you considered other issues of trust not included in the above list?

What factors contribute to your trust in the decision-making process for adopting (or not adopting) an external third party cloud service(s) for storing some/all of your organisation's records? (Choose all that apply)

- Service provider/vendor reputation
- Robust internal processes
- Clear problem definition and/or goal
- Involvement of relevant stakeholders

- Thorough investigation of situation
- Analysis of alternatives
- Taking account of regulatory/legislative requirements
- Risk management
- Other, please specify... _____
- No factors of trust contribute to the decision making process

Finally...

This survey is anonymous however we would like to identify some case examples of the use and non-use of external third party cloud services for records storage and publish them as part of the research findings. We would draft a case example (~500 words), based on a short discussion, which can be anonymised or not, and ask you to finalise it prior to publication. Would you be willing to be contacted for a short discussion about why and how you use the cloud for storing any of your organisation's records, or do not use it?

I would be willing to be contacted for an interview.

- Yes
- No

Name

Email

Telephone number or skype address

Thank you for completing the survey