

Digital POWRR: Illinois State University Case Study

I. Institution Bio & Back Story

A. Metrics – Institutional Level

1. Number of Students and Faculty (Fall 2012)

- On-Campus Total Enrollment: 20,502
 - Undergraduate Students: 18,207,
 - Graduate Students: 2,295
- 3,563 University Employees
 - 1,212 Departmental Faculty (239 Professors; 242 Associate Professors; 218 Assistant Professors; 513 Other),
 - 41 Non-departmental Faculty; 29 Library Faculty,
 - 112 Laboratory School Associates,
 - 760 Administrative/Professional,
 - 1,409 Civil Service,
 - 97.3% of Tenure/Tenure Track Faculty hold a terminal degree

2. Endowment and Budget

- 2011 endowment, \$69,194,754

3. Carnegie Classification

- Undergraduate Instructional Program: Prof + A&S/HGC: Professions plus arts & sciences, high graduate coexistence,
- Graduate Instructional Program: Doc/Prof: Doctoral, professional dominant,
- Enrollment Profile: VHU: Very high undergraduate,
- Undergraduate Profile: FT4/MS/HTI: Full-time four-year, more selective, higher transfer-in,
- Size and Setting: L4/R: Large four-year, primarily residential,
- Basic: DRU: Doctoral/Research Universities

4. Colleges/Academic Programs Offered

Degree-granting colleges

- Applied Science and Technology,
- Arts and Sciences, Business,
- Education,
- Fine Arts,
- Mennonite College of Nursing,

- Other (Interdisciplinary Studies and University Studies)

Degrees offered

- Au.D., B.A., B.F.A., B.M., B.S., B.S.Ed., B.S/M.P.A., C.A.S., D.A., Ed. D., M.A., M.F.A., M.S., M.S/M.P.A., M.S.Ed., Ph.D.,
- Post. Bacc. Cert., Post-Masters Cert., Specialist (School Psychology)

B. Metrics – Library Level

1. Size of library

i. Number of Faculty and Staff (10/2013 data)

- 24 tenured, tenure track and non-tenure track library faculty,
- 11 administrative professionals (3 with rank & tenure),
- 49 civil service staff

ii. Operating Budget

- \$9.2 million is the library operating budget, including personnel

iii. Number of Volumes (10/2013 data)

- 1,622,355 print volumes (located in open and closed stacks as well as a remote storage unit),
- 81,448 electronic serials titles,
- 1,927 print journal titles

iv. Size of Digital Collections

These numbers are estimated on the basis of digital masters.

- Digital collections: ~2 TB (images and text, including books),
- Archives: ~88.7 TB (negatives and books),
- Cataloging and Acquisitions department:
 - Books and full-text from publishers: ~245 MB,
 - Newspapers and mixed formats: ~3 TB on external hard drives

2. Number of staff currently devoted to digital preservation: N/A

i. Organizational role

ii. Responsibilities beyond digital preservation

3. Library's budget for digital preservation activities: N/A

4. Digital content management and preservation software, platforms, technologies, etc. that are currently in use

- Archon,
- CONTENTdm,
- Digital Commons,
- Internet Archive,
- Faculty publication database

C. Defining Moment

1. What happened that made you realize that DP was an urgent, unwieldy, and unaddressed problem at your institution

Though digital preservation has been an important asset to consider for the ever-increasing volume of digital files, the IMLS NLG has triggered a certain level of interest within the library. Equally important have been the federal requirements for grant submission at the institutional level, and the recently enacted Illinois legislation (i.e., SB1900), which mandates that “each public university shall establish an Open Access to Research Task Force” by January 2014.

Further, any digital transformation of unique analog collections held at Milner Library, which constitute an asset to teaching and research at Illinois State University, represents an investment in the long-term access of the institutional memory. We have increasingly become aware that there is no centralized plan to collect data from each department and that everything in Archives was stored on portable hard drives.

II. Self-assessment results (Please see < imls_digpres_selfassessment_isu.pdf > attached)

III. Policy Gap Analysis

A. “As Is” Model – where you are

Though Milner Library has no digital preservation policy, it is beginning the work towards a digital preservation solution. The current practice includes three distinct, yet interconnected departments. These departments represent different facets of the organizational chart, each representing some aspect of Illinois State University history. They are the University Archives, Special Collections, and Digital Collections.

