Introduction

Electronic Resources: In the Beginning

An obvious and direct effect of the increasing availability of electronic resources in library collections was—and still is—the need to control and manage them. As simple as this task may sound, we, as librarians and library professionals, are still trying—more than a decade after the appearance of these electronically based resources—to find ways to administer these resources with the same comprehensive efficiency as we accomplished with print resources, all with new sets of tools and skills specifically tailored to the resources themselves and the new services these resources create.

The library literature of the early 1990s focused on whether or not the format—electronic journals with access only delivered over the Internet—was useful to libraries. Authors asked the question, "Should we acquire and make available to our patrons these new electronic journals?" At the heart of this issue was not just how much material was available, or what the quality of the material was, or even what processing it might take to make the material available; first and foremost the issue was whether it was an appropriate format or not.

In the 1993 report, *An Agenda for Digital Journals: The Socio-Technical Infrastructure of Knowledge Dissemination,* Brian Gaines made his compelling case for electronic journals as a mechanism for supporting the growth of knowledge. Gaines pointed to both the technological developments and the social framework of scholarship, "to harness the information explosion," as rationales for supporting the medium. In August 1994, the Association of Research Libraries (ARL) issued one of its *SPEC Kits* in which policies and procedures for electronic journals were examined.[2] Of the seventy-seven responding libraries detailed in the ARL data, thirty-five were actually making electronic journals available to their library patrons. These libraries had made the implicit decision the digital format was appropriate; however, only five of these responding libraries had collection-development policies that expressly addressed these electronic resources.

An Agenda for Digital Journals: The Socio-Technical Infrastructure of Knowledge Dissemination, *by Brian Gaines*
http://ksi.cpsc.ucalgary.ca/reports/HM/DigitalJ/DigitalJ.pdf

"Availability of Journals in Electronic Form," by Oili Kokkonen and Eva Ijas
http://forge.fh-potsdam.de/~IFLA/INSPEL/97-2koko.pdf

Much of the literature in the mid- to late 1990s discussed the availability of specific e-journal titles in particular disciplines that might be appropriate additions for library collections. For example, in 1997 a paper published in the *International Journal of Special Libraries* (*INSPEL*) discussed the availability of titles in electronic form in specific subject areas that met appropriate library collection-development policies.[3] The number of titles was meager by today's standards, but still the prospects were tempting.

Librarians had, by this time, made the leap of acceptance. We saw some of the possibilities and the advantages. So at this point, the task was to find these electronic journals wherever they existed; evaluate them

on an individual basis; and then decide whether or not to incorporate them into our collections. It is important to note that the task was not really *how* to incorporate these resources but whether or not an individual title *was worthy* of being added to our collections; at this point in time, the material was considered supplementary. Although a small number of titles were only available in digital form, many of the titles available electronically were replicas of their print counterparts. Some were not even complete replicas; incomplete replicas didn't always have every article or column that the print title had. In this period, print remained the primary format for resources and the final archival: print was still the authoritative version in the view of librarians and publishers.

What followed in the late 1990s was a maturing of the format and an explosion of titles available electronically, distributed over the Internet, in a comprehensive range of disciplines. These journals were made available in a variety of pricing, packaging, and platform choices. Journal issues included all of the material available in the print version and sometimes also included more information and had features that could never be included in print—such as animated images and hyperlinks to supporting data.

But pricing, packaging, and platforms were not the only issues librarians had to contend with in trying to incorporate these resources into their collections. Across the spectrum of traditional library-work divisions at this time, these electronic resources only partially fit into the general workflow, thus e-resources were only partially served by that same general workflow. In addition, electronic resources made possible a variety of opportunities unimaginable in the print environment, which had dramatic effects on staffing and workflow as well.

Scope of This Report

In order for libraries to wholly embrace electronic resources, progress must be made in at least three areas. There must be a significant body of content available for libraries to acquire. We have seen this happen over the course of the last decade.

Staffing and workflow is another area in which libraries must develop a strategy. In this issue of *Library Technology Reports (LTR),* dramatic workflow changes—that must happen in order to accommodate electronic-resource management—will be examined. These changes are evident in the selection process, in the licensing negotiations, in new ways to provide access to library collections, and in the administration and management of resources over the term of the license agreement and beyond. Although there is a clear need for a reorganization of staff responsibilities, library research suggests there is no one path that is right for all libraries.

The third area of development discussed in this issue is the technology that manages both content and workflow. In regard to ERM technology developments, the Digital Library Federation's (DLF) Electronic Resource Management Initiative (ERMI) Report stands as a major contributor to how ERM technology is being developed in the mid-part of this first decade in twenty-first century.

Because of the magnitude of the DLF's ERMI report, in regard to electronic-resource management technology, it's important to examine the information that came from the initiative. Thus, this issue of *LTR* begins with an examination of homegrown systems—as did the ERMI—which were developed independently by a small group of libraries that meant to begin to address their own management needs of these new resources. This report also explores the comprehensive functionality of such a system and the data elements necessary to support this functionality. And, further in this issue, there's a brief discussion of currently available services and systems that were, and are still being, developed to address the functionality identified in the ERMI document.

This report also touches on the newest initiatives in standards development, which are meant to extend the original ERMI report. A couple of these standards-development efforts include SUSHI (Standardized Usage Statistics Harvesting Initiative) and the License Expression Working Group.

Finally, this report explores how these three components of electronic-resource management—staffing, collection, and technology—affect one another as well as how they impact a library's decision about the selection of an electronic-resource management system. In the final part of this issue (chapter 3, "How to Manage Changes"), there are some suggestions for implementation strategies.

Notes

1. Brian Gaines, *An Agenda for Digital Journals: The Socio-Technical Infrastructure of Knowledge Dissemination,* (Calgary: Knowledge Science Institute, University of Calgary, Alberta, Canada, 1993), http://ksi.cpsc.ucalgary.ca/reports/HM/DigitalJ/DigitalJ.pdf (accessed January 30, 2006).
2. Elizabeth Parang and Laverna Saunders, *Electronic Journals in ARL Libraries: Policies and Procedures* (Washington, D.C.: Association of Research Libraries, 1994).
3. Oili Kokkonen and Eva Ijas, "Availability of Journals in Electronic Form," *INSPEL* 31, no. 2 (1997): 72–80, http://forge.fh-potsdam.de/~IFLA/INSPEL/97-2koko.pdf (accessed January 30, 2006).