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Alma at Purdue: The Development Partnership Experience

PAUL J. BRACKE

In mid-2009, we found ourselves at the Purdue University Libraries in a position that will be familiar to many libraries. Library services were undergoing change, but our technological infrastructure was not serving us in developing new services as well as we thought it should. Fragmented and, at its core, oriented toward print collection management, we were struggling with developing more effective models for providing access to our now largely electronic collections. At the same time, a number of new strategic directions were emerging that required that the Libraries shift human resources to new activities.

These directions were allowing the Libraries to develop new, deeper relationships with the campus through a reinvigorated model of liaison librarianship and the development of strong programs in data curation and information literacy.

When approached with the opportunity to become development partners on the Ex Libris Unified Resource Management (URM) project, now know as Alma, it was an opportunity to advance the Purdue Libraries' strategic priorities on multiple fronts—and an opportunity we seized. Alma was appealing on several levels. The vision of an integrated approach to resource management was appealing as electronic resources and repository development had become vital components of our collection development activities. The collaborative vision of Alma, most specifically the Community Zone approach to shared management of bibliographic records, was also attractive as we developed strategies for repositioning cataloging staff into other metadata-related activities. Finally, we have been actively migrating our technology platforms to the cloud to enable technical staff to focus on mission-centric applications rather than infrastructure.

What is Alma?

Alma is Ex Libris' next-generation library management system. In the Ex Libris product strategy, there is a three-tiered, decoupled strategy consisting of Primo as the discovery layer, Alma as the library management system, and Rosetta as the preservation layer. Alma supports acquisitions and selection functions, electronic resource management, cataloging and metadata management, and access services functions. There are several noteworthy design characteristics of Alma. First, it is a cloud-based system, which has several advantages. For one, this approach reduces the need for individual libraries to invest in hardware infrastructure and allows them to focus technical support resources on application support connected with business practices, rather than devoting significant resources toward systems administration functions. Second, this approach allows for regular, incremental updates to the system, which means system improvements can be deployed more quickly than in an institutionally-hosted solution with a traditional and resource-constrained approach to upgrades.

Purdue's Existing Infrastructure

The Purdue Libraries' current infrastructure consists of Voyager (also from Ex Libris) for the Integrated Library System, with several other systems providing specialized functions. VUFind is the primary interface to the catalog, although WebVoyage is still available. MetaLib is used for federated search and SFX provides OpenURL services.

Purdue also employs a three-pronged approach to digital object management.

- Contentdm[®] (OCLC) supports digitized archival and special collections.
- **2** Digital Commons[®] (bepress) supports institutional repository and publishing programs.
- **3** HUBzero[®] supports the institution's data repository.

The Purdue Libraries do not currently have a production electronic resource management system.

The Development Partnership Process

For the past three years, the Purdue University Libraries have been development partners with Ex Libris for Alma, along with our colleagues at Boston College, KU Leuven, and Princeton University. The partnership has consisted of several phases, progressively building towards the launch of a finished system. Initially, the partnership was focused on system design, allowing stakeholders within the Purdue Libraries to provide input into the design of the various functional components of the system. This included input into cataloging/metadata, acquisitions, fulfillment (circulation, reserves, document delivery, etc.), e-resources management, third-party integrations, and more. This process involved discussing proposals for Alma functionality, describing existing use cases— "This is what we do and how we do it"— and functional wish lists—"I've always wished I could …"—to enable Ex Libris to develop the system. This design phase was followed by a series of testing phases, during which the Libraries' staff tested both the latest functional developments in Alma and also data migrations.

Data migration has been a consideration throughout the testing stage of the partnership, with several migrations executed during the process. Considerable effort was expended on identifying data to be migrated, mapping data from the structure within Voyager (and other systems) to that used by Alma, and verifying migrated data. As one might expect, the quality of data migrations progressively improved throughout the testing process as Ex Libris refined their procedures and as more functionality became available, allowing more and different data to be tested.

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We have been very pleased with the new upgrade process enabled by Ex Libris' cloudbased approach to Alma. Enhancements and bug fixes are now released on a monthly basis, without the hassle of performing the upgrades ourselves. It is our impression that we are receiving upgrades in a timelier manner than in the past, which will also facilitate continuous improvement of processes within the Purdue Libraries.

