

Workshop on 'Preservation of digital heritage: regional and international cooperation as a solution'

CDNL Annual Meeting

Lyon, France 19 August 2014

Moderator: Steve Knight, Programme Director Preservation Research & Consultancy, National Library of New Zealand
Steve.knight@dia.govt.nz

The IFLA Trend Report 2013

Five top level trends which will play a key role in shaping our future information ecosystem:

- New technologies will expand access to information for some people and limit access for others
- Online education will democratise and disrupt education around the world.
- The boundaries of privacy and data protection will be redefined.
- Hyper-connected societies will listen to and empower new voices and new groups.
- The global information environment will be transformed by new technologies.

The IFLA Trend Report 2013

In referring to digital preservation the report states that:

Preserving our digital heritage is a priority for libraries and archives around the world.

Identifying and capturing digital content of historical or cultural significance in the information deluge is one challenge for libraries. Copyright restrictions on digital content, format obsolescence and lack of technological capacity are others. Automated technologies like web harvesting and search algorithms are increasingly being used by libraries to identify and record our digital output – what have we lost in turning curation and preservation over to algorithms?

Do we agree with the statement underlined above?

How about this?

‘Failure to look for trusted means and methods of digital preservation will certainly exact a stiff, long-term cultural penalty.’

Do we also agree with this statement?

Garrett, J. and Waters, D. 1996. Preserving Digital Information: Report of the Task Force on Archiving of Digital Information.

Commission on Preservation and Access and The Research Libraries Group. Page 4. <http://www.clir.org/pubs/reports/pub63watersgarrett.pdf>.

Digital preservation

While digital preservation is based on the same concepts and ethical principles as traditional conservation practice, digital preservation is a new challenge and our digital collections continue to grow in both volume and complexity.

In addition, there are challenges to our business models, our collecting strategies, and our workforce planning. Perhaps the greatest challenge now and increasingly in the future is the sheer cost of storing and managing large-scale digital collections. And if our digital collections are not large-scale now, they will be in 10, 20, 50 years' time.

CDNL Global Digital Library

The CDNL vision for the Global Digital Library includes:

‘promote the development of digital tools, products and services and common standards through ICABS and IIPC, and **with a particular focus on critical issues for national libraries such as long-term digital preservation**, authenticity, and understanding the needs of our users.’

What is digital preservation?

Digital preservation combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media failure and technological change. The goal of digital preservation is the accurate rendering of authenticated content over time.

How do we ensure our actions ensure accurate rendering of authenticated content over time?

Is digital preservation ...

a mechanical process

- Storage
- Fixity checking
- Periodic technology refreshment?

Or is it a social, cultural, psychological process?

- Provenance
- Context
- Chain of custody
- Ensuring understanding of change over time

- Semantic shift over time or is that the responsibility of our researchers?

Technologists **or** curators?

If a digital object is said to be authentic if it is what it purports to be

And if the integrity of a digital object is based on its remaining uncorrupted and free of unauthorised and undocumented change

Can we be comfortable in saying that our digital collections are safe in the hands of technology

Or, at some level, do we need human, mediated, curatorial oversight to provide assurance that a viable chain of custody has been provided for our digital collections over time?

Technologists **and** curators?

Digital preservation practitioners have an interest in the technologies that impact on our ability to understand, manage and provide access to it.

In particular we are interested in the idea of formats, the container an object arrives in (eg an image might arrive in TIFF or png format).

But we are also interested in what is required to ensure that the content within the container does not change over time.

Digital Practitioners are therefore a hybrid resource within our institutions, requiring both technological and curatorial skills and focus.

We need a mixture of machine and mediated, curatorial (human) oversight to provide assurance that a viable chain of custody has been provided for our digital collections over time?

Cooperation as a solution

So, if we agree that:

- Preserving our digital heritage is a priority for libraries and archives around the world
- Failure to look for trusted means and methods of digital preservation will certainly exact a stiff, long-term cultural penalty
- at some level we do need curatorial oversight to provide assurance regarding the authenticity and integrity of our digital collections over time?
- and that currently we are not addressing the problem satisfactorily (thus the title of the workshop)
- What role should national libraries play in ensuring the long-term sustainability of digital assets so that we can access, use and benefit from information in an increasingly hyper-connected world?

What can we do together? What do we need from each other?

Quick wins?

Shared strategy and policy – collection policies (digital collecting)

Shared tools development/enhancement

Preservation standards (what does compliance/conformance mean for national libraries?)

Resourcing – staff exchanges

- Strategic
- Technical
- Operational

Medium term wins?

Certification and audit – should national libraries settle on one?

Bridging the gap between research and practice for national libraries

- Repository analysis (interrogating large data sets)
- Data mining
- Visualisation
- Email systems
- Databases

TREASURES

A Horizon 2020 bid to develop a sustainable global technical registry for digital preservation.

A global collaboration project initiated by national libraries of New Zealand, Australia, Germany (Deutsche Nationalbibliothek), KB Netherlands and the British Library.

Business modelling and sustainability work to be lead by Deutsche Nationalbibliothek.

Outcome to benefit all national libraries and the wider global digital preservation community.

PERSIST

UNESCO Digital Roadmap

Bringing industry and cultural heritage together to support the digital preservation agenda

Requires sustained effort from governments, creators, publishers, relevant industries and heritage institutions

Requires international cooperation to enable all countries to ensure preservation and continued accessibility of their digital heritage.

Report back to Plenary

Workshop on 'Preservation of digital heritage: regional and international cooperation as a solution'

Technology, infrastructure, training, awareness raising, policy, strategy, legal frameworks, workforce planning/skills

- Preserving our digital heritage is a priority for libraries and archives around the world
- Failure to look for trusted means and methods of digital preservation will certainly exact a stiff, long-term cultural penalty

Report back to Plenary

How do we (as national Libraries) ensure our actions ensure accurate rendering of authenticated content over time?

1. Legal, strategic and policy frameworks – we need to get this right – we need to take the lead
2. Have the right people – how do we make them, where do we get them from
3. Having the right tools and processes (maybe from the private sector)
4. Networking, cooperation the keys to success
5. Responding better to the technology world – cloud, big data, robustness, scalability