Chapter 8

Looking Forward

Abstract

The current version of Techniques for Electronic Resource Management (TERMS), as represented through the TERMS wiki, outlines some of the best practices for electronic resource management today. Chapter 8 of Library Technology Reports *(vol. 49, no. 2) "Techniques for Electronic Resource Management" explores how the resources to be managed continue to evolve and develop into new models of scholarship and new systems for management. This situation sometimes requires workflows to be rewritten and redesigned as the scholarship models change and the systems used to manage the resources are upgraded.*

Introduction

Up to this point, TERMS has outlined and illustrated some of the best practices for the current state of electronic resource provision in libraries. However, there are many developments occurring both with the resources available to libraries and how they will be purchased as well as with the systems that will be used to manage these new offerings. This chapter will outline some of the new resources being made available, from new e-book models, to the fracturing of known scholarship publishing through the development of hybrid journal publishing, to new resources being developed from the digital humanities arena. In addition, the chapter will also describe some of the changes occurring to management systems, such as the development of next-generation integrated library catalogs and web-scale management tools. As systems develop and change, workflows must also change and be redeveloped to best suit the management systems in place.

E-book Management, Article Publishing, and New Forms of Scholarship

The purchase and access models for e-books are still in flux. Publishers are premiering both new models for purchase and platforms for access on a regular basis. It can be said the e-books pricing models are where electronic journal purchasing was a decade ago, which indicates they are all over the map. Some models allow for single-title purchase through traditional book vendors; some titles can be purchased singularly on publisher platforms or aggregated platforms with other e-books; others are set in packages from publishers; and some are incorporated into publisher database websites. Along with major e-book platforms such as EBL, ebrary, EBSCOhost, and MyiLibrary, many publishers are creating their own content platforms that intersperse their e-book content with e-journal content. In addition, there's still disagreement on whether books should be made available as PDFs, EPUBs, or HTML5. There is also a growing movement of open-access (OA) e-books being developed along with the various for-fee options. Librarians will need to decide whether to purchase e-books in packages, separately title by title, as part of various content platforms, or through demand purchasing models.

All of the major scholarly publishers are now offering the ability for scholars and researchers to pay article processing charges (APCs) up front through a purchasing model know as hybrid journal publishing or gold OA.[1] As the mandates for OA publishing grow among institutions of higher education and major research centers, librarians are being asked to find ways both to manage the APCs for articles and to reconcile these payments alongside their traditional

subscription models. Currently, most of the management systems in use by libraries are unable to handle tracking and management of article-level purchasing. As this area of scholarship grows and expands with national mandates in effect, both librarians and library tools will need to develop new skills and functionality.

Furthermore, there is a growing body of scholarly literature that is considered to be neither part of scholarly e-journals nor single e-books. One example of a new format of scholarly resources can be found on Palgrave Pivot. There are various other models being developed out of the growing field of digital humanities and the development of new digital projects coming from university press publishing.[2] Lastly, there are the developments of multimedia resources such as JoVE (Journal of Visualized Experiments), which have streaming videos incorporated as part of the journal. As the traditional publishing models are fractured and re-created in new formats, librarians will need to have new and different ways of both purchasing and accessing these new content types.

Palgrave Pivot
www.palgrave.com/pivot

JoVE (Journal of Visualized Experiments)
www.jove.com

Next-Generation Integrated Library Systems and Web-Scale Management Systems

TERMS has sought to understand the workflows and processes we have in place for ERM systems and related systems such as ILSs. However, there are many criticisms of the current crop of ILSs, such as:

- *their inability to deal with the changing formats of resources*: As digital resources supersede print collections, this leads to complaints by staff that the systems are simply not up to the job.
- *the confusion created by the different interfaces encountered by users as they search for information*: Users familiar with the ease of searching the Internet for information increasingly want the same ease when searching the library for information.[3]

In the world of ERM, things have come a long way since the publication of the outcomes of the DLF Electronic Resource Management Initiative, Phase II.[4] However, there are criticisms of ERM systems too. As noted in chapter 1, implementations of ERM systems are still relatively few and far between;[5] certainly in the United Kingdom, there are very few examples of successful implementation and interaction with the ILS.

Marshall Breeding describes 2012 as "a watershed year in the roll out of a new generation of library automation platforms, especially in the academic library arena."[6] It can be argued that many ILSs currently in place are hindering the electronic resources manager and limiting improvements in workflow efficiencies. This situation then leads to duplication of effort, such as rekeying financial information into both the ILS, the ERM system (or spreadsheets), and the institution's financial system. In the current financial climate, where libraries are reducing budgets and staffing, ILSs that require a dedicated team with specialist expertise to support them; lack the integration with other key systems, such as student records, finance, etc.; and contain fixed workflows often based around print material are monolithic compared with the newer systems that have come to market in recent years.