Preparations for an Alma deployment have gone far beyond our contributions to the design and testing of the system, however. Launching a major system like Alma is a major undertaking and requires a significant focus on change management issues. Accordingly, we have spent a significant amount of time in ensuring that we launch at the point when the system is ready for us, and when we are ready for the new system. This has been approached through several avenues, beginning with the documentation of our important workflows, including both mission critical tasks and more peripheral activities.

This had a number of benefits.

- Allowed us to assess the readiness of the system for our launch. We were able to evaluate the state of readiness of the system not only for our mission critical processes, but also for tasks that might not be absolutely essential for us on day one but would be needed in the near-term.
- Allowed the staff to be able to see, in a structured way, how Alma would support their work. Their exposure to the system was no longer disconnected from the context of their day-to-day activities and it became easier for staff members to test and evaluate when they could directly assess the impact on their work.
- Occumenting workflows provided an opportunity for staff to begin shifting their mindset about their work from one framed by our current technological infrastructure to one framed by our future infrastructure.

Initial documentation was done from the point of view of workflows completed in Voyager, SFX, etc. Steps and tasks were system-specific, but outcomes were not. By working with Purdue Libraries managers and Ex Libris, staff have been able to make the transition to expressing their needs in an Alma context. This has had the benefits of facilitating system evaluation and of increasing the comfort level of staff with the system. Finally, the documentation process has provided a foundation for staff training. We have been able to leverage the process documentation, once converted to an Almaoriented workflow, as the basis for staff training materials. Staff training is being developed at several levels, including general overviews of the system, specific function areas, and in-depth treatments of specific workflows.

In a parallel process, we have also been implementing Ex Libris' Primo product as a discovery layer. This has been launched in advance of the Alma deployment to provide discovery services to the Primo Central index as well as a range of local collections—print and electronic records from our Voyager ILS, digitized and archival collections, materials from our textual and data repositories, and LibGuides. We have continued to run both our VUFind catalog and WebVoyage. Once Alma is deployed, however, Primo will become the sole local search interface to collections.

These processes have put the Purdue Libraries in a position where we have a scheduled launch date of May 2013. Although Alma's vision is not fully realized at this point, at Purdue we feel that Alma's current state will prove to be an improvement over our existing infrastructure. With monthly releases of new functionality, we anticipate seeing continued and steady progress toward the vision that was attractive in making the commitment to Alma.

The Development Partnership Experience

We have a learned a number of things at Purdue through our participation in the Alma development partnership that have been helpful to our Alma implementation, that will likely be useful to us in the future, and that might be useful to other libraries prepared to engage in similar processes. Keep in mind that these were lessons learned in a development partnership when working with a system that was very much in the early stages of development. Some of our testing and migration processes were more iterative than would be typical of the implementation of a finished system.

Cloud Management Systems and System Improvements

A common frustration for many libraries, including Purdue, about the traditional systems environment is the long path to bug fixes and functional improvements. One must wait, not only for the bug fix or enhancement to be developed, but then for it to be bundled into a periodic major or minor upgrade. Applying these upgrades can be difficult to schedule and then cumbersome to apply. We have been very pleased with the new upgrade process enabled by Ex Libris' cloud-based approach to Alma. Enhancements and bug fixes are now released on a monthly basis, without the hassle of performing the upgrades ourselves. It is our impression that we are receiving upgrades in a timelier manner than in the past, which will also facilitate continuous improvement of processes within the Purdue Libraries.

Use Cases and Understanding Processes

Use cases are, of course, vital elements to designing software and prioritizing features. Using real life scenarios to explain the significance of a feature request is an important approach to software development. It is an approach employed throughout the development process with Ex Libris. We found this to be useful in two respects. First, during the design phase it provided Purdue Libraries staff, and the staff from other libraries, with a framework for describing their practices and the significance of them. More importantly, they were useful in challenging our own assumptions. On a number of occasions, Purdue staff found themselves challenged to provide a clear explanation of the need for a desired functionality. An obvious benefit of this in many cases was being able to clearly communicate our desired functionality. In other cases, however, the approach had the additional benefit of forcing us to reexamine our assumptions about what was important in our work. Although our staff takes a very thoughtful approach to

their work, it is easy to become entrenched in work practices that could be improved. Thinking about our requirements in the context of a use case allowed us to question whether workflows, or steps in the workflows, were necessary or whether there might be different and better ways to achieve desired outcomes. One example involves changing the way collections funds will be tracked by acquisitions staff. There were significant differences between Alma and Voyager in this respect. After long consideration of our existing practices and of the new possibilities afforded by Alma, we felt that Alma's approach offered quite a few advantages and we elected to make changes to our workflows.

