

Introduction and Literature Review

Abstract

Librarians and information specialists have been finding ways to manage electronic resources for over a decade now. However, much of this work has been an ad hoc and learn-as-you-go process. Chapter 1 of *Library Technology Reports* (vol. 49, no. 2) “Techniques for Electronic Resource Management” shows that the literature on electronic resource management is segmented into many different areas of traditional librarian roles within the library. In addition, the literature shows how management of these resources has driven the development of various management tools in the market, as well as serving as the greatest need in the development of next-generation library systems. *Techniques in Electronic Resource Management (TERMS)* is an attempt to create an ongoing and continually developing set of management best practices for electronic resource management in libraries.

An important role for librarians over the next five to ten years is to provide access to online library resources—free, open-access, or purchased, all valuable resources—in an intuitive, easy-to-use one-stop shop and not to be afraid of running a continual beta test in which new services and functions can be added when necessary. To fill this role, librarians and electronic resources managers need flexible, interoperable resource-discovery systems based on open-source software. In addition, we must continue to assess users’ needs and reach out by adapting our systems to fit their requirements, rather than expecting them to come to us; indeed, our very future depends on it.¹

Two decades after the advent of electronic journals and databases, librarians are still grappling with ways to best manage e-resources in conjunction with traditional print resources and at the same time explore new purchasing initiatives and practices, such as demand-driven acquisition of electronic books. In

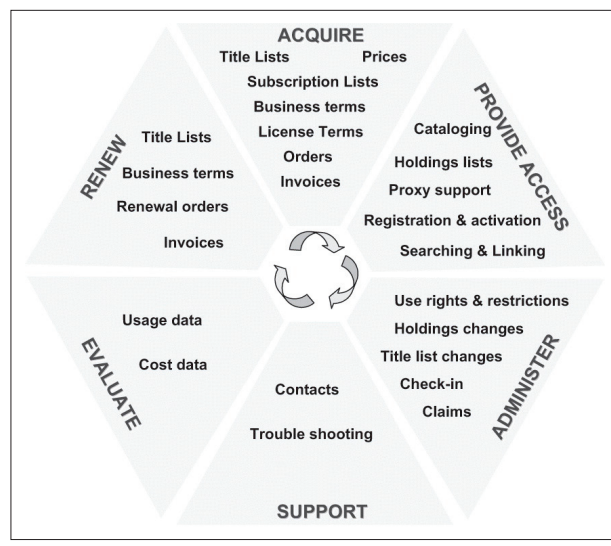


Figure 1.1

Pesch's electronic resources life cycle. Source: Oliver Pesch, “Library Standards and E-Resource Management: A Survey of Current Initiatives and Standards Efforts,” *Serials Librarian* 55, no. 3 (2008): 482, doi:10.1080/03615260802059965.

addition, these times of economic austerity are creating budgetary pressures at many institutions of higher education, resulting in librarians having to justify their spending on collections and resource management more than ever.

Techniques for Electronic Resource Management (TERMS) began in 2008 after a discussion about electronic resource management (ERM), current ERM tools, and what was lacking both in current practice and with the systems available. *TERMS* expands on Pesch's electronic resources life cycle (see figure 1.1) and seeks to become a reference point for those who are new to ERM, those who have suddenly shifted job functions to oversee ERM, and those who may want to

implement its recommendations of best practice.

After swapping ideas between the United States and the United Kingdom about what ERM meant, the authors came up with six TERMS (see figure 1.2) and began working on a draft document and plan for a crowdsourcing review. In September 2011, TERMS was launched as a Tumblr blog and publicized via a Facebook group page and Twitter hashtag, enabling scrutiny by open peer commentary and crowdsourcing in order to solicit feedback on the ideas from the library social community. At the time of this writing, the blog has twenty-three direct followers, around 150 Twitter followers, and over 180 Facebook members.

TERMS Tumblr blog
<http://6terms.tumblr.com>

TERMS Facebook group
<https://www.facebook.com/groups/174086169332439>

6TERMS on Twitter
<https://twitter.com/6terms>

During 2012, the latest draft of TERMS was migrated to a wiki in order to be shared, monitored, and updated by librarians throughout the world. The wiki received positive feedback from the United States, the United Kingdom, Ireland, India, and Brazil, and as a result, a number of the librarians have offered to work on future versions of the wiki as open peer reviewers:

- TERMS 1: Investigating New Content for purchase/addition, assigned to Ann Kucera (Baker College, Michigan)
- TERMS 2: Acquiring New Content, assigned to Nathan Hosburgh (Montana State University, Montana)
- TERMS 3: Implementation, assigned to Stephen Buck (Dublin City University, Ireland)
- TERMS 4: Ongoing Evaluation and Access, assigned to Anita Wilcox (University College Cork, Ireland)
- TERMS 5: Annual Review, assigned to Anna Franca (King's College, London, United Kingdom)
- TERMS 6: Cancellation and Replacement Review, assigned to Eugenia Beh (Texas A&M University, Texas)

