

NUTS AND BOLTS: PROCESSING IMPACTS

Libraries have learned the hard way that acquiring e-materials is a more complicated process than buying print books and journals. The day-to-day challenges are made clear in the review that follows of a project designed to address them—the Digital Library Federation Electronic Resources Management Initiative (DLF ERMI).

Later sections of this chapter describe some particular headaches of e-acquisition, including avoidance of accidental duplication and the growing need for both continuous management of purchases and the data to support it.

Digital Library Federation Electronic Resources Management Initiative

Libraries must maintain a complex and interrelated array of information to support the acquisition and management of electronic resources. This system is far more complicated than what is required for print purchases. Evaluation, selection, acquisition, maintenance, and provision of effective access all take place within an environment dictated by the many business and license terms set by the sellers.

Acquisition of electronic products is a multistep process involving many participants, some of whom are outside the library (such as vendor negotiators, campus purchasing agents). Tracking progress at each stage is critical, since purchases are easily delayed or derailed along the way. Staff and the public need different kinds of information.

Various kinds of data must be recorded and manipulated for different purposes in an e-resource management system. An abbreviated list of information required includes:

- Purchasing arrangements (such as consortium deals, bundled packages, pricing models, cancellation and print retention requirements)
- Licensing terms (such as authorized use and users, renewal requirements, and cure of breach directives)
- Technical matters (such as access management specifications, open URL syntax, and availability of MARC records)
- Administrative information (such as vendor sales representative information, technical contact, and designated library contact)

The overall goal of Digital Library Federation Electronic Resources Management Initiative (DLF ERMI) has been to lay the groundwork for the creation of standards-based systems to store and manage information needed for acquisition and management of electronic resources.

The idea was the brainchild of Tim Jewell, the author of an earlier study commissioned by DLF. In the course of his research for that project, Jewell contacted several libraries to find out how they were addressing the e-resources information management problem.

Many libraries had already evolved quite sophisticated systems, but each was to some extent duplicating the effort of others, and he concluded that a concerted, cooperative effort would be a far more productive approach.

A website to serve as a center of information on the topic was set up at Cornell and an informal meeting took place at the American Library Association (ALA) annual conference in 2001.

In fall 2002, the project was formalized as an official DLF program and a group of librarians (and later, vendors) were invited to participate. The basic aims were:

- To identify essential data elements
- To describe functional specifications and system architectures
- To specify and promote the development of standards

The library participants wanted to address needs spanning the complete lifecycle of the e-resource from initial consideration onward. They also wanted to ensure integration with other library systems, interoperability with vendor products, and reusability of data in various contexts for different purposes.

The steering group defined a set of specific products as its ultimate goal. Group members have accomplished their work and issued their final report. The report is accompanied by six appendixes (such as Functional Requirements and Data Element Dictionary). All are available via the website.

The project has created a detailed framework for moving forward toward generally applicable solutions to the e-resources management information problem. The complexities involved are illustrated by the total of 44 functional requirements specified in Appendix A. Product developers will probably be hard-pressed to build in all the capabilities that most members of the librarian reactor panel agree are essential.

Certainly the greatest achievement of DLF ERMI was to set integrated library system companies on the road to creating electronic resources management (ERM) products. Innovative Interfaces has been working on a module since 2002 and is ready to move it from beta testing to production. Endeavor is well along in work on its Meridian solution, and ExLibris is developing a module called Verde.

Despite the hard work and accomplishments of DLF ERMI, the final report summarizes substantial issues that still need attention:

- DLF-ERMI did not address support for consortium information management needs.
- The place of usage data in ERM systems was not fully explored. Some libraries are content to have pointers to data; others want to be able to store data and display analyses through the ERMS.

One of the most important aims of the project was to identify and promote the use of standards. The final report indicates the expectation that ERM systems will ultimately be able to rely on the standards developed by the NISO/EDITEUR Joint Working Party for the Exchange of Serials Subscription Information.

The group is less optimistic about general agreement on standardized language for license terms, intellectual property rights, and authorized uses. Its own investigation of existing schemas for rights expression failed to yield a usable starting point.

DLF ERMI,
www.library.cornell.edu/cts/elicensestudy/home.html

Final report,
www.library.cornell.edu/cts/elicensestudy/dlfdeliverables/DLF-ERMI-FinalReport.pdf

The last paragraph of the report offers a realistic, though somewhat daunting conclusion:

“Resolution of these issues will require substantial, organized, cooperative, ongoing efforts from libraries, consortia, publishers, serial agents and support companies, and library system vendors—as well as effective structures for communicating about them. The new electronic environment in which libraries, publishers and vendors operate has evolved quickly and become quite complex in relatively short order, but the complexities we now recognize could pale in comparison to what may be just around the corner – as investments in electronic resources grow, technical innovation continues, and business models evolve....”¹

Caveat e-emptor

E-publishers' penchant for bundling calls for vigilance on the part of buyers regarding inadvertent duplication and double payment. The multitudinous Elsevier subject-based back files offer a compelling example of the risks involved in buying publisher-determined parcels.