The University Archives holds rich and valuable legacy materials from the community and the history of the university. While University Archives digitize their analogs internally and store them on local servers, the department outsources larger projects for digitization. One of those services is Internet Archive, which provides a storage component. Special collections hold rare materials including one of the top five Circus collections in the world, Lincolnia and more. The Special Collections department coordinates their digitization initiatives in part, with Milner digital center. The Digital Collections department houses the digital center, where analogs are digitally transformed into Master copies and documented per NARA standards. Digital materials are stored on local servers and magnetic tapes and backed up daily. These collections and others are made accessible via the Digital Collections department website, available via a CONTENTdm Hosting instance. Lastly, the Digital Collections Librarian manages university scholarly and research materials by means of the institutional repository, ISU ReD.

B. “To Be” Model - where you want to be (different for each institution - in the spirit of established best practices)

It is important for Milner Library to develop a digital preservation policy in order to carry out the mission of supporting teaching, learning, and research. This policy will provide guidance in determining which materials and institutional memory content to permanently preserve. The policy will address selection criteria, workflows and technical requirements for storage and

retrieval. Additionally, elements would include staffing and professional development to guarantee the success of a digital preservation initiative at Milner Library in agreement with Illinois State University stakeholders. Concerted efforts across departments and networking on campus will maximize resources and achieve digital preservation goals.

Although Milner Library will be conducting an inventory of its content, a variety of content type can already be identified as follows:

Content Type	Format type	Examples
Text-based materials	Teaching materials, proceedings, eBooks	ASCII, UTF-8, Unicode
Images	Digitally transformed materials (photographs, slides, etc.)	TIFF, JPEG, GIF, JPEG2000
Audio, video materials	Videos, sound recordings, etc.	MPEG, AVI, MOV, WAV, CR2
Numerical data, datasets	Research data	XML, XLS, proprietary formats

Several initiatives have recently highlighted the importance of digital preservation.

- 1) The IMLS digital POWRR grant has brought a minimal awareness on campus,
- 2) The institutional repository, ISU ReD, was launched in the spring of 2013,
- 3) The Data Management Plan requirement from the National Science Foundation (NSF), large National Institutes of Health (NIH) grants, and the digital humanities directorate of the National Endowment for the Humanities (NEH) have all raised the issue of digital preservation,
- 4) The Illinois Senate Bill 1900 has mandated that “each public university shall establish an Open Access to Research Task Force” by January 2014.

The assets that are collected via these initiatives represent a major step toward embracing the need to develop strategies and take action in digital preservation.

C. Gap – what specifically is keeping your institution from achieving the “To Be” (money, staffing, technical infrastructure, buy-in, etc.)

In the newly published 2013 report by Primary Research Group, Inc., Danielle Mericle, Director of the Digital Media Group at Cornell University states, “until we had a preservation repository in place, it didn’t make sense to embark heavily on digitization.” Milner Library considers it is important to identify the university collections for which long-term initiatives may be taken for granted if not intentional. Beagrie et al. (2008) recommend the careful examination of “dependencies and linkages between...preservation and collection development policies; the mission, preservation capacities and expertise of [the] organization; and scope your preservation policy and implementation plans accordingly” (p. 14).

In order to close the gap, Milner Library must literally build bridges between people and departments involved in the preservation work. These include the curators of collections, conservators, catalogers and those who would provide the digitization. In other words, closing

the gap requires administrative support on many levels, buy-in from campus stakeholders, coordination with other offices on campus, priorities for our restricted resources, technical infrastructure and staffing. Fundamentally, all stakeholders must understand their common concerns and the importance of collaboration to achieve their goals.

In addition, though challenges to digital preservation may relate to economics and human capital, one fundamental misconception is to understand that preservation and access are different. Further, administrators need to “understand that digital preservation is not peripheral; it is a cultural change; an institutional activity” (Halbert, 2012 cited in Rinehart, Prud’homme, & Huot, 2014, p. 6), it encompasses a series of procedures and processes in sustaining long-term access and preventing further deterioration to the selected materials in support of the mission and goals of the library.