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

In 2012, TERMS was also endorsed by the Knowledge Base + project in the United Kingdom, which has a project deliverable of providing “workflow

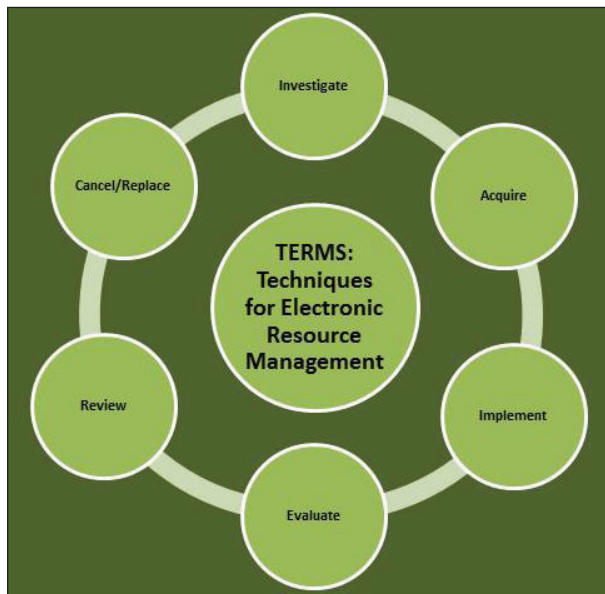


Figure 1.2
The six TERMS

management tools related to the selection, review, renewal and cancellation of publications”² and has also received interest in the United States from GoKB from Quali OLE (open library environment), “a community of nine research libraries working together to build the first open-source system designed by and for academic and research libraries for managing and delivering intellectual information.”³

TERMS is also being used as a teaching aid by Galadriel Chilton at the School of Library and Information Studies at the University of Wisconsin⁴ to establish a key framework for its ERM class. Lastly, the library community at large has been interested in the development of in-person presentations on TERMS, and so the authors have sought feedback at library events such as the Electronic Resources and Libraries annual conference and the LIBER conference, a premier library event held in Europe each year.⁵

Electronic Resources and Libraries website
www.electroniclibrarian.com

Literature Review

One of the first things to note when performing a literature review on ERM is that there are no independent literature reviews solely on this area. Instead, ERM has now become an integral part of standard literature reviews for acquisitions processing, collection development and management, cataloging and classification, and serials management. At the same time, there

are areas of ERM that sit outside of these traditional functioning areas in libraries. This makes performing a literature review on ERM more of a challenge.

From the field of library acquisitions, the issues most readily identified in recent years have been the switch from print processing to ERM and the continued struggle to find management tools that work within the local library context.⁶

Collection Development

“Simply put, collection management is the systemic, efficient and economic stewardship of library resources.”⁷ The term collection development has been with us since the 1960s.⁸ However, it is a constantly evolving area, and as the library collection moves from one dominated by print to one dominated by electronic resources, collection development policies may have been patched rather than redesigned to reflect the different emphasis on delivery. In a 2012 study, Mangrum and Pozzebon found that “over half of the libraries tried to address ER [electronic resources] in some way. However, most policies contain traditional language with a section on library ER inserted into the latter portion of the document.”⁹

In regard to collection development and management trends, the two biggest growth areas are e-book purchasing and purchase-on-demand or patron-driven acquisition models. There has been an explosion in collection management literature on these two topics over the past three to four years.¹⁰ A single place for best practices, or from which a local library can create its own localized best practices, is definitely needed: “Bleiler and Livingston stressed that a lack of established policies and procedures for assessment puts a library at risk for financial loss and recommended that libraries create selection policies and standardized methods for assessment, train staff for contract negotiation, and share strategies, policies, and best practices.”¹¹

In addition to changes to the format of delivery of library resources, libraries must also contend with the impact of today’s economic environment. Hazen suggests that libraries need to rethink their collection development in light of these issues and move from collection to collection and content, where content is “a category that encompasses everything to which a library enjoys ready physical or digital access regardless of ownership status [and] is central to all that we do.”¹²

Development of ERM

In 2001, Jewell reported on the selection, licensing, and support of online materials by research libraries and concluded that several libraries had developed local systems for acquiring, managing, and supporting

electronic resources.¹³ Jewell’s report was followed in 2004 by a report from the Digital Library Federation’s (DLF) Electronic Resource Management Initiative (ERMI), which “was organized to support the rapid development of such systems by producing a series of interrelated documents to define needs and to help establish data standards.”¹⁴ The report went on to provide a road map for ERM.

