

DIGITAL PRESERVATION ETHOS FRAMEWORK

"Digital Preservation is about making the best use of your resources to mitigate the most pressing preservation threats and risks." ¹

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¹ "Guiding Digital Preservation Axiom #9" Trevor Owens, *The Theory and Craft of Digital Preservation* ©2018

SUMMARY

Digital preservation is a comprehensive set of managed activities that are necessary to provide continued access to digital objects, beyond the limits of media failure or technological change. An ethos is "the characteristic spirit of a people, community, culture, or era as manifested in its attitudes and aspirations; the prevailing character of an institution or system."²

This framework formalizes The Ohio State University Libraries' (University Libraries) characteristic spirit, attitudes and aspirations in its continuing commitment to the long-term stewardship, preservation of and sustainable access to its diverse and extensive range of digital resources, in alignment with University Libraries' Values for Discovery, Connection, Equity, Integrity and Stewardship.³

University Libraries' digital stewardship efforts contribute to The Ohio State University's mission to be a model 21st-century public, land grant, research, urban, community engaged institution, dedicated to:

- Creating and discovering knowledge to improve the well-being of our state, regional, national and global communities;
- Educating students through a comprehensive array of distinguished academic programs;
- Preparing a diverse student body to be leaders and engaged citizens;
- Fostering a culture of engagement and service.⁴

This framework identifies the requisites inherent to the digital preservation process, before progressing to articulate the objectives, scope, principles and standards, responsibilities and University Libraries' commitment to collaboration and cooperation involved in the ongoing process of digital preservation.

REQUISITES FOR DIGITAL PRESERVATION

Digital preservation is an ongoing process, not an achieved state. As such, we acknowledge the requisites for implementing an effective digital preservation program, which include, but are not limited to:

- Accessibility: University Libraries must commit to providing equitable access to the digital content under its stewardship
- **Expertise:** University Libraries must commit to continually updating staff expertise, where appropriate, as technologies change.
- **Flexibility:** University Libraries, to have a successful digital preservation program, must be able to continually revise its abilities to respond to the evolving technological capabilities and changing user expectations without jeopardizing the ongoing care of the digital content.

² https://www-oed-com.proxy.ohiolink.edu:9100/view/Entry/64840?redirectedFrom=ethos#eid

³ <u>https://library.osu.edu/strategic-directions</u>

⁴ https://oaa.osu.edu/mission-vision-values-and-core-goals

- Management: Moving from well-managed digital collections to preserved collections in the true sense of the term requires institutional effort, partnership development, and a financial commitment. University Libraries should provide a thoughtful balance between access and preservation, while being mindful of preservation's core role in maintaining access.
- **Partnerships:** University Libraries must work with creators and providers of crucial content to employ appropriate maintenance prior to deposit that will facilitate future preservation.
- Rapid growth: Technology that enables the variety of formats and dissemination mechanisms changes rapidly. As different types of materials are submitted (data sets, complex digital objects), monitoring different needs (storage size, metadata, etc.) of the materials and maintaining procedures and policies based on these needs is necessary.
- **Rights:** There are a myriad of intellectual property and other rights-based constraints on providing access that impact digital preservation efforts.
- **Security:** Digital preservation systems, tools and storage platforms need to be secure to avoid unwanted network intrusions. Further, there is a responsibility to safeguard digital content from unauthorized access and use in compliance with laws, as well as contractual and donor agreements.
- Sustainability: Developing a sustainable digital preservation model that will respond to technological and staffing changes as needed, without under- or overestimating the needs imposed by these changes. The need for good cost models and affordable programs is widely acknowledged, yet still not fully addressed. University Libraries requires sufficient funding for operations and major improvements for digital asset management, as well as designated library funding to sustain ongoing preservation efforts. Further, there are administrative complexities in ensuring cost-effective and timely action to implement preservation strategies. The scale of funding is based on the level of commitment; therefore, the program should reflect reasonable expectations of requisite resources, i.e., University Libraries should not promise more than can be delivered.

OBJECTIVES

OBJECTIVES STATEMENT

The objective of digital preservation at University Libraries is to enable the present and long-term access to the intellectual and artefactual value (when appropriate) of born digital⁵ and digitized materials⁶. These efforts are in support of University Libraries' greater mission to curate and preserve information essential for scholarship and learning at Ohio State, and the sharing of knowledge and culture with the people of Ohio, the nation, and the world. Digital preservation is a collaborative effort among University Libraries' various Divisions, to which this document provides a framework to:

⁵ Data and information created in a digital format and maintained digitally.

⁶ Analog materials that have been transformed into digital form, especially for storage, access and use in a computer environment.

