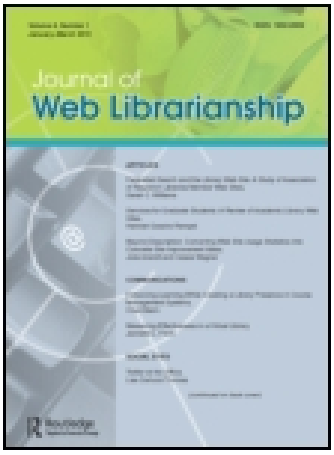

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Phased Migration to Koha: Our Library's Experience

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COMMUNICATIONS

Phased Migration to Koha: Our Library's Experience

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Landman Library is two-thirds of the way through a three-stage process of migrating to the Koha open-source integrated library system (http://koha-community.org). We are an academic library with roughly 143,000 volumes, six professional librarians, and three support staff. The migration to open source was driven by the desire to access our own data as well the need for more flexibility in our public search interface. After evaluating two open-source solutions, we selected Koha because it included modules for all major functions of the library. The phased migration process allowed us to spread costs out over multiple fiscal years and to make the most urgent changes sooner than would have otherwise been possible. The two phases that we have completed so far have taught us various lessons about project management, problem solving, and communication between the library and IT. We learned to involve stakeholders very early, provide specific examples when reporting problems, and have a designated liaison between library staff and developers. We successfully migrated to the Koha staff client on June 1, 2009, and are working on changes to our Web site to incorporate the Koha public catalog.

KEYWORDS Koha, open source, integrated library system, project management, information technology, library catalogs

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Landman Library at Arcadia University migrated all of its back-end operations to Koha in June 2009 as stage two of a three-stage process of migration. The two phases that we have completed so far taught us various lessons about project management and communication between the library and IT, as well as about Koha itself. While others (Yang and Hofmann 2009; Virtual Academic Library Environment of New Jersey 2008; Breeding 2008) have written or presented evaluations of the software, less has been written about the process of migration. The Koha Developer Wiki (http://wiki.koha-community.org) provides some user experiences, but these narratives are mainly about installation and data migration rather than about staff training or project management. In this article, we will cover the steps we took, how we involved staff in the process, and what we learned. Though our three-stage process might not work for all organizations and was not problem-free for us, it still provides what we hope is a useful example for others.

We are a medium-sized academic library that is part of a merged department called Library and Information Technology. The library has roughly 143,000 volumes. There are six professional librarians and three support staff within the library. Three people from the IT side have been involved in the migration project. In December 2005, Eric McCloy was hired to be the first cross-over person of the merged department: an IT professional whose office was in the library and who was responsible for library technologies.

DECISION TO MIGRATE

From his perspective as an SQL developer, Eric found our existing integrated library system frustrating. One frustration was that he could not see the data other than via the library staff interface. He was accustomed to working with data that followed an industry standard called Open Database Connectivity (ODBC), which allows developers with proper login credentials to connect directly to databases. This allows flexibility in reporting or updating data. In addition, he was used to working with databases that were relational in design. A relational database design is one in which the tables reflect real-world entities and their relationships to one another. The database would contain multiple tables—for example, a borrowers table, an items table, and an issues table—and these tables would be linked to each other in a way that avoids repeating data. This is an extremely efficient way to store data, and the advantage of using this type of database for our library catalog is that it allows for easy reporting and reduces discrepancies. Jason Etheridge, on the Evergreen-ils blog (http://evergreen-ils.org), wrote an interesting and more detailed description of the advantages of database normalization for an integrated library system (ILS) (2008). Reading this post was a turning point for Eric in the decision to migrate to a new ILS.

As head of Collection Development and the supervisor of the Technical Services unit, Karen was primarily frustrated by the confusing and sometimes inaccurate reports our ILS provided (as text files!) and by slow customer service from the vendor. A benefit to her working closely with IT was that she could see that Eric was not nervous about the idea of migrating data. Migration is a much more common process for IT professionals than librarians, and Eric's confidence made the prospect seem realistic. Karen and Eric both began reading about the two main open-source integrated library systems, Evergreen and Koha, and Karen attended a one-day conference and a training session to get a closer look at these products (Virtual Academic Library Environment of New Jersey 2008; Koha Camp 2008).

