

Disposable Scholarship?

If digital materials are a critical success factor for higher education, institutions need to act now to ensure long-term access to their digital scholarship

By **Fredrick Miller**

When I was younger and contemplating a career as a professional musician, I set up a music publishing enterprise named “Disposable Music Company.” My friends all had a good chuckle, talking about the how the name was a commentary on the ephemeral nature of popular music—how the “greatest hits” of one generation can be completely forgotten by the next.

Now, after working in higher education for nearly 20 years, I’m starting to wonder if our institutions are treating the scholarship of our campus communities with the same cavalier attitude that bedevils pop music hits. Increasingly, libraries are licensing access to scholarly journals, not buying them. Our access to these materials lasts only as long as we pay the license fees.

The digital materials that faculty produce for their classrooms often are saved only to storage devices that might become obsolete in a few years. Similarly, how much of a problem is it when the registrar needs a transcript for a student who attended the university before 1990, and the only records are on paper or microfilm? The university is providing access to PowerPoint presentations, streaming audio, and video for current courses, but after the course ends, what happens to this content?

These are just a few examples of the growing problem facing a university in meeting the need to provide access to and preserve its information. Without an institutional effort to provide access systems, storage, and services for our digital media, are we in danger of creating “Disposable Scholarship”?

Digital Information Growth

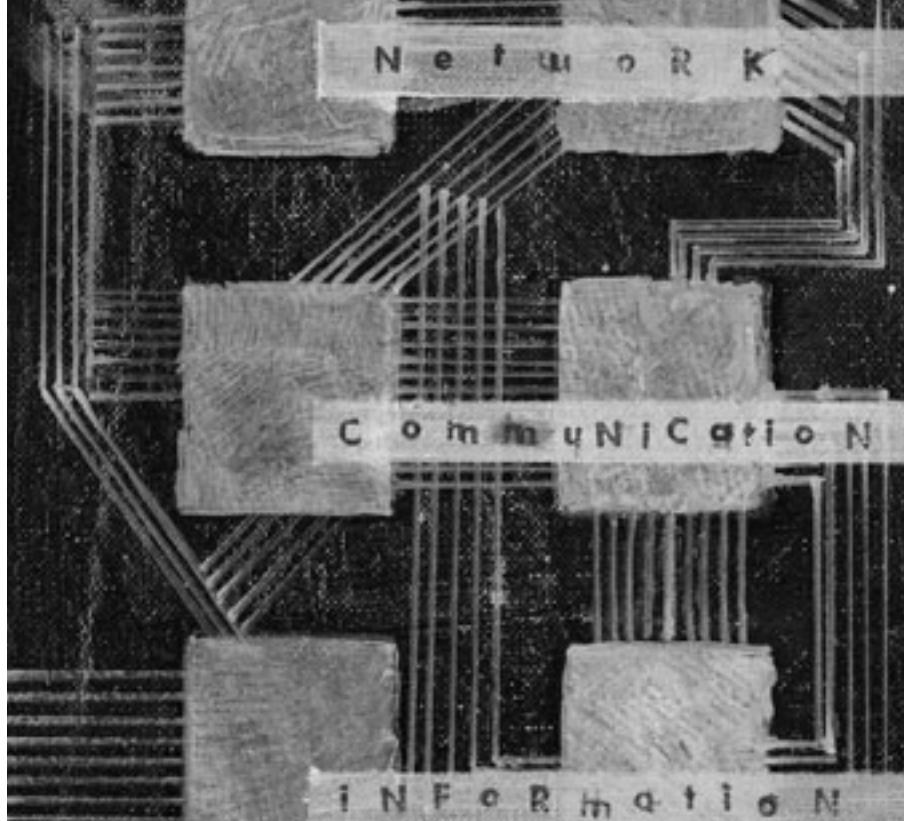
All institutions of higher education should continually evaluate the information needs of their campus communities. If you ask a faculty member, administrator, or student what information they need from campus information and communication technology, you will get a diverse set of answers. Whether someone wants a specific, large data set, access to information that may or may not be in a particular database, or the ability to easily communicate with others on or off campus, no single campus system satisfies all individual, departmental, or institutional information needs. However, when these needs are seen in the context of ongoing initiatives at my university and others, a pattern starts to emerge. This pattern revolves around the need to use the network to provide access to disparate—and growing—digital information.