Open-source ILS replacements, such as Koha and Evergreen, and also open-source library catalog replacement layers, such as VuFind, are a reaction to the fact "that collections have changed considerably over the past 10–20 years yet the workflow/services of the library system have not kept pace to help process/present a modern 'collection.'"[7] These systems are based, however, on the systems that they are designed to replace; thus, Chad describes the current ILS marketplace as "ripe for disruption."[8]

Work sponsored by the National Library of Sweden and carried out by Marshall Breeding in April 2012, described the current marketplace for the major e-resource knowledge bases and their associated link resolvers. The study looks at the top and second tier of providers, such as Ex Libris, Serials Solutions, EBSCO, and OCLC. The research is a good picture of the marketplace in 2012, and in it Breeding mentions the work of Jisc Collections' Knowledge Base + (KB+) and Kuali OLE's GoKB:

> The Kuali OLE project and Jisc have recently launched a joint project funded by the Andrew W. Mellon Foundation to create a Global Open Knowledgebase (GOKb), a community-based knowledge base; however, this is not described as a replacement to commercial knowledge bases though it does seem positioned to serve as an alternative, with similar scope of e-content coverage (and an enhanced data model). It will become the knowledge base for Kuali OLE.[9]

Breeding goes on to report,

> Some libraries have already migrated away from link resolvers and knowledge bases previously in place to achieve better alignment with newly acquired discovery services. We can expect

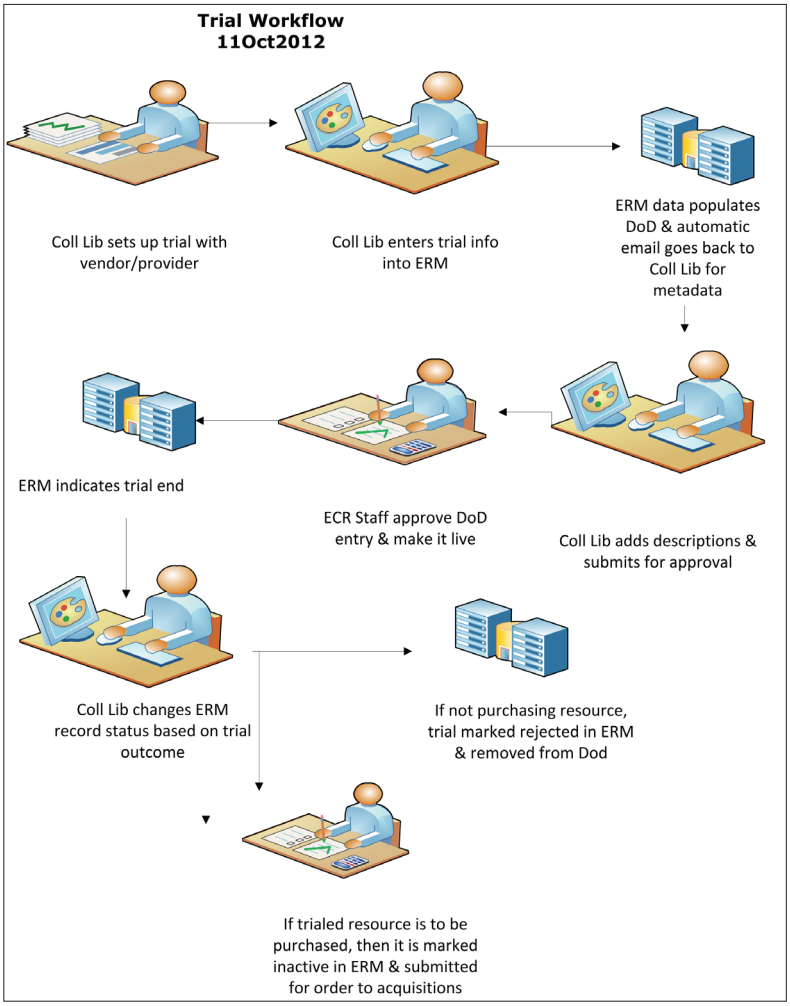

Figure 8.1
Trial workflow

> further migrations to take place associated with the implementation of Alma, Intota, WorldShare Management Services and other new-generation library services platforms.[10]

A combination of community knowledge bases (the KB+ model has already had interest from other countries) and new-generation library services platforms, with little of the baggage associated with the old ILS, may be just the disruption that Chad envisages.

Before we can know what we want from a next-generation library service, we need to understand the problems and frustrations library staff and users feel with the current ILS by recording our existing workflows, and this is one of the main outcomes of TERMS. However, almost as soon as we understand the current TERMS and the associated workflows, we need to discard them and identify what we expect from the new systems, such as Intota and Alma, and where they can improve on the older models.