CHOOSING A PRODUCT

We needed our ILS to perform three major functions. These were:

1. Staff functions, such as acquisitions, cataloging, serials, and circulation
2. Public access to the catalog
3. Federated searching of databases (the ILS we were using was tied to a particular federated search tool, which would go away if we dropped the ILS)

During the process of identifying our needs and learning about available products, we knew it was important to involve the librarians and staff, both because each person is the expert in his or her own needs and because involvement early on should lead to more buy-in later. In May 2008, we brought in trainers to give presentations on Koha and Evergreen. (See the bibliography for URLs for these products.) After the presentations, Evergreen dropped off our radar because of its lack of an acquisitions module. We began to look more closely at Koha to see if it could meet our needs.

We knew we could accomplish a migration project when we figured out how we could spread out both the costs and the work over multiple fiscal years. During the in-house presentation on Koha, the idea arose[1] to separate the front end of the catalog from the back end and to make the first phase of our project the development of the Web site and federated search. This approach may seem backwards; most of the time it makes more sense to address the underlying structure first and the public aspects of the project later. There were two main considerations for doing it this way. The first was the start-up cost associated with getting the federated search connectors written. The phased approach also allowed us to split costs over multiple fiscal years, which we will describe below. The second was that we were aware of a need to create an Web site that was compliant with the Americans with Disabilities ACT and could do this much sooner if we made the Web

site redesign its own project rather than undertaking the full migration at once.

We proceeded in three phrases. Phase I (fall 2008) involved redesigning our Web site to make it ADA compliant. Since our Web site at that time used a package from our ILS vendor that included both the online public access catalog (OPAC) and federated search, creating an ADA-compliant site entailed both redesigning the Web site and finding a new search tool. We chose MasterKey (http://www.indexdata.com/masterkey) as our search tool because it was available, open source, and supported by LibLime, the company we were considering for Koha support. Phase II (spring 2009) involved evaluating and testing the Koha staff client, making enhancements, and migrating. Phase III (fall 2009) involved redesigning the Web site again to take advantage of the Koha OPAC's search features and user account functions.

PHASE I

In order to create a new Web site, we needed a new federated search tool. Koha was designed to handle staff functions and public access, but it was not designed to handle federated search. We used MasterKey and its component tool, Pazpar2 (http://www.indexdata.com/pazpar2), for our federated search. These tools do a z39.50 search of our catalog and the article databases that we purchase from various vendors. Pazpar2 allows the search to include multiple targets and to return an integrated results list. At this point, we were running a nightly process to dump our data from the old ILS into Koha. While our ILS provided some rudimentary search access through z39.50, we were unable to get all of the answers we needed to set up more advanced searches. This intermediate step to Koha allowed us to configure everything correctly and positioned us to be ready for full dependence on Koha in Phase II. The z39.50 search used the Koha database as its target, although neither the staff nor the public was using a Koha interface. By starting this part of the project right away, we were able pay the start-up costs for MasterKey (creating the search connectors) at the tail end of a fiscal year in which we had a small surplus. We paid LibLime (http://www.liblime.com) to set up MasterKey for us and canceled our license for the Web interface that was tied to our existing ILS. Matt McManus, one of our Web designers, created the search interface and results display for us.

Although this phase met its goals of providing an ADA-compliant Web site and spreading out the costs of Koha implementation, in terms of project management, it can best be described as a learning experience. The major issue was communication about expectations. As major stakeholders, the librarians had quite a bit of feedback on how the catalog records displayed, but unfortunately most of this feedback came after the site had gone live

and was being used at the reference desk. Because the project was working on a deadline that some had called impossible, the site was finished and made available for testing very shortly before the semester started, and the go-live date changed at least once. As a result, the librarians did not feel they knew when the deadline to finish testing was (and did not do it), whereas the Web developer felt he had given the librarians plenty of time and was frustrated we had not done any testing. It would have been better to develop a testing checklist or an accountability mechanism that would show librarians how much testing they were supposed to do by what date. In Phase II, we corrected our mistakes and involved stakeholders early on by making a schedule for staff to test and report on what they had found.

