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# No One Left Behind

## Digital POWRR Project Promotes Preservation of Digital Materials in Smaller Organizations

**T**he Digital POWRR Project at Northern Illinois University Libraries addresses a problem that has largely gone unrecognized in the field. Research shows that digital objects are considerably more subject to loss than paper resources. Large amounts of digital content remain at a high risk of loss, especially in the collections of the smallest organizations with the fewest financial resources. These organizations often contain materials documenting the history and culture of historically marginalized populations but frequently lack the ability to secure them for future use. Most cannot afford to purchase and operate integrated digital preservation products and services available from commercial vendors. Outreach activities related to improving organizations' digital preservation capacity have most often excluded them by charging considerable registration fees and requiring expensive travel.

The Digital POWRR Project has addressed this situation in several ways. First, it has promoted a provisional, iterative approach to digital preservation. It encourages information professionals to improve local practice in any way possible, no matter how simple or seemingly insignificant, then expand capacity incrementally as local conditions allow. Second, POWRR has recognized significant affective aspects of digital preservation work. Preserving digital objects requires the development of skills very different than those used in the care of analog collections, and many practitioners found themselves intimidated or overwhelmed. Unsure how to proceed, many did nothing. POWRR publications and instructional events have identified and addressed this situation directly by showing how a "good enough" approach can build practitioner confidence. Third, POWRR has used grant funds to make professional development training available at no charge and provide stipends for practitioners showing that their organization cannot fund the costs of travel and lodging at an event site.

### Origins

In 2012, the federal Institute of Museum and Library Services (IMLS) awarded Northern Illinois University Libraries \$575,000 to study challenges arising from digital materials' susceptibility to loss and how smaller organizations with limited resources might meet them. Lynne Thomas, then Head of Rare Books and Special Collections at NIU Libraries, and Drew VandeCreek, director of digital initiatives, served as co-Principal Investigators.

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They coordinated the activities of a team that also included librarians and archivists from Illinois Wesleyan University, Western Illinois University, Chicago State University, and Illinois State University. The team hired Jaime Schumacher, a recent graduate of the University of Illinois' School of Information Sciences, to direct the project.

The project collaborators began to explore how their libraries stored and preserved digital materials. Although many people believed that digital resources are more durable than analog objects, literature in the field showed that they are, in fact, subject to a multitude of factors that can result in their loss. Digital materials created in a given software application may become unusable as that application becomes obsolete. Once-viable software applications may recede from widespread use as new competitors displace them. Digital storage media may fail for a variety of reasons, including manufacturing defects, inhospitable local storage conditions, and age. Individuals and institutions charged with the care of digital materials may also simply lose track of them or fail to convert them to formats readable by new software applications.

## **Project Research and Report**

The project team named their program the Digital POWRR Project (Preserving Digital Objects with Restricted Resources) and focused their efforts on addressing digital preservation challenges faced by small and medium-sized organizations with limited staff sizes, restricted IT infrastructures, and tight budgets. Project research showed that many of these institutions held unique digital content, yet practitioners seeking to enhance the probability that their materials would survive for use in the longer-term future indicated that they were often unsure how to secure this result.

In 2014, the project published a white paper based on research conducted under its original grant.<sup>1</sup> It found that the cultural heritage and information science communities had developed guidelines and best practices that could enable an organization to achieve high levels of digital preservation, but these protocols were often highly theoretical and complex in nature and required the use of more resources than many organizations could provide. Seeking to provide practitioners at these organizations with a well-defined, realistic path toward sustainable digital stewardship, the project team set out to test a variety of tools and services for the preservation of digital library collections.

The report included the results of tests conducted on several digital preservation tools and services. It included a graphic tool grid that showed the functionalities of more than 60 digital preservation utilities and how they fit into the digital curation lifecycle that existing protocols described.<sup>2</sup> In the course of project activities, the project successfully merged this resource with a similar online registry based in the United Kingdom, producing COPTR (Community Owned Digital Preservation Tool Registry).<sup>3</sup>

The white paper presented its evaluations of tools and services in the context of a provisional, "good enough" approach to digital preservation. This stood in contrast to the common supposition that only integrated, and often prohibitively expensive, utilities could do the job. The authors encouraged readers to evaluate their organization's digital preservation capacity by reference to the National Digital Stewardship Alliance's Levels of Digital Preservation and seek ways of improving local practice.<sup>4</sup> Even the simplest activities, like creating an inventory of digital materials on hand and noting their characteristics, could improve local practice. Looking forward, the report emphasized how practitioners might assemble multiple

open-source or low-cost tools and services into a larger digital preservation process suited to local collections and conditions. Together, applications providing single functions could produce affordable, scalable digital preservation solutions for under-resourced organizations.

The report also acknowledged the affective issues involved in meeting the challenges of digital preservation. Its case studies of five participating institutions' digital preservation capacity noted that practitioners often felt overwhelmed or anxious in the face of a very complex situation. Many believed that they should address the problem in one fell swoop by purchasing an appropriate digital preservation utility but could not begin to determine which one. The unavailability of institutional resources often compounded this challenge at smaller organizations by making the purchase of a single product impossible. POWRR's white paper advised practitioners to set these fears aside and build confidence by focusing on relatively simple, "good enough" practices that could make incremental progress toward better preservation capacity.

In 2015, the project white paper received the Society of American Archivists' Preservation Publication Award for "outstanding published work related to archives preservation." In that year, the publication also won the National Digital Stewardship Alliance's 2015 Innovation Organization Award.

