Getting from Here to There, Safely: Library Strategic Planning for the Transition Away from Print Journals Forthcoming in *The Serials Librarian* 52, no. 1/2 (2007).

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Summary: The transition of journals to electronic-only format has begun. There is evidence that suggests that libraries often cancel journals in a reactive and incremental fashion in the face of annual budgetary pressures, but this approach is not ideal. To achieve an effective transition away from print, individual libraries should take a strategic perspective. This article reviews some of the most important aspects of library strategic planning and recommends complementary approaches that can be taken on the consortial and system-wide levels.

Keywords: Strategic Format Review, Process Redesign, Electronic Resource Management, Electronic-Archiving, Paper Repositories

We have reached a moment in the electronic transformation when it is appropriate for librarians to begin evaluating exactly how a full transition to electronic-only scholarly journals might be achieved. Rather than being carried along by events and responding on a year-to-year basis, it is appropriate for librarians to begin developing strategies for transitioning the library, and the scholarly community, to an environment without print journals.²

The advantages of the electronic format over print are widely well-known for scholarly journals. Users prefer the electronic format, to the extent that even faculty members have become largely comfortable with libraries taking the decision to cancel print format.³ Although disciplines are moving at somewhat different speeds, with the image-dependent disciplines in particular somewhat behind the text-based disciplines, user needs are not impeding, and are indeed informing, the transition to electronic

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³ Significant survey evidence exists on this matter. Ithaka's 2003 nationwide survey of 4-year college/university faculty found that 51% agreed strongly with the following (very strongly worded) statement: "If my library cancelled the current issues of a print version of a journal but continued to make them available electronically, that would be fine with me." Presumably, the proportion that would agree with such a statement has only grown in the past three years. There was significant variation by discipline. Of business/finance faculty, some 67% agreed strongly with that statement, while in economics the share was 60%. But even in a field like art history, where some might have been surprised to find almost any agreement at all with such a statement, fully 33%—one-third—agree strongly that it would be fine for print versions of journals to be canceled and replaced with electronic versions.

formats. In addition, libraries and publishers have utilized the opportunities presented by the new format to make vastly more journal titles available to readers.⁴

There are also significant cost implications associated with the redundant collection of print and online formats. The nonsubscription costs associated with the electronic format have been demonstrated to be significantly lower, for a wide sample of libraries, than those for print.⁵ In short, the human resource costs and library space needs required for print collections are significantly greater than those for electronic resources. Completing the transition from print to electronic serials will allow libraries to repurpose staff time toward other important new work. It will also allow the costs that would have been associated with building additional library space to be devoted to other purposes, and for some existing stack spaces to be used for a number of new needs—such as collaborative workspace—that have emerged alongside the electronic environment.

Between the ability to better serve user needs with the electronic format and the cost advantages of cancelling print, the evidence points towards a movement to a digitalonly future for scholarly journals in all disciplines. To be sure, there will be some natural exceptions to this principle. Popular periodicals may be collected in print for armchair reading. Journals that are the "only child" of their publishers or those published in some parts of the developing world face additional challenges in moving to electronic-only versions and may therefore continue to be available only in print. Finally, in disciplines that are heavily dependent on images, such as art history and perhaps even some fields of biology, print journals may be required until such time as image display technologies completely meet user needs. These exceptions affect a relatively small proportion of all journals, and it appears that they will probably each be addressed in the coming years. It is therefore appropriate to begin planning for the likelihood of a near-total transition away from print, if not a complete transition altogether, taking place in the foreseeable future. For those who may object that this transition is not yet inevitable, appropriate risk management practices nevertheless would suggest the value of planning for such an eventuality as one possible contingency.

Planning for such a transition is not simple. The ultimate movement away from print to electronic-only format is one of the great opportunities to rethink an entire class of library functions and services. To do so requires sophisticated leadership and library-wide planning. What are some of the most important considerations, and how might they best be addressed?

A faster transition is better than a slower transition. Although there will always be voices calling for a more gradual approach, there are real cost advantages and other benefits associated with a more rapid transition. For one thing, scale effects can make certain aspects of the intermediate phase more costly than a print-only or an electronic-

⁴ For example, across the members of the Association of Research Libraries in 2004, the mean number of serials purchased was 24,390, while in 1994 the figure was 16,309.

