Enacting Environmentally Sustainable Digital Preservation

The authors of the article "Toward Environmentally Sustainable Digital Preservation" created this workshop as a space for participants to discuss issues of environmental sustainability in digital preservation, identify and enact change toward sustainable practices in their organizational contexts, and identify and plan further research. The workshop was run for the first time at the BitCurator Users Forum 2019 on October 24, 2019 at Yale University. Resources for this workshop are available at https://doi.org/10.21985/n2-hxe1-m195.

Learning objectives

Using Keith Pendergrass, Walker Sampson, Tessa Walsh, and Laura Alagna's article "Toward Environmentally Sustainable Digital Preservation," participants will discuss environmental sustainability as it relates to digital preservation using the authors' proposed framework, and apply this thinking to their own organizational contexts.

This framework balances management, use, and environmental sustainability to find compromises that allow practitioners to focus on high-value materials through a renewed emphasis on critical **appraisal**; reduce the resource-intensity of digital storage and management by rethinking digital **permanence**; and meet user needs in different ways by challenging assumptions about the **availability** of digital content and the need for "always on" digital access infrastructure.

Expected outcomes

By the end of the workshop, participants will be able to:
- Identify areas of change necessary to move away from unsustainable digital preservation practice,
- Identify ways to enact sustainable digital preservation in their organizational contexts and create action plans for implementing necessary changes, and
- Identify holes in existing research and create action plans to address those gaps.

Time

This workshop requires approximately 90 minutes. We suggest setting the agenda based on the number of participants.

For a larger number of participants:
- Introduction, scoping, and discussion norms - 10 minutes
- Breakout group discussion on three areas of paradigm shift (Appraisal; Permanence; Availability) - 40 minutes
- Report back to full group - 10 minutes
- Development of action plans (local implementation and/or research areas) - 20 minutes

- Share out and wrap up - 10 minutes

For a smaller number of participants:
- Introduction, scoping, and discussion norms - 10 minutes
- Group discussion on three areas of paradigm shift (Appraisal; Permanence; Availability) - 50 minutes
- Development of action plans (local implementation and/or research areas) - 25 minutes
- Wrap up - 5 minutes

Intended audience

This workshop is intended for cultural heritage workers interested in or responsible for preservation of digital materials in any capacity, as well as digital preservation researchers.

Materials
- Workshop slide deck
- Documents for taking collaborative notes

Readings

Required
- Pendergrass, K., W. Sampson, T. Walsh, and L. Alagna. "Toward Environmentally Sustainable Digital Preservation." *American Archivist*, 82, no. 1 (2019), https://doi.org/10.17723/0360-9081-82.1.165. Open access via Harvard DASH: https://dash.harvard.edu/handle/1/40741399.

Recommended
- Goldman, B. "It's Not Easy Being Green(e): Digital Preservation in the Age of Climate Change." *Archival Values: Essays in Honor of Mark Greene* (Chicago: Society of American Archivists, 2019). Open access via Penn State ScholarSphere: https://scholarsphere.psu.edu/concern/generic_works/bvq27zn11p.
- Meadows, D. *Leverage Points: Places to Intervene in a System* (Hartland, VT: The Sustainability Institute, 1999). Open access via the Academy for Systems Change: http://donellameadows.org/wp-content/userfiles/Leverage_Points.pdf.
- Tadic, L. "The Environmental Impact of Digital Preservation." Presentation, Association of Moving Image Archivists conference, Portland, OR, November 18–21, 2015. Updated December 2018, https://www.digitalbedrock.com/resources-2.
- Tansey, E. "Archival Adaptation to Climate Change." *Sustainability: Science, Practice and Policy* 11, no. 2, 45-56, https://doi.org/10.1080/15487733.2015.11908146.

How to lead this exercise

1. Introduction
    a. Present the slides summarizing the main points of the article. The slides are available at: https://doi.org/10.21985/n2-hxe1-m195
    b. Outline the scope: This workshop is not a venue for discussing the science of climate change -- climate change is real and humans are causing it.
    c. Set discussion norms: For example, see AORTA guide to "Anti-Oppressive Facilitation for Democratic Process: Making Meetings Awesome for Everyone."
2. Discussion
    a. (*Larger number of participants)* Break into three groups -- one for each paradigm shift area. In each group, identify (1) a notetaker and (2) a reporter who will report back to the full group at the end of breakout discussion.
    b. (*Smaller number of participants*) Identify (1) a notetaker and (2) a timekeeper with responsibility to make sure the group has adequate time to discuss each paradigm shift area.
    c. *(All groups)* Use the tables in the article (pp., 185, 191, and 195) as prompts for discussing the paradigm shift areas. Encourage participants to talk about these prompts in relation to their own work and organizational policies/practices.
3. Development of action plans
    a. (*Larger number of participants)* Participants can stay in the same groups or move between groups.
    b. *(All groups)* Encourage participants to shift focus to identifying areas of implementation and creating action plans, working collaboratively when possible. Areas to consider:
        i. Organizational policies
        ii. Organizational practices (e.g., workflows, infrastructure)
        iii. Areas for further research
4. Wrap up
    a. (*Larger number of participants*) Brief summary of action plans discussion from each group
    b. *(All groups)* Discussion of any collective follow-ups

Source

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