D. Digital Preservation Policy/Program Proposal

1. Mission/Scope

Protecting and ensuring accessibility of selected digital data to be collected and preserved in a secure and scalable environment, which practices adhere to technical standards and comply with legal retention requirements for extensibility and flexibility of the digital cultural heritage of the institution.

2. Etc. – Each institution can choose their own framework on which to base their proposed policy.

The proposed preservation policy would focus on the commitment to developing innovative services, programs, space, strategies, and systems that promote discovery, dialogue and learning to the constituencies. In this, it aligns with the mission of Milner Library “to create and sustain an intuitive and trusted information environment that enables learning and the advancement of knowledge in a culturally and technologically superior setting.” At this point in time, a digital preservation policy has not been linked to other internal library department strategies; however its alignment with University Archives and Digital Collections would solidify its integrity for a successful outreach to external entities on campus. Further, the policy would align with digitization strategies to reflect on the types of digital materials the library holds.

Externally, the LEAPForward project on campus, a student information system, is in the process of data analysis of technology requirements.⁴ As data migration will be done by end of year 2014, collaborative analyses will be implemented. Other aspects of data management that have an impact at the campus level relate to federal requirements with NSF, NEH, and NIH grants submittals.

These requirements play an important role for the long-term research prospects and commitment to keep original data to its highest quality with all inclusive metadata and maintain the user experience through the institutional memory.

Also, the enacted Illinois open-access bill (SB 1900) mandates that “each public university shall establish an Open Access to Research Task Force” by January 2014. Therefore, it is essential to commit to “preserving the archival version of the resource in its highest quality in accordance to collection development policy retention decisions.

The library will identify a set of priorities based on a series of principles pertaining to the commitment to long-term preservation of selected content, the relevant significance and

uniqueness of materials, the guarantee that the data collection is reliable and the adequacy of the level of preservation of the deposited data the organization will engage in. Lastly, the level of integrity of the materials and legal obligations and varieties in file formats may influence the satisfactory level of preservation provided.

3. Digital Preservation Workflow – Specific to your institution and the types of digital objects you anticipate will be “in play”

i. Selection and acquisition

The selection policy will guide the selection of material, regardless of access platform and department. The policy will detail the relationship of the material to the goals of the university. By providing their content expertise, collection specialists will collect materials that are relevant to scholarship and history of the university. Materials accepted will range from donations to records' transfers in a variety of formats relative to the particular computing environment to guarantee their accurate presentation in consultation with technical experts.

ii. Curation

The curation phase of the workflow focuses on the active management and appraisal of data over the entire life cycle. The policy will permit Milner Library to maintain and procure added value for those materials selected and collected for long-term preservation and access with consideration of standards and guidelines at the time digital assets are created. The Digital Center will guarantee that digitization standards are applied to promote the long term value of those assets in their original formats. The applicability of standards will extend to metadata creation, i.e. MODS, EAD, etc., including preservation metadata and appropriate information packages in accordance to the OAIS reference model to ensure interoperability across multiple systems.

iii. Storage and Access

Storage will be geographically dispersed and redundant with continual monitoring, not excluding scalability and affordability. Access of digital assets is to be reserved to designated personnel only.

Access of digital assets will be handled by digital preservation personnel in accordance to whether materials are to be publicly available or rendered for research purposes only, i.e. non-public materials. Theoretically, users could request specific folders of records or documents once selected from ARCHON finding aid or CONTENTdm for example. A separate site would be created for accessing selected copies to be downloaded directly without having to make use of the information packages created for access purposes only.

The structure of digital preservation practices will comply with access restrictions as defined in all relevant laws, regulations, licenses and deposit agreements.

