Assessing Need for an Automated File Format Obsolescence Notification System for Medium-sized Digital Archives

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Abstract: The purpose of this research study is to assess the need for, and to inform the design of an automated file format obsolescence component for medium-sized digital archiving systems.

This study seeks to answer the research questions: 1) What types of file formats are medium-sized digital archives currently managing, 2) What methods are medium-sized digital archives currently employing to sustain their collection over time, and 3) What types of tools (automated or otherwise) could help medium-sized digital archives in sustaining their collection over time? This study will complement previous and contemporary work that is seeking to fully understand the challenges that digital archives contend with in managing their collections in the face of rapidly changing technology which can and has made items in their collections inaccessible.

At present there is no fully functioning system which can detect and notify digital archives managers of impending file format obsolescence and specifically, there is no such system designed for the needs and budget of medium-sized digital archives. This study is intended as a first step of assessment to begin the iterative process of bringing these much needed tools to the mid-sized digital archive community.

Data has been collected through semi-structured interviews with managers of mid-sized digital archives have been qualitatively analyzed using grid analysis techniques in order to assess patterns, consensus, and outlier information about their collections, preservation practices, and needs for tools in managing file format obsolescence. Beyond informing tool development, this study will also inform continuing research on this topic.

About the author:

Heather Bowden is a Carolina Digital Curation Doctoral Fellow and the DigCCurr II (http://ils.unc.edu/digccurr/aboutII.html)Project Manager at the School of Information and Library Science at the University of North Carolina at Chapel Hill. She received her Master's degree in Library and Information Science with a focus of Information Science Technologies at the University of Denver in 2008.

She is conducting research in digital preservation and curation with a focus on media and file format obsolescence/endangerment. She has begun work with Richard Marciano and the DICE group to explore the development of tools to help with the challenges of maintaining viable file formats in digital collections. Her next focus will be on developing a metric to determine levels of file format

endangerment which can be applied to digital asset management systems used by different institutions.

She has developed the first iteration of the Digital Curation Exchange website (http://digitalcurationexchange.org/), which serves as a community space for digital curation practitioners and educators. She has built the site using Drupal, an open source content management development community. She will continue developing the site while exploring community engagement practices as they relate to research on motivation in online social networking sites.

She is also working with the Long Now Foundation to develop their Format Exchange project and is working to further their long term digital preservation strategies