Another major lesson was problem solving. Although librarians and IT professionals all problem-solve as part of their jobs, we found that the librarians wanted to look at the big picture, while the IT people wanted to start from specific examples. For example, many times the librarians felt they were not getting the results they expected to find in the catalog, and a common request Karen got was for the developer to explain to us how the search was working. From a developer's perspective, this question was too big and vague to answer. In response, the developer usually asked for an example, which sometimes looked to the librarians as if the developer was insisting that only one title was the problem rather than something larger. Once Karen understood the developer's perspective, she was able to facilitate communication between the library and IT. In one successful case, a librarian was not finding the results she expected in a search and brought the issue to Karen's attention. Karen asked for examples and was able to figure out that the title search was not including alternate titles. She asked the developer to fix this, which he did. To aid IT with troubleshooting, Karen asked the librarians to bring concerns to her for vetting so she could ensure that IT received the information they needed. While bugs continued to crop up, we eventually established a better working relationship and were able to communicate about these issues.

PHASE II

Simultaneous to the Web site redesign, we began to analyze Koha more closely to determine if we could use it. The first step of this closer analysis was to meet with each staff member separately and ask them to list all the tasks they needed to accomplish using an ILS. (We met with staff individually because we have one full-time person each doing cataloging, acquisitions, serials, and circulation, so each staff member would have a unique list of tasks.) We tried to encourage staff not to use the terminology of the specific steps involved in our current ILS but to focus on what they were trying to accomplish. As a hypothetical example, instead of "I need to be able to

create an order and run a report to export it to a text file so I can e-mail it to the book vendor," the task would be "I need to create an order and output it to a format that can be sent to the book vendor." On the IT side, Eric created guidelines for what would constitute too many features missing from Koha; if the required customizations and enhancements seemed like more work than a typical summer project for our IT staff (i.e., eight-to-twelve weeks' worth of work), we would not do it. We tried to stay abreast of which features were already under development without counting on any of these features being ready in time for us to use them.

In practice, it was hard to use Eric's guidelines, since it would have required identifying all of our needs at once and then estimating the time involved in writing code. It made more sense for our developers to deal with issues as we discovered them. Phase II, therefore, involved evaluating, testing, and enhancing Koha more or less simultaneously.

Based on our experience in Phase I, we decided to involve the stakeholders very early on. Because we were able to host Koha locally and had in-house staff who could migrate the data, we were able to set up a test database before we had a support contract in place. By December, our developer had created a test database, and in January, we met with technical services and circulation staff members to introduce the software.

Although Karen was nervous about showing people a product that would not fully work for them, this proved to be the right decision. About half the stakeholders were support staff, who often are not included in major library decisions, and they had been hearing for months that something was coming that would affect them significantly. Letting everyone log in from the very beginning not only let stakeholders feel included but let everyone become the expert on their own tasks.

It was important in this phase to make sure the staff tested Koha early and thoroughly to avoid some of the problems of Phase I. We decided to have weekly meetings at which a designated librarian or staff member presented his/her tasks. For example, one day, the cataloger took us through the steps of importing a file of OCLC records that should match against and replace the records created at order time. During the meetings, the presenter explained what had not worked, and the developer either suggested a different procedure or asked questions about our needs so that he could find a solution. Often, whatever was not working was resolved during the meeting. For whatever could not be immediately resolved, we made a to-do list and ranked items as having high, medium, or low priority. (Low priority items could be addressed after we went live.) It was sometimes stressful for staff to add Koha testing on top of their regular workloads, and we had to work to keep the meetings brief enough not to be burdensome. For the most part, however, this process mostly felt positive to the library support staff, and weekly meetings were very helpful in ensuring steady progress both in testing and development.

