

APPROACHES TO DIGITAL PRESERVATION PRODUCT AND SERVICE SUSTAINABILITY

Comparing alternate approaches

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Abstract - How do we apply the lessons of ongoing evaluations of digital preservation sustainability within single institutions to the products and services on which this sector increasingly depends? The speakers will look at this key question from different viewpoints to pool best practice and explore the issues to ensure the community can expect more durable systems however they are delivered.

Keywords - Sustainability, Products, Services, Standards

Conference Topics - Sustainability: Real and Imagined

1. INTRODUCTION

Sustainability is of course critical in the field of Digital Preservation and has been the subject of many surveys, reports, evaluations, standards and papers, almost always applying to individual preservation programs. However, as the field has evolved, almost all preservation initiatives will select from the products available and implement one of these, placing a burden on the providers of these systems to ensure that what they provide delivers the sustainability demanded.

The sad demise of the DPN system in 2018 [1] demonstrated that even well-funded, widely applied

systems are not immune from failure and such events reflect badly on the whole sector.

This panel will discuss the sustainability of these products and services, where sustainability is considered in its widest form. It will take input from academic studies, product suppliers and standards experts to examine the approaches adopted by these providers, comparing models and setting expectations for the whole sector. The speakers have been selected to represent different approaches to achieving the same endpoint - digital preservation products and services that sustain for the long term.

2. PREVIOUS SUSTAINABILITY EVALUATIONS

Many approaches exist to evaluate the quality of specific digital preservation programs. Most of these center around standards as summarized by the Digital Preservation Coalition [2]. These cover many alternatives, from heavyweight specific and general ISO standards, sector specific standards, standards on part of the challenge like metadata or storage, to lighter weight evaluations such as the DPC Rapid Assessment Model, NDSA Levels of Preservation, and CoreTrustSeal.

These all have their place, but they are mainly aimed at organizational program sustainability rather than that of a product or service that will be offered to tens, hundreds, or thousands of organizations. They also don't cover supplier longevity issues like financial stability, internal knowledge management, or environmental impact. Most importantly they are not appropriate for the evolving market of new users who just want to have confidence that a system works and do not have the funds or knowledge to do a full audit.

3. PRODUCT AND SERVICE SUSTAINABILITY FACTORS

The sustainability of a digital preservation product or service should be judged against the following criteria:

- Data. How is the content sustained?
- Software. How is the software used kept in production and up to date even after the supplier ceases to exist?
- Operations. How do the processes required to operate the product or service continue?
- Knowledge. How does the organization avoid relying on a few key individuals?
- Financial. What is the commercial model to ensure the long-term viability of the services?
- Governance. How does the organizational structure ensure good practice is maintained?
- Environmental. Is the organization demonstrating their responsibility to ensure a minimum environmental footprint?

These questions apply to all organizations active in this field, whether the source code is open, closed or escrow, whether the ownership is commercial, community or academic, and whether the solution is delivered as installable software or a hosted service.

4. PANEL SPEAKERS

Oya Rieger (Senior Strategist, ITHAKA)

Oya has authored several reports on the state of the Digital Preservation landscape [3] and will use the findings of her recent paper "The Effectiveness and Durability of Digital Preservation and Curation Systems" [4] to show how organizations with very different commercial models deliver sustainability with the digital preservation context. Oya also contributed to the report on the failed DPN initiative.

Thib Guicherd-Callin (Program Manager, LOCKSS)

Thib will present on the sustainability of the community of services built around LOCKSS, the open-source software, which has served distributed digital preservation to scholars, libraries, memory organizations, and publishers for two decades.

Jack O'Sullivan (Innovation Engineering Lead, Preservica)

Jack will present on how Preservica has delivered sustainable digital preservation technologies for 20 years, drawing on their recently published Sustainability Charter [5].

Kelly Stewart (Chief Archivist, Artefactual)

Kelly will present on Artefactual's approach to sustainability as a company providing commercial services around the open-source software it stewards.

David Giaretta (Director and Lead Auditor, Primary Trustworthy Digital Repository Authorisation Body Ltd)

As one of the leaders in Digital Preservation international standards, David will draw on ISO 16363 (Audit and certification of trustworthy digital repositories) to highlight those elements that should apply to product and service providers.

William Kilbride (Executive Director of the Digital Preservation Coalition (DPC))

William will moderate the session, reflecting his role making sure that the DPC members can rely on all products and services across this emerging sector.

5. REFERENCES

- [1] Why Is the Digital Preservation Network Disbanding?, Roger Schonfeld, <https://scholarlykitchen.sspnet.org/2018/12/13/digital-preservation-network-disband/>
- [2] Digital Preservation Handbook: Standards and best practice, Digital Preservation Coalition, <https://www.dpconline.org/handbook/institutional-strategies/standards-and-best-practice>
- [3] The State of Digital Preservation in 2018, Oya Y Rieger, <https://sr.ithaka.org/publications/the-state-of-digital-preservation-in-2018/>
- [4] The Effectiveness and Durability of Digital Preservation and Curation Systems. Oya Y. Rieger, Roger C. Schonfeld, Liam Sweeney, <https://sr.ithaka.org/publications/the-effectiveness-and-durability-of-digital-preservation-and-curation-systems/>
- [5] A Charter for Long-term Digital Preservation Sustainability, Preservica, <https://cdn2.assets-servd.host/preservica-core/production/resources/A-Charter-for-Long-term-Digital-Preservation-Sustainability.pdf>