Between 2003 and 2005, the first commercial ERM systems came to market. However, by 2006, Adlington, in a white paper to Vanderbilt, reported:

On the back end, we continue to rely on methods developed when we had 250 rather than 25,000 resources. Information on our electronic resources is currently kept in paper files (license agreements), Excel spreadsheets (vendor contact information and administrative passwords), staff web pages (usage statistics), small databases (trial and decision tracking, divisional library resources, technical problem reports), SFX (journal holdings), and our ILS (acquisitions and payment data). Few of these systems are connected to each other; in some cases, information is readily accessible only to one or a few individuals, not by intent, but by the limitations of the storage mechanism. Many procedures are not documented and rely on informal channels of communication.¹⁵

More recently there have been a number of open-source and community ERM systems, such as CORAL¹⁶ and CUFTS, developed by Simon Fraser University (SFU) and implemented by SFU and the University of Prince Edward Island, which view this “technology not necessarily as a way of spending less money, but spending money more wisely.”¹⁷

Another growing area of ERM is the work being performed to develop a suite of standards to support the vast amount of access and management knowledge and myriad of tools needed to maintain adequate access to electronic resources.¹⁸ According to Sarah Glasser, “KBART and IOTA are both working to decrease OpenURL link failures that are caused by metadata deficiencies.” In addition, “PIE-J differs from KBART and IOTA because it is not focused on link resolver errors. Formed by NISO in 2010, PIE-J addresses access barriers that arise from the manner in which electronic journals are presented on provider websites.”¹⁹

ERM Implementation

There has been a lot of discussion about the implementation of ERM systems in recent years.²⁰ However, use of these systems is still far from ubiquitous, and many academic libraries have yet to implement or even purchase a system. “A risk of ERMS implementations, more

talked about than written about . . . was that the costs (in added work) to maintain a new system would outweigh the value of the added functionality.”²¹ Despite early expectations, Collins and Grogg see the current crop of ERM systems as “less like a silver bullet and more like a round of buckshot.”²²

One of the most time-consuming parts of an ERM implementation is analyzing licenses and inputting them into the relevant fields of an ERM system in order for them to be meaningful to librarians and patrons. The University of Northern Colorado has developed an in-house system to perform license mapping that “makes information that is often deeply embedded within a license readily available to library personnel who could use such information in the daily operations of the library. This information is useful to any library that maintains license agreements for electronic resources.”²³

A panel session at the 2010 NASIG conference concluded that the “ERM system at UC has not solved all their problems, but some improvements have been realized. Budget tracking and staffing continue to be challenges. A final determination of the effectiveness will not be evident until the system becomes a part of the general staff workflow and not considered as something extra.”²⁴

Workflow Management

Collins and Grogg cited workflow management as number one in librarians’ top six ERM priorities. They found that “over a third of librarians surveyed prioritized workflow or communications management, and they called it one of the biggest deficiencies (and disappointments) of ERMS functionality.”²⁵ This area has also been highlighted by the National Information Standards Organization (NISO), which has created a working group, ERM Data Standards and Best Practices Review, to undertake a gap analysis regarding ERM.²⁶

In the United Kingdom, the Managing Electronic Resource Issues (MERI) project at the University of Salford aimed “to produce a use case of ERM systems and a preliminary set of requirements for an electronic resource management system, for use by the University of Salford and other HE institutions and system suppliers.”²⁷ The requirements document from this project went on to inform the SCONUL shared ERM requirements project. An output of these projects was a set of workflows that describe the various processes involved in managing electronic resources.²⁸ The University of Huddersfield was one of the sixteen UK universities to take part, and like others, had never actually recorded these workflows until asked to do so by the project. All project members found that by recording workflows, they were able to take advantage of efficiencies discovered as part of documenting the process.

One of the objectives of the TERMS blog and wiki was to collect a number of e-resource workflows from a variety of different types of libraries. Both the University of Huddersfield and Portland State University shared their workflows as part of TERMS. The release of the six TERMS via the blog also encouraged other universities to share their workflows and discuss efficiencies; indeed, “rethinking e-resources workflows and developing practical tools to streamline and enhance various inelegant processes have become the priorities.”²⁹

Since the launch of the first draft of TERMS, the project has now attracted interest in various workflows from different libraries around the world, including the University of Cork, Duke University, Florida Gulf Coast University, and Texas A&M University.

A recent press release by Jisc in the United Kingdom suggested that international collaboration is needed to transform ERM in libraries—“Many of the concerns libraries have in the management of electronic resources are the same across the world”—and that projects such as GoKB and the Knowledge Base + service in the United Kingdom “are exploring community-based solutions.”³⁰

It is hoped that the content in each of the six TERMS wiki pages, including shared workflows (available under Other Documents), will 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

Investigating New Content for Purchase/Addition

http://library.hud.ac.uk/wikiterms/Investigating_New_Content_for_purchase/addition

Acquiring New Content

http://library.hud.ac.uk/wikiterms/Acquiring_New_Content

Implementation

<http://library.hud.ac.uk/wikiterms/Implementation>

Ongoing Evaluation and Access

http://library.hud.ac.uk/wikiterms/Ongoing_Evaluation_and_Access

Annual Review

http://library.hud.ac.uk/wikiterms/Annual_Review

Cancellation and Replacement Review

http://library.hud.ac.uk/wikiterms/Cancellation_and_Replacement_Review

Notes

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