

BUILDING A LOCAL DIGITAL PRESERVATION INFRASTRUCTURE:

Experiences in Selecting and Implementing Digital Preservation Systems

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Abstract – As cultural heritage organizations seek solutions, open source, community-based, and commercial digital preservation systems and tools have proliferated. Nevertheless, given the magnitude of digital content and the requirements of specific file formats, institutions struggle to integrate disparate tools and systems to support their institutional preservation programs. The purpose of the panel discussion is to provide insights from on-the-ground implementations of current preservation tools and to consider the opportunities and challenges in deploying and integrating these tools with local digital content management processes.

Keywords – preservation systems, digital asset management, sustainability

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I. INTRODUCTION

As cultural heritage organizations seek solutions, open source, community-based, and commercial digital preservation systems and tools have proliferated. Nevertheless, given the magnitude of digital content and the requirements of specific file formats, institutions struggle to integrate disparate tools and systems to support their institutional preservation programs. The purpose of the panel discussion is to provide insights from on-the-ground implementations of current preservation tools and to consider the opportunities and challenges in deploying and integrating these tools with local digital content management processes.

II. DIGITAL PRESERVATION SYSTEMS



Although digital preservation is a well-established concept, it continues to be a situated and interpretive process, highly variable across different institutional settings. Depending on the institutional context, digital preservation can be seen as retrieving information from legacy media, implementing microservices such as file format transformation, or simply digitizing analog content for retention and online access. The emergence of web archiving and research data management programs further blur the boundaries. The hidden value of records management as an active process is coming to the fore with digital preservation. As archivists face an avalanche of digital records, one of the de facto appraisal criteria is emerging as the availability of features to actively support digital curation overtime. Some digital content needs to be kept permanently, whereas some needs to be managed overtime as archivists make decisions about deaccessioning and replacement.

Some institutions may feel a values-driven allegiance to community based systems, while others are wary of the potential “hidden costs” of implementing and managing systems that may not be as user-friendly or agile as commercial products. Another risk of both commercial and community systems is that they may be discontinued. Cultural heritage organizations are implementing and leveraging various curation systems (e.g., ILS for collection management, an all-purpose institutional repository, possibly a separate institutional repository specifically designed to house research data) in addition to leveraging community services such as Archive-It for web archiving or HathiTrust for digital collection preservation. The challenge of integrating these separate systems—not to mention paying for them—is daunting for many institutions. This is compounded by the organizational structure of most libraries, which usually separates collections from technology and digital asset functions.

The panel discussion will illustrate the variety of the approaches taken in ensuring enduring access to digital content and will offer lessons learned from actual experiences, including processes to ingest into a system, bitstream preservation to ensure integrity, and processes to ensure continued accessibility and usability over time. The panel will also discuss key findings from an IMLS-funded series of case studies conducted by Ithaka S+R that examine and assess how

digital preservation systems are developed, deployed, and sustained. This research aims not only to further increase our understanding of sustainability principles but also to contribute to the development of actionable recommendations for the community.

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