At an ALA 2004 program on the effects of the Big Deal, Gary Ives, of Texas A&M University, presented spreadsheets showing the level of duplication among the various parcels Elsevier has put together for different specialist markets.

Certain collections have a particularly high degree of overlap, for example, the environmental sciences and agriculture collections contain many of the same titles. Only a few journals are unique to the small veterinary medicine collection. Libraries buying the back files will need to take care that they are not paying more than once for the same titles.

Sometimes the need to avoid duplication may result in delays in purchasing. An example here relates to consortium buying of a netLibrary collection. Member libraries who want to buy individual titles may identify them for purchase long before the details of the group purchase are announced. The choice may be to satisfy needs in a timely way and risk paying twice or to delay purchase.

Marketing of e-books is still in the shakeout stage, but publishers seem more willing to seek multiple outlets. This distribution strategy creates greater opportunities for unintended multiple copy purchases by libraries. E-commerce books, for example, may turn up in *Books 24x7*, in a publisher-based bundle or in an aggregator's subject package.

Management of purchases

Digital systems are great at generating data and librarians have agitated for more and more information from vendors. We can now know more about the use of library resources than ever before and, at least theoretically, make more informed decisions regarding what to purchase.

Project COUNTER and use data

When electronic publishing first began, many producers did not offer usage data. Those that did provide records of use employed their own systems and made no effort to be consistent with what other vendors were doing.

The absence of standard definitions for data elements and method of capture and reporting made meaningful comparisons among similar products

impossible. Even changes in use of a single product over time were difficult to track since vendors also altered their practices as products evolved.

A sensible way to address these issues grew out of collaborative discussions in the United Kingdom among publishers and librarians. Appropriately dubbed Project COUNTER (Counting Online Usage of Networked Electronic Resources), the program aims to establish standards for data collection to be adopted by all producers and an auditing authority to guarantee the credibility of the information vendors transmit to libraries.

COUNTER had an ambitious timetable and has made substantial progress since its inception in 2002. It is now an incorporated body with a board of directors and has instituted membership fees as source of financial support. Release 1 of the Code of Practice has appeared, and Release 2 is available for comment before issuance in January 2005.

More than 30 vendors are on the register of COUNTER-compliant suppliers, though owing to the difficulties of implementing even the simple reporting requirements specified, many on the register are still having problems with full implementation, especially for certain products.

Though initially participating vendors were described as COUNTER-compliant, the convention from now on will be to designate products, instead of producers, as COUNTER-compliant. The project has so far tackled only journals and databases but expects to address e-books and e-reference works soon.

The importance of COUNTER is demonstrated by the fact that the vendors signing on are responsible for more than 50% of journals articles included in *Science Citation Index*. A major remaining hurdle for the complete success of COUNTER is the establishment of an auditing process to assure the trustworthiness of vendor reports.

Having good, reliable data for decision-making is certainly half the battle for librarians, but tracking, analyzing and interpreting still take time, effort, and dedicated staff. (Some libraries have assigned one or more positions to this activity.) Increased purchasing of e-books and e-reference materials that can be selected and de-selected on an annual basis based on use will add substantially to this job.

Who keeps print? How to manage access?

As libraries opt to share print copies of journals, deciding on who keeps the paper and how to make print copies available to others will create another collection management headache. When they decided to share a single copy system-wide of paper Elsevier and ACM journals, California Digital Library (CDL) encountered many policy and procedure issues.

First, agreement had to be reached as to whether volumes would circulate. CDL decided on a dim as opposed to a dark archive and assigned a one-week circulation period. Discussions also were necessary regarding ownership. Although participating libraries were willing to allow collective governance of the shared collection, they were not willing to relinquish ownership.

Special workflow procedures had to be developed in each of the two receiving libraries (UCLA and San Diego) to track costs and to fast track the materials. To facilitate scanning, individual issues were not bound, but instead, put in archival envelopes for preservation purposes.

Policies were needed for staff on how to handle requests for the material. Finally, the most important issue: "to find time to step back and define the broad goals and vision of a shared collection."²

In a system where print copies of journal titles in a particular package are being distributed between more than one library, the participants have the additional headache of sorting out which institution keeps which titles.

Notes

¹Timothy D. Jewell, Ivy Anderson, Adam Chandler, Sharon E. Farb, Kimberly Parker, Angela Riggio, and Nathan D. M. Robertson, "Electronic Resource Management: Final Report of the DLF Initiative," Washington, D.C., Digital Library Federation 2004, www.library.cornell.edu/cts/elicencestudy/dlfdeliverables/DLF-ERMI-FinalReport.pdf.

²C. Shelton, "Planning a Prospective Print Journal Collection at the University of California," *Against the Grain*, v. 16, no. 3 (June 2004) p. 30.