- maintain access to reliable data at bit-stream level, the digital assets encoded in the bit streams, and access to the intended contextual and intellectual meaning of the digital assets
- include in the scope, University Libraries' materials that are born digital, as well as those that are converted to digital form
- demonstrate organizational commitment through the identification of sustainable strategies
- develop a cost-effective program through means such as, system-wide integration, shared responsibilities, and automating human-intensive efforts, when possible
- comply with prevailing community standards for digital preservation, access and accessibility
- seek, expand, and develop digital preservation methods that are appropriate for University Libraries, and promote inter-institutional collaboration

MANDATE

University Libraries' mandate for digital preservation is at least five-fold:

- **Scholarship:** As an institution of higher education, Ohio State is obligated to support scholarship, teaching, and learning. As more resources and services associated with these functions become digital, University Libraries' responsibilities must continue expand to include the identification, stewardship, and preservation of designated digital content.
- **Institutional records:** Ohio State has charged University Libraries with maintaining the University Archives, by collecting and preserving university records that best document the history of Ohio State, including those in born digital and digitized formats.
- Legal obligations: Ohio State has mandated responsibilities to preserve and maintain access to certain digital objects, as well as responsibilities as a designated land grant institution. Some legal obligations derived from Federal and State laws require us to maintain files in an archival fashion.
- **Organizational commitment:** University Libraries' commitment to digital preservation is implied in its Strategic Directions⁷ to:
 - "Equip Students for Lifelong Success" by promoting equitable learning through transformative teaching and services utilizing affordable and open educational resources, and providing 21st-century literacies.
 - "Empower Knowledge Creators" and advance innovative research and creative expression by fostering, preserving, and sharing knowledge and scholarship, through multidisciplinary scholarship and emerging research methods; new models for scholarly communication; collaborative collection building and access; and leveraging distinctive collections for use.
 - o "Engage for Broader Impact" by providing open content for expanded access.
 - o "Enrich the User Experience" by providing seamless discovery, access, and delivery.

⁷ https://library.osu.edu/strategic-directions

• Consortia and contractual commitments: University Libraries has commitments to consortia (e.g. OhioLINK and Hathi Trust) and other contractual agreements to assume or share in the responsibility for preserving designated digital content.

SCOPE

SCOPE STATEMENT

This framework addresses preservation of digital content and resources for which University Libraries is the primary steward. However, University Libraries has a responsibility for informing, consulting, and as appropriate coordinating with other units of Ohio State to assure that Ohio State faculty, staff, and students will have adequate ongoing access to administrative, scholarly, and other digital resources created at Ohio State outside of University Libraries. Further, University Libraries' personnel also work externally through consortia (e.g. the Big Ten Academic Alliance and OhioLINK), licensing agreements, etc., to assure that Ohio State faculty, staff, and students will have adequate ongoing access to all currently available digital resources. University Libraries, however, cannot guarantee preservation for materials that we do not own and manage.

SELECTION AND ACQUISITION

To effectively and responsibly steward our digital collections, University Libraries' decisions about the acquisition of born-digital materials and the selection of analog materials for digitization for preservation must consider the availability of the aforementioned Requisites for Digital Preservation. Therefore, it is incumbent on the organization to monitor its capacity for digital preservation work in the requisite areas and to use this assessment as a determinant in decision-making about that acquisition and selection.

CATEGORIES OF COMMITMENT

University Libraries recognizes that not everything may be preserved, or preserved at the same level. University Libraries' categories of commitment as outlined below recognize that developing solutions for born digital materials informs solutions for the other categories; it does not imply that these objects are inherently more valuable or important than any of the other categories and/or our traditional, analog⁸ materials.

- **Born digital materials:** Rigorous effort will be made to ensure preservation in perpetuity of material selected for preservation, both library resources and institutional records.
- **Digitized materials (no available analog):** Every reasonable step will be taken to preserve materials without an analog counterpart, when re-digitizing is not possible or no analog versions are located elsewhere. Also included are digitized materials that have annotations or other value-added features making them difficult or impossible to recreate.

⁸ Data and information in a format that must be digitized to make it digitally accessible.

- **Digitized materials (available analog):** Reasonable measures will be taken to extend the life of the digital objects with a readily available analog counterpart. However, the cost of re- digitizing as needed will be weighed against the cost of preserving the existing digital objects
- Commercially available digital resources: University Libraries has responsibility for working externally through consortia, licensing agreements, etc. to assure that one party or parties provides the necessary infrastructure to provide for preservation activities, so that Ohio State faculty, staff, and students will have adequate ongoing access to commercially available digital resources. If the resources are external to University Libraries, there needs to be an articulated exit strategy in the event of the cessation of the consortia or licensing agreements. Particular emphasis should be given to resources which exist in digital form only.
- Other items and materials: No preservation steps will be taken for materials requested for short term use such as materials scanned for inter-library services delivery, or for content that is deemed unessential.