Engaging Staff

The Alma development partnership has been an important experience for Purdue Libraries' staff. Although the process has required a lengthy commitment from those involved, it has had benefits for everyone involved. Library staff engaged in acquisitions, electronic resource management, and other activities had learned to make do with the shortcomings of our existing environment, but had good ideas about improvements that would make it easier to provide high quality services to members of the Purdue community. The Alma development process has afforded Purdue Libraries' staff with the opportunity to have these ideas put into practice. These ideas were expressed to Ex Libris staff throughout the design process, and Purdue staff can point to a number of examples of Alma functionality shaped by this input. Having the opportunity to see one's influence on the product has been a positive experience, especially since we believe that this influence will improve our ability to serve the Purdue community.

One learning experience has been the importance of involving public services staff in system evaluation early in the process. To some degree, it was clear from the beginning that public services staff would need to be involved. Contributing to the design and testing of access services functions was an important component of the process and subject selectors would also need to be able to place orders and monitor expenditures. The area of greatest concern to staff, however, has been the transition to Primo as our OPAC. Although many staff members were accustomed to a modern catalog interface through VUFind, they were concerned about the transition to Primo and its ability to provide structured searching and browse displays. Although there have been improvements to Primo over the course of the development project, most notably in the area of browse functionality, many staff members are still uneasy

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about the impending transition to Primo as the sole interface, particularly without WebVoyage as a fallback option. If there were one area to stress in planning the implementation of a next-generation library system that might be overlooked, it would be the importance of involving public service staff in evaluating the integration of the system with the discovery layer as early in the process as possible.

Alma and the Transformation of the Purdue Libraries

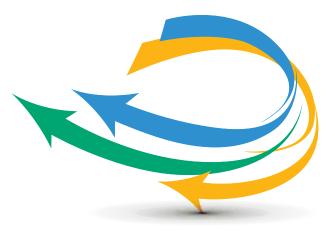
We chose to engage in the Alma partnership for strategic reasons. At the time we were approached about participating in the development partnership, the Purdue Libraries were moving aggressively in a number of directions of strategic importance to their future. We were reshaping our model of liaison librarianship, developing data services, advocating for information literacy, and developing publishing services. At the same time, we were trying to move into an increasingly electronic collection development environment. With limited capacity to expand resources, we were interested in solutions that might allow us to dedicate existing staff in new directions.

Leadership within the Purdue Libraries elected to become partners with Alma because we felt that it enabled these strategies and facilitated transformational change in our collection access and management functions. A system that is more workflow-oriented, that provides the advantages of a cloud-based system, and that offers the potential to develop collaborative approaches to activities such as copy cataloging were all very attractive to us. We believe that Alma offers a platform that will enable us to engage in collection management functions in new ways, and refocus our efforts in strategic directions.

Although the full vision of Alma is still a goal for the future, Ex Libris has developed a system that will provide the Purdue Libraries with immediate improvements. Many of the issues that have been cause for concern with our existing infrastructure, particularly the poor functionality for contending with electronic resources, have been improved upon. We feel that our technical infrastructure will better meet our needs when we go live with Alma in May 2013. The technology is simply a tool for realizing the change we foresee in our environment, however. Alma is not a cure-all for the future of our, or any other, library but it provides tools that will enable the new kinds of collections work we envision.

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PAUL J. BRACKE (pbracke@purdue.edu) is Associate Professor and Associate Dean at Purdue University Libraries.



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> Alma Library Management Service (Ex Libris) www.exlibrisgroup.com/category/AlmaOverview

Contentdm (OCLC) www.contentdm.org/

Digital Commons (bepress) digitalcommons.bepress.com/

Ex Libris products www.exlibrisgroup.com/category/Products

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