E. Strategy – How will you direct people and organizations towards embracing and implementing the Policy

1. Communication & Education

i. Administrators

One-on-one meetings have proven useful to encourage buy-in and funding of resources.

ii. Colleagues who are stakeholders

All department heads (Archives, Special Collections, Preservation, and Digital Collections) will continue on-going conversations in and out the library. External offices to be included in outreach efforts may be the Office of Research and Sponsored Programs with respect to grants and research projects produced at Illinois State University. Further, the Graduate School is the main point of contact for Electronic Thesis and Dissertations and the long-term preservation of this intellectual capital at Illinois State University. Lastly, two employees have become certified as trainer in the DPOE (Digital Preservation Outreach & Education) trainer network.

iii. Content providers

Milner Library holds several collections, housed in Special Collections, University Archives. An array of collections also exists throughout the institution, which is being identified gradually with the support of librarian subject specialists.

iv. General marketing/PR

Generally speaking, the public relations and marketing office at Milner helps promote digital preservation information to stakeholders. At the same time, librarian subject specialists do help with direct contact to academic department, respective of their discipline.

2. Allocation of Resources

i. People

Temporary digital preservation non-tenure track position has been proposed to library administration.

ii. Budget N/A

IV. Lessons Learned

Objectively, the writing of a digital preservation policy will be the product of an agreement between stakeholders in the library and the institution. A working group will be charged with the broad responsibility to ensure that the library's policy and technical infrastructure can meet digital preservation priorities at the institutional level.

Observations from campus interviews indicate a largely non-uniform understanding of digital preservation and what it means to preserve materials for long term access, while many stakeholders are involved in day-to-day responsibilities in a learning environment, which also calls for immediate access to information. Further, observations are, that more outreach is needed to rally advocates for digital preservation to become part of the organizational culture.

References

- I.A.1. Number of students and faculty, <http://prpa.illinoisstate.edu/downloads/Book.pdf>
- I.A.2. Endowment and budget, <http://colleges.usnews.rankingsandreviews.com/best-colleges/illinois-state-university-1692>
- I.A.3. Carnegie Classification, http://classifications.carnegiefoundation.org/lookup_listings/index.php
- I.B. Milner Library, Illinois State University, <http://library.illinoisstate.edu/libraryinformation/>
- I.C.1. SB1900: Public Act 098-0295, Enacted, <http://www.ilga.gov/legislation/publicacts/98/PDF/098-0295.pdf>
- III.A. ISU ReD, <http://ir.library.illinoisstate.edu/>
- III.B. ODU Libraries Digital Preservation Policy. Retrieved from <http://www.lib.odu.edu/aboutthelibraries/ODULibrariesDigitalPreservationPolicy.pdf>
- III.B.1. Preserving (Digital) Objects With Restricted Resources, digitalpowrr.niu.edu
- III.C. Beagrie et al. (2008). Digital preservation policies study. Retrieved from http://www.jisc.ac.uk/media/documents/programmes/preservation/jiscpolicy_p1finalreport.pdf
- Mericle, D. (2013). *Creating the digital art library*. New York: Primary Research Group, Inc. Retrieved from <http://www.prweb.com/pdfdownload/11056728.pdf>
- Rinehart, A.K., Prud'homme, P-A, & Huot, A.R. (2014). Overwhelmed to action: Digital preservation challenges at the under-resourced institution. *OCLC Systems & Services*, 30(1). 28-42.
- ODU Libraries Digital Preservation Policy. (2012). Retrieved from <http://www.lib.odu.edu/aboutthelibraries/ODULibrariesDigitalPreservationPolicy.pdf>
- III.D.2. James, H. (2004). AHDS Collections Preservation Policy. Retrieved from <http://www.ahds.ac.uk/documents/colls-policy-preservation-v1.pdf>
- Mission of Milner Library. Retrieved from <http://library.illinoisstate.edu/library-information/about/mission-vision.php>
- The Ohio State University, Digital preservation policy framework http://library.osu.edu/documents/SDIWG/Digital_Preservation_Policy_Framework.pdf
- III.D.3.iii. Digital Preservation Framework, University of Minnesota Libraries. <https://netfiles.umn.edu/ul/Divisions/InfoTech/DigiColl/webDocuments/DigitalPreservation-Framwork-Final.pdf>
- Jisc Digital Preservation briefing paper http://www.jisc.ac.uk/publications/briefingpapers/2006/pub_digipreservationbp.aspx