Digital Stewardship and Curation

A successful digitization project provides long-term sustainability. This Bulletin explores the meaning of digital curation and stewardship and provides tips for dealing with the effects of rapid changes in technology on digital collections.

What is Digital Curation?

Think of a digital object as something that is born, lives, and either dies, or migrates (transforms) into a new format. A Digital Curator follows the "digital lifecycle", checking the integrity of digital objects and taking steps to ensure their preservation and accessibility.



For example, a digital curator will test an object's integrity by opening it periodically for viewing. Maintaining the integrity of a digital object means that the file and the information contained within it will be accessible and free from corruption (i.e., data loss, or bit rot) and accessible for future generations. A digital curator also reviews copyright law (covered

in Heritage Bulletin 21), and takes steps to make collections accessible and useful.

What is Digital Stewardship?

Best practices call for the maintenance of original materials so that if digital objects become lost or corrupted, the original materials are accessible. Typically, cultural heritage institutions do not dispose of valuable source material; however, your organization may have scanned a document that it later lost – perhaps through a disaster or through the object's fragility. When this happens, the digital file becomes the only remaining link to the information. Your collection management policies should outline the process and steps for recover from loss.

Digital stewardship also involves awareness about the digital records we create, how they are stored, and where we store them. Most organizations create digital content without thinking about it. We write and send email; capture life events on video and in photographs; perform accounting tasks, and generate documents using word processing software. Through all of these activities, we create "born-digital" objects. Think about how much digital content your organization generates

on a weekly – or yearly – basis, then add to that the additional content resulting from digital conversion projects (e.g., scanning photographs). The cumulative number of digital objects created annually is staggering. These objects take up valuable storage space.

It is important to remember that digital stewardship involves a continuous and active approach to the longterm retention of digital information. Digital stewardship implies that we're not blindly creating and storing thousands of files without thinking about what we want to do with them.

Consider Technology, How it Changes and the Associated **Risks to Digital Content**

Digital curation and stewardship involves addressing the issues rapidly changing software. It also involves the migration of records to new media for continued access. This process is a vital step, which ensures the continued access of the historic record when the original software and storage media is obsolete. This is a critical issue to consider when 1) creating digital media; and 2) when



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accepting digital items into your collection.

EVALUATE THE MACHINES IN YOUR COLLECTION (I.E., COMPUTERS, TAPE PLAYERS, ETC.)

- Make sure they operate.
- If they don't operate, investigate the costs for repair and the availability of parts.
- If the machines are too costly to repair, or you don't possess the machines necessary to access information found in your collection, consult a professional to convert the material to different media that is readily accessible.
- Your machines may be in good operational order, but you lack components to read digital materials contained on floppy disks or other storage media. If so, seek an organization willing to assist you migrate the digital material to media that you can access.
- Consider the software used to access the digital materials in your collection.
- Software used to create digital materials might be obsolete (e.g., word processing software)
- Always keep a copy of the materials in their original format.
- Be mindful of software considerations when accepting digital materials into your collection.
- Consult a professional if you don't have the software to convert born digital objects to a preservation format (PDF) that provides the look and accessibility, including embedded links and metadata, of the original.

A Tip for Successful Digital Curation

One of the most essential actions a cultural heritage institution can perform before, during and after a digitization project is documentating the work. Documentation can also come in the form of representation information (e.g., file format, filing structure, software used), which helps to ensure the long-term integrity of the digital objects. For example, purchasing a notebook to gather dates, object ID numbers, or information about an object's preservation needs creates a snapshot of data for future reference. Documentation is essential because it leads to the generation of metadata.

Metadata means "data about data". It comes in many forms and includes descriptive, technical, structural, preservation and administrative information. Each form possesses specific information that is valuable for maintaining the integrity of an institution's collection. Metadata is at the core of any collection management system; without metadata, information is difficult to collect and disseminate. Cultural heritage institutions utilize metadata to describe, manage and disseminate valuable source material.

Additional Resources

- Evens, T., & Hauttekeete, L. "Challenges of Digital Preservation for Cultural Heritage Institutions". *Journal of Librarianship and Information Science*, 43(3) 2011. pp. 157-165.
- Harvey, R. Digital Curation: A
 How-To-Do-It Manual. New York,
 NY: Neal Schuman Publishers,
 Inc., 2010.
- Digital Curation Centre http://www.dcc.ac.uk/

- International Journal of Digital Curation http://www.ijdc.net/index.php/ijdc
- National Digital Stewardship Alliance (NDSA) https://ndsa.org/
- File Formats Blog http://fileformats.wordpress.com/ tag/jhove/



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