Authentic records in the cloud?

Dr Erik Borglund, Mid Sweden University
2nd International Conference on Cloud Security Management (ICCSM 2014)
University of Reading, UK
Bio

• Associate professor, Computer & System Science
  • Senior lecturer Archives and information science at Mid Sweden University
• PhD Computer & System Science
• MSc Information Systems
• Police exam (20 years as sworn officer)
Outline for this presentation

• Research background
• Problem
• Study one
• Results study one
• Study two
• Preliminary results study 2
• Questions
Background

- The last couple of years more and more information is “going to the cloud”
- This is also the case for records and archives.
- Very little research has been undertaken to assess the impact of cloud computing from an archival science perspective
Two different focuses

1. Research where archives is presented as a cloud service

2. Research about management of records. A set or problems related to cloud computing and records management is presented: 1) trust of records, 2) general problems to management of records, 3) the fact that you do not know where the records are stored.
Study one

- A qualitative approach, three in depth interviews with representatives of cloud providers and official documentation were used as collected data.

<table>
<thead>
<tr>
<th>Company</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of offices</td>
<td>1</td>
<td>4 in Sweden</td>
<td>6 World wide</td>
</tr>
<tr>
<td>Started cloudservices</td>
<td>1997</td>
<td>2009</td>
<td>2008</td>
</tr>
<tr>
<td>Services</td>
<td>SaaS, PaaS, IaaS</td>
<td>Saas, IaaS</td>
<td>Specialized on software, SaaS</td>
</tr>
<tr>
<td>Customer characteristics</td>
<td>SME’s, 5-100 users, both public and private sector</td>
<td>SME’s, 5-200 users, both public and private sector</td>
<td>SME’s, Medium sized and large sized companies national and global, both public and private sector</td>
</tr>
</tbody>
</table>

Luciana Duranti
Principal Investigator
Results study one

• Security/Quality attract but customers care less

• Authenticity was nothing the companies focused upon. A was less mature; B Microsoft problem; C keep records in original form.

• Long term preservation. Company A-C all thought the cloud not are suited for long term preservation.
Summary

• First it seems like the customers of company A, B, & C not really cares about authenticity. If authenticity would be important then it would also be a requirement.
Summary

• Second the long-term preservation problem does not seem to be important at all.
• The cloud can be interpreted as a temporal information storage solution, in which you are willing to take risks of loosing information.
• This research should be followed by a more in depth research where the customer should be in focus.
Study two

• Customer – Archivist
• 12 interviews (14 answered request)
• 30-60 minutes
• Focus the cloud and trust
Preliminary Results

• Challenges
  • Long-term perspective (compared to study one)
  • Knowledge
  • Black Box Syndrome
  • Information Security
Results

• Service providers
  • Can I trust the provider as organization
  • Can I trust that the providers can what they claim?
• Trust of the record
  • A paradox ➔ If you do not trust the record the whole idea with cloud services disappear
Results

• Knowledge needed
  • IT-competence
  • Requirement engineering
  • Agreement and contract skills
Results

• New archival assignments
  • Instead of guardian of trustworthy records
    • Guardian of trustworthy organizational values
  • Proactivity results in
    • Generalists instead of experts
Results

• New roles
  • Auditing
  • Controller
  • But still responsible for
    • Appraisal
    • Deliver of archival records
    • Archival description
Results

• Why the cloud?
  • Cost
  • Political ideologies
  • Easiness
  • Used to use cloud services (privately)
  • Citizens demands
Results

• Risk taking
  • More willing to take risks
  • The cloud might be safer than ”in house”
  • A general more sloppy information management
  • You forgot the risks with physical archives
Results

- Regulations $\rightarrow$ Two extremes
  - Works fine
  - Needs to be refined
Next step

• Questionnaire
• More interviews
• Managers
• Analysis of behaviour
Thank you

http://www.recordsinthecloud.org/

Erik Borglund

erik.borglund@miun.se

www.borglund.net