This organic pattern of digital information growth reminds me of what happened with campus networking almost 20 years ago. At that time we were just starting to deal with how to connect computers to local area networks. First, one or two departments set up their own networks. They didn’t care about other departments’ networks; it only mattered that their network worked for them. Eventually, people learned that other departments were interconnecting their networks. Unfortunately, they found that connecting different networks was not a simple task. As we moved to campus networks, some departmental networks and systems survived, while others were replaced.

The same type of maturation that happened to campus networks is appearing in the areas of digital media access and preservation. Numerous academic and administrative systems provide access to digital media, but this access is neither simple nor seamless. By looking at systems already on campus, we can anticipate usability and interface problems providing access to even more specialized systems. The broad demand for digital media services suggests that we may soon need to consider a campus-wide approach. Providing a core set of supporting services for digital media and preservation will be a major strategic challenge.

Coming Your Way: More Digital Initiatives

Think for a minute about the future of technology on campus, and it’s easy to quickly come up with a wide range of items on the campus technology “wish list.” Besides more and better technology infrastructure and communications, there are numerous opportunities for new digital media initiatives. This wish list probably includes access to documents, images, music, and video all over the campus network. Of course, our campus technology wish list also includes improving the enterprise resource planning (ERP) system, maintaining the campus portal (you do have one, right?), and helping the library with the e-reserves, union catalog, federated searching, and digital library projects. And our wish list wouldn’t be complete without those easy-to-use Web content management and digital imaging systems



While each of these digital initiatives taken alone could be seen as individual department or area projects, as a group they indicate a growing need for systems and services to support digital media. But how many of us would consider preservation of digital material as a high priority on our campus technology wish list? If your campus is like mine, I'd be surprised if many realize that making information available digitally now does not ensure that the media will be available for future scholarship.

If our universities were to pursue all of these potential new systems as individual or department projects, we could expect multiple problems and challenges. Besides the need for creating, archiving, storing, and maintaining all this digital information, how do we make it so easy to use that we don't need to hire an army of technologists to support it? How do we provide the ability for students to search across collections? Will we want to share this information on our own campuses only, or with other universities as well?

Solution(s)?

It's important to remember that we are not alone in thinking about these problems. EDUCAUSE provides excellent forums for us to share our thoughts on these matters. One solution I learned

about through EDUCAUSE is what Clifford Lynch, of the Coalition for Network Information, calls an "institutional repository." Lynch defined an institutional repository as "a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and the community members."¹ We are already starting to see solutions that extend the ability to provide access and at the same time preserve the scholarship of our campus communities. These solutions include open-source software such as DSpace from MIT² and commercial products such as Documentum's Digital Asset Management capabilities,³ being included in portal products such as SCT Luminis.

These trends raise a number of important questions. Should the university be looking for a digital-media strategy that builds on its technology strengths to further teaching and learning today, while at the same time seeking to avoid the problem of disposable scholarship? Will new technology initiatives continue to serve future generations? Colleges and universities talk a lot about traditions. Are we building a tradition of using digital technologies to improve teaching, learning, research, and scholarship?

Strategic Importance

Our colleges and universities have made great strides in setting up digital infrastructure—the network, electronic classrooms, computer labs, and office equipment. This work will continue to require maintenance and ongoing improvement (for example, more wireless networking). Institutions of higher education need to think about how we can build on our technology strengths to help students, faculty, and staff. In the near future this will require that we not only focus on infrastructure, but also provide services for the digital communications and media that are becoming increasingly important for scholarship. The services and support needed for the campus community to easily access, manage, preserve, and secure digital resources are absolutely essential for providing teaching, learning, research, and scholarship that is not disposable, but meaningful for this generation and for those to come.

Institutions of higher education need to take a strategic look at how important technology is to all facets of campus life today and in the future. Is providing access to and preservation of digital materials a critical success factor for the institution to achieve its mission? If so, then the institution needs to consider developing a strategy for providing effective and efficient support for digital media services, including means for ensuring long-term access to the institution's digital scholarship. When we consider digital solutions on campus today, we must ensure that we're not heading for disposable scholarship tomorrow. *e*

Endnotes

1. C. Lynch, "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age", *ARL*, No. 226, Feb. 2003, pp. 1-7.
2. DSpace Federation, Massachusetts Institute of Technology; see <<http://www.dspace.org/>>.
3. Digital Asset Management, Documentum, Inc.; see <<http://www.documentum.com/solutions/dam/index.htm>>.

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