⁵ Roger C. Schonfeld et al., *The Nonsubscription Side of Periodicals: Changes in Library Operations and Costs between Print and Electronic Formats* (Washington, DC: Council on Library and Information Resources, 2004), available at http://www.clir.org/pubs/abstract/pub127abst.html.

⁶ This theme was developed at somewhat greater length in Eileen Gifford Fenton and Roger C. Schonfeld, "The Shift Away from Print," *Inside Higher Education*, December 8, 2005, available at http://insidehighered.com/views/2005/12/08/schonfeld.

only environment.⁷ For every year that libraries collect redundantly in the two formats, there are print subscription fees along with many other costs that could potentially be deployed for other purposes. The advantages of speed must naturally be weighed against other factors, such as the ability of a library to create the infrastructure and services necessary to support the users of an all-digital journals collection.

Some publishers have a difficult transition to make as well. Smaller publishers, such as scholarly societies, independent university-based journals, and some university presses, have not yet developed models that will allow them to thrive (or survive) in an electronic-only environment. As they do so, price increases on their electronic editions are in some cases inevitable, in order for them to achieve sustainability. It is almost certainly in the interests of libraries to try to help the smaller not-for-profit publishers, in some cases by developing services such as BioOne, Project Muse, and HighWire Press that help to support the transition, and also by evaluating both absolute price increases along with percentage price increases for the lower-priced publishers.

Some functions no longer need to take place. A number of traditional library functions may no longer be required. Some print requirements, such as binding and shelf-space, are among those most obviously unnecessary for the electronic-only journals collection. Other functions, such as check-in processes, have been subject to additional debate and have been extended to the electronic format in some cases. But all functions merit careful review, to see not whether they are necessary but whether they are justified given all the claims on a library's resources.

Some new functions need to be funded. A key challenge is to distinguish those new processes and measures that are needed in order to manage an increasingly electronic-only collection from those that are not. Many libraries have begun to implement electronic-resource management systems as well as a variety of measures by which to exercise bibliographic control over electronic journal collections. Libraries have also frequently put into place the staff and infrastructure needed in order to manage, among other tasks, licensing and usage statistics. But new functions meant to duplicate print-environment functions may not always be required, and they too should be evaluated against other opportunities to serve readers.

Electronic archiving. New accessions are not "owned" by libraries in a licensed electronic environment, displacing many of the traditional local incentives and roles for preservation. Formal and collaborative arrangements will therefore be of greater importance for electronic archiving than they ever have been for print. It is necessary that the library community somehow find a path towards the full funding of appropriate electronic-archiving solutions, whether they are managed through a national library that

⁷ Eileen Gifford Fenton and Roger C. Schonfeld, "The Transitional Period of the Periodicals Format Shift," *LIBER Quarterly* 14, no. 3/4 (2004), available at http://webdoc.gwdg.de/edoc/aw/liber/lq-3-04/fenton_schonfeld.pdf.

⁸ See for example Amanda Yesilbas's paper, "Old Is New Again: Using Established Workflows to Handle Electronic Resources" at the NASIG annual meeting, June 2006.

⁹ For more on electronic resource management, see Timothy D. Jewell et al., "Electronic Resource Management: Report of the DLF ERM Initiative," (Washington, D.C.: Digital Library Federation, 2004), available at http://www.diglib.org/pubs/dlfermi0408/ERMFINAL.pdf. One recently published guide is Gary Ives, ed., *Electronic Journal Management Systems: Experiences from the Field* (New York: Haworth Press, 2005).

is capable of serving a diverse constituency or through other programs such as Portico and LOCKSS. Given that an electronic-only collection has no other format as a backup, prudence dictates that each library should ensure the availability of appropriate electronic-archiving solutions as part of its transition away from print.

Print archiving. In an environment of large-scale digitization, the cost to hold print versions locally may become greater than the benefit for many libraries. Should incentives be developed to ensure the survival of appropriate print artifacts? Can they be developed? By whom? Are more formal frameworks, such as paper repository agreements, needed to ensure the survivability of "legacy" print collections? One important example has been the University of California's consortial work to create paper repositories (of JSTOR journal backfiles, as well as of the publications of various commercial science houses). The Five Colleges in Massachusetts, as well as a number of other consortia, have begun to develop similar types of repositories. Should every library transitioning to an electronic-only environment develop some sort of affiliation with an existing paper repository, or sponsor the creation of a new repository?

