A Pioneering Spirit: Using Administrative Metadata to Manage Electronic Resources

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“I have a feeling that electronic journals may be the ‘microforms’ of the waning years of the century, and predict that their impact will rise from the invisible to the miniscule in the next five years and that they will still be a relatively unimportant factor in 2001.” – Michael Gorman

ABSTRACT
This article describes administrative metadata, and its use in managing electronic resources. The focus of the article is an interview with Tim Jewell, Head of Collection Management Services at the University of Washington and Adam Chandler, Information Technology Librarian at Cornell University.

KEYWORDS
Electronic Resource Management Initiative, ERMI, administrative metadata; electronic resources; e-resources; Tim Jewell, Adam Chandler

In early 2002, while returning by train from a meeting in Washington DC, I read an article about Griffith University’s e-resources management system (Schulz, 2001). At that time, I was involved in developing a database that would help my local consortium manage information about its growing array of electronic resources. I knew I wasn’t the only librarian struggling with the management of these resources, but I also didn’t know where to go for help. As far as I knew, this was an area of the profession devoid of expert advice. Fortunately, Ms. Schulz’s article cited “A Web Hub for Developing Administrative Metadata for Electronic Resource Management” <http://www.library.cornell.edu/cts/elicensestudy/home.html>, a site hosted at Cornell University, that brings together information regarding projects in the e-resource management arena. The site is maintained by Adam Chandler (Cornell) and Tim Jewell (University of Washington) and it is a tremendous resource for anyone involved in the management of electronic resources.

THE CONUNDRUM
Expenditures for electronic resources have grown enormously in the past 10 years. Nearly 40% of my library’s serials budget supports online resources, yet the staff’s ability to manage this growing collection of resources is not much better than it was in 1994. For better or worse, serials departments
still spend most of their time managing print resources (see Anderson, 2003 for a different approach). A large part of this conundrum is due to integrated library systems not providing tools to help us manage these resources. Administrative metadata, elements about licensed resources, do not fit comfortably into most library systems. As a result, managing electronic resources is a reactionary activity. Unlike the print environment, it is hard for us to know when an e-journal issue is missing or is late in being published. Unless publishers notify us when publication lapses occur, generally it is a user who notifies the library when an issue is not available. Some institutions have developed local systems that help them manage their e-resources. Grassroots efforts, led by Jewell and Chandler, have spearheaded development of standards and tools that hold promise for assisting libraries with this work.

THE MARKETPLACE

The Web Hub highlights some of the locally-developed e-resource management solutions created by libraries. For the most part, these systems have been developed by large research institutions. What is intriguing is the number of vendors interested in developing products to meet the needs of most academic libraries. In May 2002, NISO and the Digital Library Federation cosponsored a meeting in Chicago to further discussions regarding development of a standardized administrative metadata element set. Among the 50 attendees were representatives of the integrated library system marketplace (Innovative Interfaces, Ex Libris, SIRSI, and Endeavor), serials subscription agents (EBSCO), and bibliographic utilities (OCLC). Clearly, these organizations recognize the opportunity in this area for commercial products, and want to be the first to the marketplace. This strategy certainly has worked for Ex Libris with respect to its SFX product. The e-resource management market is in need of a similar killer application. Recently I had a chance to speak with Tim Jewell, Head of Collection Management Services at the University of Washington, and Adam Chandler, Information Technology Librarian at Cornell University, about the state of affairs in this exciting new area.

NM: Tim, tell me about your DLF-sponsored work. How did you come to spearhead this initiative, and what are your expected outcomes?

TJ: One of the more interesting discoveries I made while conducting a “best practices” study for the DLF a couple of years ago was the sheer amount of information concerning licensed electronic resources that DLF member libraries were gathering and trying to maintain and present to their staff and users. It began to seem really obvious that these libraries were all trying to capture the same kinds of information and do very similar things with it, and it gradually occurred to me that we could all progress much more quickly if we could define the common problem and find some ways to work together to solve it. Since I had already been in touch with most of the people who seemed to be active in this area, I thought that I could help by trying to facilitate information sharing and coordinate efforts. The main outcome that I hope to see is rapid progress in developing systems to manage electronic resources – and I see some real evidence that this is happening.

NM: How pervasive is the e-resource management problem? Does it tend to be restricted to large academic institutions, or are libraries in general struggling with these issues?