Communication and problem solving worked much better in this phase than in Phase I. Karen took a greater role as liaison between the library and IT. Technical Services staff often brought bugs or problems to her before the weekly meetings, so problems that turned out to be because of typos or training issues did not need to take up everyone's time. Although most people involved in this project were not involved in Phase I, there seemed to be a great improvement in the ability to bring specific examples rather than saying, "This feature doesn't work." Some of the issues we identified and resolved were: getting baskets (Koha's term for an order, or a list of titles to be ordered) into a format that could be sent to a vendor, copying all outstanding orders at the end of a fiscal year into the next, batch deleting records, and canceling an order without deleting it. Repeatedly, issues that seemed significant would turn out to be less so than we thought; often there was already a way to do what we needed, or there was a simple work-around. Throughout the process, we were pleasantly surprised by how well it went. In fact, we were able to push our go-live date up a month earlier than we had planned!

Landman Library went live with Koha on June 1, 2009. In the first month, the adjustment was so smooth it was almost anticlimactic. (We had some trouble later on, but since it was related to our server, the details will hopefully not be applicable to other libraries.) Although our student workers were not involved in the process, luckily, they required almost no training to use the software at the circulation desk. The only major functionality we are missing at this point is a reserves module, which is expected to be part of the next release of Koha, version 3.4. We could not pay for a support contract until our next fiscal year started on July 1, but we have been using PTFS (http://koha.ptfs.com) since then and have been happy with it. The benefits of Koha's database structure (and of open-source software) became clear almost immediately when an IT developer wrote a series of reports that eliminated manual statistics-keeping and provided additional data for decision-making. As Collection Development Manager, Karen had been frustrated for years with the difficulty of reading reports about what circulated in a given semester, and the new reports are both easy to read and to run. It should be noted, though, that IT had to write the reports in SQL rather than using Koha's reporting tools.

WHAT'S NEXT?

Phase III of this project will take place in fall 2009 and spring 2010. Both IT and the library are aware that there are many features of the Koha OPAC that we are not taking advantage of, such as showing book covers and providing patrons the ability to renew their own items online. We want to use the Koha OPAC but need to figure out how to integrate it with federated searching.

The next phase will involve redesigning the Web site so that it includes both a federated search option and an option for searching the Koha OPAC with all its features.

CONCLUSION

The two phases we have completed so far have helped us to both integrate the library and IT more fully and improve work processes in Circulation and Technical Services. While the librarians are eager to begin using the Koha OPAC, having the temporary, z39.50-only Web site allowed us to undertake the migration in a manageable and affordable way. We were very lucky to have a close relationship with impressive IT professionals; however, other libraries might be able to plan a similar project with some of the migration outsourced. We would be glad to talk to libraries considering migrating to Koha.

NOTE

1. Thanks to John Rose, then of LibLime and now of Progressive Technology Federal Systems, Inc., for this suggestion.

REFERENCES

Breeding, Marshall. 2008. *Open source integrated library systems*. Chicago: American Library Association.

Etheridge, Jason. 2008. Why do you do it that way? (Or, design rationale). *Evergreen-ils blog*. http://evergreen-ils.org/blog/?p=130 (accessed November 18, 2009).

Koha Camp. 2008. One-day workshop at Palinet office, January 11, in Philadelphia, PA.

Koha Developer Wiki. User experiences with Koha. http://wiki.koha.org/doku.php?id=kohaexperiences (accessed November 17, 2009).

Virtual Academic Library Environment of New Jersey. 2008. Next Generation Academic Library System Symposium, March 12, organized by The College of New Jersey, in Ewing, NJ.

Yang, Sharon, and Melissa A. Hofmann. 2009. Administrative decision-making: Open source vs. proprietary OPACs. Presentation at the Library Management Institute, June 30, in Glenside, PA. http://athena.rider.edu/yang/opac_6_30_09_final.pptx (accessed November 17, 2009).