Digital preservation of cultural heritage information in Sweden - a pilot study

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2014-06-03
Digisam will coordinate the work with national digital strategy and between 2012-2015:

- Present recommendations for coordinated digital information management of collections and holdings.
- Develop proposals for cost-effective long-term digital preservation of collections and holdings.
- Define roles and responsibilities for the work on aggregation, access and preservation of digital cultural heritage information.
Background

- Task to the state cultural heritage authorities from the government in 2009/2010 aiming to collect data about work with **digitisation, access and preservation of digital information** as a basis for the national strategy.

- Coordinating secretariat for digitisation, digital preservation and digital access to the cultural heritage – Digisam (Ku2011/242/KA).

- **The national strategy for digitisation, digital access and digital preservation**, 2012-2015

- A **workshop on definition of digital preservation for cultural heritage** together with the professionals at the National Archives in January 2012.

- **Meetings with 24 state cultural heritage agencies** that are the core group of Digisam in 2012.

- **Pilot study on digital preservation** May 2013 – March 2014.
A workshop on definition of digital preservation of cultural heritage together with professionals at the National Archives in order to formulate problems and possibilities connected to digital preservation of cultural heritage information.
Archives, Libraries and Museums
Institutions and type of information
State cultural heritage agencies

- technical storage - frequently "in house".
- digital preservation is usually not included in the procurement of the system today.
- importance of collaboration on preservation issues.
- need for common preservation solution for all digital material, both archival material and other material - not a storage system but a system that manages all processes.
• The e-Archive and e-Diarium Project (eARD) at the National Archives develop **Common Specifications for Government Agencies (FGS)** for transferring digital records between records management systems and to an e-archive.

• FGS are general technical specifications for structure and metadata content of the delivery packets or transmission format.
Pilot study on digital preservation

- to examine the current way of working on digital long-term preservation issues at the state cultural heritage agencies.
- current needs and "state of the art" at the national and international levels.
- basis for measures to bridge the gap.
The interviews with:

- The Centre for Architecture and Design
- Institute for Language and Folklore
- National Library of Sweden
- National Museum of Science and Technology
- Swedish National Heritage Board
- National Historical Museums
- National Maritime Museums
In the framework of the pre-study, different levels of digital preservation were defined:

- **Short-term preservation** – solutions that are used for a short time, 5 years maximum.
- **Medium-term preservation** – solutions that are used during a lifetime of the system, 10 years maximum.
- **Long-term preservation** – solutions that are used after the originating system's lifetime.
Findings of the pilot study:

1. **Which kinds of digital cultural heritage information are there in your organisation?**

   All of the interviewed institutions have digital collections with metadata descriptions, archival records, digital images, audio-visual material. More than half of the institutions has also 3D drawings, but many see it as a sort of material that will increase in the future.

2. **Are there priorities within the organization for which kind of digital cultural heritage information is to be stored and/or digitally preserved?**

   There is material that get a higher priority for digitisation: that runs a high risk of being lost. Those who answered “yes” added that they do not make a distinction between storage and preservation.
3: Do you have a documented strategy for preservation of cultural heritage information (short-term, medium-term, long-term)?

One documented strategy for short-term and medium-term preservation, none for long-term.

4: Do you have routines/procedures for digital storage/preservation of cultural heritage information?

Two of the institutions have implemented routines for digital storage and/or long-term digital preservation. However, older digitised materials stored on CDs, are not included in these routines and thus risk to be overlooked/forgotten.
5. Do you have systems for digital storage/preservation of cultural heritage information?

a) digital storage  
b) long-term preservation
6. Are your systems adequate for your current needs of storage/preservation?

Only one of the institutions answered that their current needs were covered, with the reservation that their future needs would not be.

7. What types of metadata standards do you use to describe digital cultural heritage information that will be stored/preserved?

Within the museum sector, standards are often developed in-house and/or are built on old traditions. However, when a new system for collection information is implemented, this is taken as an opportunity to change metadata standard.
8. Do you use classification for any of the stored/preserved information (with respect to confidentiality, availability, traceability, consistency et c)?

All of the institutions had information that needed classification. Some of this is processed at least partly automatically.

9. Are there different levels of authorisation for the digital cultural heritage information?

Six of the seven institutions had different levels of authorisation for access/usage.
10: Are there different requirements for the quality of the digital cultural heritage information, depending on the type of material? One institution had different requirements for quality, mostly for digital objects and not for metadata.

Query #11: Are you using cloud services for storage and/or long-term preservation?
None of the interviewees are currently using cloud solutions for storage and/or long-term preservation of digital CHI. One institution aims to store high-resolution images in a central (internal) cloud, connected to the collection information system.
12. What tools, services and automated processes are used today? What would be needed in the future?

Currently, most of the institutions used tools, services and/or automated processes for the following:

- Storage
- To supplement metadata
- To search data and metadata
- Authorisation

Following tools, services and automated processes that would be mostly needed in the future were most often mentioned:

- Storage
- Standards
- Routines and automated processes for mass conversion/mass migration
- Guidelines and tools

Others that were mentioned were the following:

- Extraction of information
- Classification of information
- Format identification
- Packaging
- Validation
13. Is there a need for a common storage solution for cultural heritage information?

14. Is there a need for common support, such as:

a) Storage solutions?

b) Long-term digital preservation?
Findings of the pilot study:

• Often large amount of digital cultural heritage information, but no efficient long-term preservation.

• Overall ambition that digital cultural heritage information should be long-term preserved. However, there is a distinction in a practical way of managing digital cultural heritage.

• There was a general concern about continually increased amounts of digital material, which will consequently bring on higher costs for both storage and preservation.

• Formats deriving from the traditional (analogue) way of describing collections, and international standards for metadata not always fully implemented.
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• Formats deriving from the traditional (analogue) way of describing collections, and international standards for metadata not always fully implemented.
Overall, there is need for common solutions for:

- storage
- standards and file formats
- guidelines and tools

In order to create interoperability and usability over time, there is also a need for:

- implementation of international standards
- a roadmap for digital preservation
- common support function, recommendations for preservation and thinning practices and tools and services.
Digisam…

is a secretariat for coordination of the digitisation of the swedish cultural heritage.

is a department at the Swedish National Archives