Understanding new systems, such as Serials Solutions' Intota, and how they will integrate with community knowledge bases, such as KB+, is one of the aims of the HIKE (Huddersfield, Intota, Knowledge Base + Evaluation) project in the United Kingdom. HIKE, part of the Jisc Library Systems Programme, seeks to evaluate suitability of Intota for the UK higher education marketplace as a replacement for the traditional ILS. The project is currently assessing both e-resources workflow and acquisitions workflows for both print and electronic formats. This work is being undertaken in order to identify and discuss the current issues and frustrations felt by staff dealing with the traditional ILS and its lack of interoperability with other systems. The result of this project will be to recognize areas where efficiencies could be made through avoiding either the duplication of work or tasks that are time-intensive and areas where accuracy could be improved by highlighting tasks where the risk of error is high.

The role of the electronic resources manager over the coming years is to adapt to these new systems by building upon TERMS, including new workflows and ways of purchasing, such as those required for Patron Driven Acquisition (PDA) and the management of APCs for the purchase of single articles by local access via gold OA.

Jisc HIKE Project
http://library.hud.ac.uk/blogs/projects/hike

Jisc Library Systems Programme
www.jisc.ac.uk/whatwedo/programmes/di_informationandlibraries/emergingopportunities/librarysystems.aspx

Workflow Versions

As next-generation ILS systems and web-scale management tools are adopted, workflows will be adapted to take advantage of the new service-provision tools. For Portland State University, we can illustrate two workflow changes that occurred because we were able to develop integration between our ILS ERM system