Each of these six challenges requires leadership from libraries, both at an individual level and across the system of libraries. The format transition is taking place, regardless of whether it is managed strategically. In some cases, budgetary pressures are the prime motivation for the cancellation of print, and there has developed an annual exercise in recent years in which sufficient print is cut to achieve needed (or required) cost savings. But this incremental approach, while it might be effective in some cases, generally makes it harder for libraries to address the transition holistically and strategically.

What is needed at an individual library level is what might be termed a strategic format review, which takes place on a library-wide basis or, in some cases, across a consortium or system. A strategic format review entails the setting of a goal for the movement away from print – for example, deciding to cancel 30% of print each year for the next three years – and then planning for how best to achieve that goal. Since it takes place on a library-wide basis, a strategic format review allows for the consideration of which periodicals functions can be justified given competing claims on resources. (By comparison, if the manager of the check-in function is left to determine whether to apply

¹⁰ See John Kiplinger, Nancy Kushigian, Colleen Carlton, and Jeff Sundquist, "The UC/JSTOR Paper Repository: Progress Thus Far," Presentation delivered to the NASIG Annual Meeting, Denver, Colorado, May 2006, available at www.srlf.ucla.edu/jstor/Notes/NASIG%20Presentation%202006.pdf.

¹¹ See Willis E. Bridegam, A Collaborative Approach to Collection Storage: The Five-College Library Depository (Washington, DC: Council on Library and Information Resources, 2001), available at http://www.clir.org/pubs/reports/pub97/pub97.pdf, Willis E. Bridegam, "Print Preservation at the Local Level - the Five Colleges Experience," Library Collections, Acquisitions, & Technical Services 28 (2004), Bernard F. Reilly, Jr., Developing Print Repositories: Models for Shared Preservation and Access (Washington, DC: Council on Library and Information Resources, 2003), available at http://www.clir.org/pubs/reports/pub117/pub117.pdf.

¹² A key consideration in whether paper repositories can be successful is the question of adequate bibliographic control. A recent analysis of the systemwide book collection could not be extended to serials or journals because of the quality of the data available, and this type of analysis is one important component of the creation of an efficient yet fail-safe system of paper repositories. See Brian F. Lavoie and Roger C. Schonfeld, "Books without Boundaries: A Brief Tour of the System-Wide Print Book Collection " *Journal of Electronic Publishing* (2006, forthcoming).

check-in procedures to electronic journals, there is an overwhelming likelihood that check-in will continue.) A strategic format review allows a library to determine that with savings from the rapid transition away from print, it will elect, for example, to fund an electronic-archiving solution and an electronic resource management system.

Individual libraries will as a matter of course have variations in their approaches to this type of strategic format review. This article has covered large terrain in few words, and it has therefore been necessary to ignore many of the differences across libraries. These differences, which can span the gamut from user expectations to organizational structure, are critical in appropriately managing the transition to an electronic-only environment. Recognizing these differences, and planning for how a strategic format review might best be undertaken at any given library, is critical if the transition to electronic-only format is to take place as successfully as possible.

In some cases, there will be appropriate consortial-level planning as well. For example, some types of consortia are ideally suited to developing a paper repository. Others may be able to implement shared targets for the reduction of print subscriptions. And in some cases, certain types of responsibilities, once undertaken by each library, might be conducted centrally on behalf of a group of libraries. Licensing is one area where some consortia have already developed this type of experience, but there might be opportunities for a variety of acquisitions and processing functions as well. In some cases it may also be appropriate to seek systemwide consensus on some of the issues considered in this paper, from electronic-archiving solutions to targeted movement away from print. The Janus Conference, hosted in 2005 by Cornell, was an excellent example of this type of approach. ¹³

Leading the transition away from print journals is one of the challenges, but also one of the great opportunities, before today's academic library. Organizing a strategic format review is not simple in itself, and this article has omitted the additional complications of operating in a sometimes politicized campus environment. But a failure to act strategically will bring even worse results down the line, as individual libraries and the scholarly community more broadly find themselves ill-prepared to handle the increasingly digital future. Instead, leading a successful strategic process will result in a smoother transition, creating an important legacy for future generations of students, scholars, and library managers.

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¹³ See http://www.library.cornell.edu/janusconference/.