TJ: The larger academic libraries clearly have the biggest problem, but most academic libraries struggle with it, and I think that larger public libraries also do -- to some degree. For the academics, the problem is clearly getting bigger very quickly as they rely more heavily on databases and electronic journals. The more heavily libraries rely on e-journals and full-text aggregator packages, the
more important and difficult it is for them to know what use restrictions might apply, and how to triage and track access problems. Doing those things effectively really requires different tools from what most libraries have had available to them.

**NM:** The number of locally-developed e-resource tools is amazing, and new systems are being developed all the time. When did libraries begin developing databases to help manage administrative metadata?

**TJ:** I'm not really sure who should get the credit for creating the first e-resource management system or database, since many libraries have been using different tools to track related information for some time, and at some point a few of those libraries began experimenting with database software. The two "early" efforts that I think have proven to be especially influential are Penn State's ERLIC system, which drew quite a lot of attention at a NASIG meeting a few years ago, and MIT's VERA system. I think that the articles that described VERA's capabilities gave a lot of people a hint of what could and maybe should be done by new support tools.

**NM:** Some commercial vendors are beginning to develop e-resource management tools. They've obviously realized that many libraries would prefer to purchase an off-the-shelf solution rather than spend staff time developing a local system. Do you think additional vendors will follow suit, and if so, do you envision a near-future market stocked with mature and standardized products?

**TJ:** For the last couple of years, what I have been hearing from librarians is that they want to see good offerings from the vendors they normally do business with - either for their serials business or OPAC/ILS functions. What's really interesting and heartening is to see those developments now taking place. For instance, I know of at least 5 companies and other organizations that are either actively developing e-resource management systems or are planning to do so, and I'm pretty sure some others will begin to do so shortly. I think that's a very good thing, since mounting a serious effort in this area takes a lot of resources, and few libraries have the staff to design, implement, and then maintain what need to be pretty sophisticated systems.

**NM:** Adam, the Web Hub is a tremendously useful resource to those of us wanting to learn from the efforts of others. How did you and Tim conceive of it?

**AC:** Tim and I started a dialogue about the problem of managing licensed electronic resources in the fall of 2000. Tim deals with these resources on a daily basis. I do not. I work on a variety of IT problems in the Cornell Library, but licensing is something for which my colleagues in another part of my department are responsible. I became involved because my supervisor, Karen Calhoun, asked me to survey the environment to see if we should build a system locally to manage electronic resources. It was clear to me from the beginning of the project that I could be put to best use by focusing on how to bring the data Tim was gathering into a form that would be beneficial to myself and others. Tim and I started with a problem, then slowly over time cobbled together a structure to solve it. The first piece of the structure was the Web Hub. The site has two primary functions. One, to keep people informed about the status of the project (meeting dates, reports, timeline); and two, to point to relevant projects and data sets which may be helpful for building a system for managing electronic resources. Having a stable place where we could point people brought more energy into the project. It wasn't really sustainable for us to work on this alone. There is too much flux and uncertainty. We needed more data and people. The Web Hub highlighted interesting work that others were doing. Over time, we were able to bring in some of these people to the steering group (and now the reactor
panel) because they too saw the value of collaborating on this difficult problem. The Web Hub provides a single point of reference.

**NM:** The grassroots nature of your work is a model of collaboration. It shows what dedicated librarians can accomplish when faced with a common problem. As you gaze into your crystal ball, what additional efforts will be needed down the road to fully tackle the issues inherent to managing administrative metadata?

**TJ:** As thrilled as I am to see active and excellent work on system development, I think we all will need to keep the “standards question” in mind and do all we can to standardize data elements and definitions, as we’ve been trying to do via the Web Hub and by working with NISO. There will be a lot of unhappy librarians at some point in the future if they find that the work they’ve invested in recording information about their electronic resources can’t be moved from the systems that are being developed now to some future system, when it comes time for that. Having good, widely-accepted standards where that makes sense should help prevent those problems. The other problem area that I think is really ripe for active discussion is whether it’s possible and practical to describe such common license terms as ILL and course-pack permissions -- so that those descriptions can be shared among libraries in much the same way we share catalog records. Not everyone thinks that can really be done, since there is such wide variation on these points from one publisher or vendor to another, and since the rights granted by a particular publisher to a given library might vary from what they are willing to grant another. It’s my own feeling that it should be possible to overcome those problems, which I think we need to do in order to make the fullest use of our e-resources.

**POSTSCRIPT**

It is important to note that Michael Gorman, among the deities in our profession, made a number of accurate predictions in his 1991 article, including the continued importance of library buildings and the central role resource sharing would play in the new millennium.

**REFERENCES**