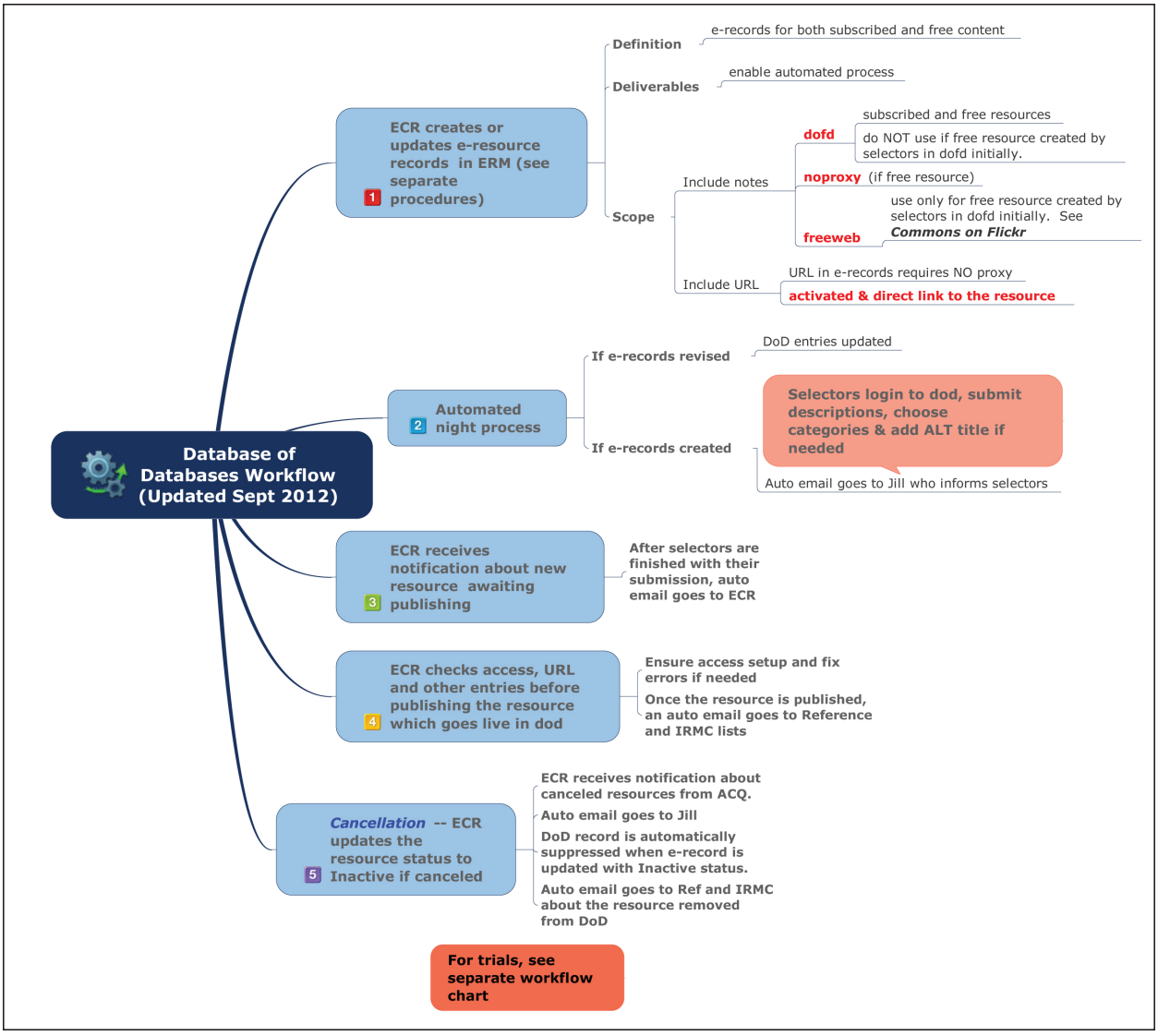

Figure 8.2
Database of databases workflow

and locally developed web pages that provide public display of resources. In the first version, the two systems were managed as completely separate from one another. This meant that staff had to enter information in multiple systems in order for access to be sustained. Any changes that occurred within one system then had to be replicated in another system (see figure 8.1). With the changes made, scripting was put into place that allowed for the automatic transfer of information from the ILS ERM system into the web page management system for the majority of the critical access fields such as title, URL, and platform provider. This automated process now occurs each day and reduces the staff needed to update systems individually (see figure 8.2). Another advantage is that subject liaisons now have the ability to readily edit and update resources as needed in the public view without the intervention of technical services staff. This means that if there is a service failure outside of standard business hours, the subject liaison can log in and notate the resource record as needed and even suggest alternative resources to be used. Figures 8.1 and 8.2 show how the work has simplified and become more interactive among everyone involved in the information chain. As new systems are created and adopted, the workflows will change and become more efficient, especially in systems where more of the operations are better integrated.

Conclusion

In conclusion, the authors have achieved the goals set for the TERMS project. The crowdsourcing of the

sections helped to ensure that the project remained relevant and worthwhile to the targeted audience. The response to TERMS from Brazil, Europe, India, and North America confirmed that it was still a much-needed endeavor, and the authors are extremely proud that this work is already being used as the basis of a course offered to library and information science students in the United States. The TERMS wiki will be in the good hands of the dedicated editorial team that has been established, and it is expected that entries will continue to grow and develop as new formats of scholarship evolve and the next-generation ILSs and web-scale management systems become more widely adopted. TERMS is already showing that the content in each of the six TERMS wiki pages, including shared workflows, is being used to prepare the electronic resources manager to address this international need to map and understand the e-resources cycle in order to provide seamless access to patrons and create efficiencies in the e-resources workflow.

TERMS Wiki: Main Page
http://library.hud.ac.uk/wikiterms/Main_Page

Notes

1. Peter Suber, "Open Access Overview: Focusing on Open Access to Peer-Reviewed Research Articles and Their Preprints," June 21, 2004, last reviewd October 7, 2012, accessed November 12, 2012, www.earlham.edu/~peters/fos/overview.htm.
2. Ellen W. Faran, "Sustaining Scholarly Publishing: University Presses and Emerging Business Models," *College and Research Libraries News* 72, no. 5 (May 1, 2011): 284–287.
3. Yongming Wang and Trevor A. Dawes. "The Next Generation Integrated Library System: A Promise Fulfilled?" *Information Technology and Libraries* 31, no. 3 (2012): 76, doi:10.6017/ital.v31i3.1914.
4. Digital Library Federation, "DLF Electronic Resource Management Initiative, Phase II," 2009, last updated January 10, 2011, accessed November 12, 2012, http://old.diglib.org/standards/dlf-erm05.htm.
5. Nat Gustafson-Sundell, "Think Locally: A Prudent Approach to Electronic Resource Management Systems," *Journal of Electronic Resources Librarianship* 23, no. 2 (2011), 126–141, doi:10.1080/1941126X.2011.576955; Maria Collins and Jill E. Grogg, "Building a Better ERMS," *Library Journal* 136, no. 4 (March 1, 2011): 22.
6. Marshall Breeding, "What's In Store for 2012," *Smart Libraries Newsletter* 32, no. 1 (January 2012): 1–2.
7. John Little, quoted in Dan Scott to Next Generation Catalogs for Libraries mailing list, "Re: Planning Open Source Library System at Duke," January 30, 2008, accessed November 12, 2012, http://permalink.gmane.org/gmane.culture.libraries.ngc4lib/3884.
8. Ken Chad, "Disrupting Libraries" (presentation, 29th Annual Charleston Conference: Issues in Book and Serial Acquisition, Charleston, SC, November 4–7, 2009), accessed November 12, 2012, www.kenchadconsulting.com/wp-content/uploads/2010/06/Disrupting_libraries_Charleston_conf_KenChad_Nov09.pdf.
9. Marshall Breeding, "E-resource Knowledge Bases and Link Resolvers: An Assessment of the Current Products and Emerging Trends," *Insights* 25, no. 2 (July 2012): 175, doi:10.1629/2048-7754.25.2.173.
10. Ibid., 176.