### **Move to In-Person Professional Development Instruction**

The project team used its research to develop a pragmatic, hands-on professional development workshop. It taught the initial steps necessary to access and inventory digital content as well as how to approach the development of a digital preservation workflow fitting local conditions. Although the project team created online learning modules containing the workshop curriculum, they emphasized in-person training events in order to help participants create a community of practice by which they might share information and support. Event curricula also promoted the use of open-source software developed for digital preservation work. Contrary to a widely held assumption, POWRR instructors have shown that practitioners can employ several effective applications without the assistance of a programmer.

In the process of conducting research for the project white paper, POWRR team members noted that organizations providing professional development training in digital preservation required registration fees that often exceeded \$1,000 and asked participants or their organizations to pay for travel to an event site along with related accommodations. Recognizing that many of their target organizations could not provide practitioners with training and travel budgets, the POWRR team requested IMLS permission to use funds from its original research grant to conduct these workshops at locations around the country at no charge. The project team also received permission to provide travel and lodging stipends for participants who could show that their organization was unable to pay these costs.

In 2015, the Digital POWRR Project received a new grant from the National Endowment for the Humanities (NEH) Division of Preservation and Access for the provision of additional one-day workshops presenting the curriculum developed and delivered during the original study's dissemination phase. Subsequent grants from the IMLS and NEH have provided POWRR with new opportunities. The former, proposed and administered by Stacey Erdman, an original member of the project team currently employed at the University of Arizona, provides librarians and archivists with opportunities to learn about digital

preservation concepts and processes by participating in ongoing mentorship, cohort-building, and peer assessment activities. The latter is allowing Schumacher and project collaborators to expand POWRR's professional development program into a two-and-a-half-day institute event featuring an updated curriculum.

## **Outreach to Historically Marginalized and Overseas Groups**

As the Digital POWRR Project has developed, it has increasingly focused its efforts on reaching practitioners and organizations devoted to sustaining cultural heritage materials produced by historically marginalized groups. Many of these organizations function with very small annual budgets and enjoy limited access to technology and expertise.

The project has provided instruction to librarians and archivists in conjunction with the Sustainable Heritage Network, an organization supporting Native American tribal libraries and archives in the Pacific Northwest, the Black Metropolis Research Consortium (Chicago), the Latino Digital Archive, and the Association of Tribal Archives, Libraries and Museums.

These relationships have facilitated the preservation of unique materials. At a 2018 event, members of a tribal nation from the Pacific Northwest approached instructors seeking assistance with a box of digital tapes. The tapes contained recordings of Tribal Elders giving oral histories in their native language. Only a few of the Elders were still living, and their language was at risk of being lost with their passing. POWRR provided digital preservation training and assisted them in formulating a plan to transfer the recordings from the legacy media to additional devices, perform initial curation actions on them, and create a workflow to preserve them into the future.

At a 2024 event, librarians from American Saipan brought instructors' attention to recordings of oral history materials recorded on a cell phone by members of a local ethnic community. POWRR team members helped the librarians move identical copies of the materials to other media, promoting their preservation through the existence of duplicates. They also assisted the librarians in the development of a workflow for future use.

At this event, POWRR staff members also helped a representative of the Sequoyah National Research Center at the University of Arkansas, Little Rock, to create a workflow for preserving Native American periodicals and newspapers. The center holds the largest collection of such materials in the US but has not created a plan for capturing and preserving those that are now appearing only in digital formats.

In the coming year, the Digital POWRR team will produce a new set of online learning modules presenting the contents of the project's professional development institute. The project team will work with the Latino Digital Archive to provide these online materials to Spanish-speaking practitioners in a Spanish-language format. Project staff members also look forward to working with Northern Illinois University's Center for Southeast Asian Studies to provide online professional development materials to librarians and archivists in Thailand and Indonesia in Thai and Indonesian language subtitled formats.

## **Conclusion**

Erdman has described Digital POWRR as providing "foundational, hands-on, and extremely practical digital preservation training opportunities.... Digital preservation is an intimidating topic, and many practitioners feel overwhelmed and frankly unqualified. Our instructors are approachable, friendly, and encouraging, and espouse a "no person left

behind” philosophy. People depart our events feeling confident and empowered, with close connections established, and our evaluations continually bear this out.” To date, the Digital POWRR Project has used more than \$1 million in federal awards for this purpose. ≈

## Notes

1. Jaime Schumacher, Lynne M. Thomas, Drew VandeCreek, Stacey Erdman, Jeff Hancks, Aaisha Haykal, Meg Miner, Patrice-Andre Prud’homme, and Danielle Spalenka, *From Theory to Action: Good Enough Digital Preservation for Under-Resourced Cultural Heritage Institutions* (2014). *Faculty Peer-Reviewed Publications*. 1056. <https://huskiecommons.lib.niu.edu/allfaculty-peerpub/1056>.

2. “Curation Lifecycle Model,” Digital Curation Centre, accessed May 26, 2025, <https://www.dcc.ac.uk/guidance/curation-lifecycle-model>.

3. “Main Page,” COPTR: Community Owned digital Preservation Tool Registry, accessed May 26, 2025, [https://coptr.digipres.org/index.php/Main\\_Page](https://coptr.digipres.org/index.php/Main_Page).

4. “Levels of Digital Preservation,” National Digital Stewardship Alliance, accessed May 26, 2025, <https://ndsa.org/publications/levels-of-digital-preservation/>.