PRINCIPLES AND STANDARDS

GUIDING PRINCIPLES

Materials selected for digital stewardship and preservation carry with them University Libraries' commitment to maintain the materials for as long as needed or desired.

- University Libraries are committed to the long-term preservation of selected content.
- Digital preservation is an integral part of University Libraries' processes.
- Levels of preservation and time commitments are determined by selectors and curators, in consultation with technical experts.
- University Libraries is committed to open access, unrestricted use and accessible access wherever possible, while still conforming to copyright law, contracts, donor agreements and privacy requirements.
- Processes, policies, and the institutional commitment are transparently documented.
- University Libraries will participate in the development of digital preservation community standards, practice, and solutions.

OPERATING PRINCIPLES

University Libraries will strive to:

- Be informed in its decision-making and digital preservation activities by appropriate digital preservation standards, models, guidelines and practices.
- Develop a scalable, reliable, sustainable, and auditable digital preservation infrastructure.
- Manage the hardware, software, and storage media components of the digital preservation function in accordance with disaster recovery obligations, environmental standards, quality control specifications, and security requirements.

- Ensure that the digital preservation environment is as interoperable as possible by utilizing open source options whenever feasible.
- Ensure the integrity of the data.
- Create and maintain metadata (e.g. administrative, descriptive, preservation, provenance, rights and technical) necessary for the use and management of the digital objects in its care.
- Comply with copyright, intellectual property rights and/or other legal rights related to copying, storage, modification and use of digital resources.
- Comply with digital accessibility policy, requirements, standards and guidelines.

STANDARDS

• University Libraries is best served when distributed and disparate systems conform to standards and best practices that make communication between these access, administrative and storage systems possible.

ROLES AND RESPONSIBILITIES

Digital preservation is a distributed and collaborative set of activities within University Libraries; no one division or department is responsible for digital preservation. University Libraries' digital preservation librarian provides leadership in coordinating digital preservation strategies and activities, in collaboration with faculty, staff, and other leaders within University Libraries including, but not limited to, Archival Description and Access, Archives and Special Collections, Area Studies, Copyright Services, Information Technology, Metadata Initiatives, Preservation and Digitization, Publishing and Repository Services, Research Services and Subject Liaisons.

COLLABORATION/COOPERATION

University Libraries acknowledges digital preservation is a shared community responsibility, and as such has long-standing and emerging partnerships with similarly committed organizations (e.g. Big Ten Academic Alliance, Hathi Trust and OhioLINK), and is committed to collaborating with other institutions, as well as with units within Ohio State to:

- advance the development of the digital preservation program
- share lessons learned with other digital preservation programs
- extend the breadth of our available expertise
- extend the digital content that is available within a broad information community to University Libraries' users through cooperative efforts

Generally, in working, cooperating and collaborating with others, University Libraries desires to:

- understand the goals, objectives, and needs of the communities of creators and the communities of consumers of its digital resources
- identify appropriate partners and stakeholders to contribute to national and international efforts in digital preservation

- help develop regional, national and international strategies and initiatives that enable the distribution of collecting, description, service delivery, digitization and preservation activity
- work actively with creators of digital materials to encourage and promote standards and practices

IMPLEMENTATION

Implementation of this framework is contingent upon the infrastructure (technological and human resources) provided by Ohio State and University Libraries, the availability of cost-effective solutions, the adoption of standards, and development of established and transparently documented practice and procedures.

To aid in implementing University Libraries' digital preservation program, it will utilize benchmarking tools (e.g. the NDSA's <u>Levels of Digital Preservation</u>, the DPC's <u>Rapid Assessment Model</u> and Kenney & McGovern's <u>Three-Legged Stool of Digital Preservation</u> and <u>The Five Organizational Stages of Digital Preservation</u> among others) to identify gaps in services and gauge the progress and maturity of the program.

REVIEW CYCLE

This policy will be reviewed by the digital preservation librarian, at minimum annually, to assure timely revisions as technology progresses and University Libraries' preservation strategies mature.

HISTORY

August 2021: Digital Preservation Ethos Framework (Daniel W. Noonan, Digital Preservation Librarian in consultation with the Digital Preservation and Access Workgroup)

August 2013: Digital Preservation Policy Framework (Tschera Connell, Head of Digital Content Services, Perter Dietz, Systems Developer/Engineer and Daniel W. Noonan, Electronic Records/Digital Resources Archivist)