The Hybrid Open Source ILS Model

NJLA Conference

Tuesday, April 27, 2010

The Middletown Township Public Library, located in suburban Monmouth County NJ, about 45 miles south of Manhattan, is an independent municipal library serving a community of approximately 68,000. By most measures, it would be considered an affluent community. The library is well supported, in budget and usage, with an annual budget around $4 M, and borrowing in 2009 was +967,000 items. There is a Main Library that accounts for 88% of all business and three small branches.

The library has 170,074 bib records; 272,368 holdings records, and 35,767 borrower records.

In October, 2009 the library migrated from Classic Dynix to Koha. The timeline was a short 9 months, but was preceded by several years of discussion and research among the staff. It's important that this was truly a team effort.   The team was comprised of the Library Director, Department Managers of Borrower Services, Adult Services/Reference, Technical Services,   Systems/Network, and Technical Support. Later on the Technology Trainer was added to the team.

The discovery and decision process started in January 08 at Midwinter in Philadelphia, followed by four vendor presentations on site.   Concurrent with this process, we started reading about the PINES project in Georgia and Koha that originated in New Zealand.   We sent Scott to a conference in NJ of primarily academic libraries who were very interested in Evergreen [PINES], and he came back and made the pitch about Open Source to the team.

The Timeline
Mar. 08	PLA Minneapolis – Koha LibLime emerges as our favorite
July 08	Trip to Howard Cty, MD, Amy DeGroff & staff
Aug. 08	Palinet Consultant hired to evaluate Koha and LibLime
Sept 08	Library Board approves OS Koha for new ILS; Proposals for development and migration sought from LibLime; PTFS enters the picture
Oct 08	Board Approves PTFS proposal; collaboration with E. Brunswick Public Library development lists shared and tuned up. A 9 month contract for Dynix was approved for 2009.
Jan 09	PTFS contract executed
May 09	Staff server available to test development as sent to us
Sept 09	Go live date pushed back – Staff Training initiated
Oct. 09	Go Live October 15 with Koha version 3.0
Jan. 10	Koha Acquisitions module activated
Apr. 10	Final Development Received and Approved New Development Projects identified

Open Source from the IT perspective:
Open Source interested us because of the ability of the library to "control" the development process.

Since the Koha ILS is based on the LAMP protocol (Linux, Apache, MySQL, and Perl/PHP), you can either do it yourself, or through a Koha developer, or Koha support vendor. We were hearing that the development could be performed by just about anyone who was experienced with Perl, so there were several options available to us at this time.

Alternatively, you can do-it-yourself, if you have someone on staff that has the ability or desire to write code.   I was very interested in developing this skill, so I attended some courses in JavaScript, PHP, and Perl development, and also started to monitor the Koha "community," which we quickly discovered, was worldwide.

The customizable aspect of Koha is very attractive: It is based on internet friendly technologies such as Html, JavaScript, Perl, PHP, etc. It is not a proprietary, closed system, like most ILS vendors are, and frankly, we were weary of being a very small fish in the vendor's pond.

By the summer of 2008 we made the key decision to develop what we've called a hybrid system. Koha's core was acceptable to us, but we did not have the money, skills, or time to develop features that we and our customers already had been used to .   So we went to our existing vendors of our self check out system [TechLogic], enriched content [Syndetics] , public computer time and printing management [Comprise], and downloadable audio books [Overdrive]

The most important integration to us (and difficult to implement) was our Self-Check, RFID system. Koha's SIP Server allowed us to integrate our self-check system into Koha. But don't think that it was an easy process.   They tell you that Koha is "SIP compatible, and will work with any SIP compliant product".

 But what they DON'T tell you about is all the pain and suffering that is involved…
The difficult part was that we actually had to change the code in order for Koha to work with our Techlogic product. I had to work with the Programmer's from Koha (Colin in England), and Techlogic (Jack in Minnesota), to test the product, and get it to work to our specifications. It was a tripartite experience that I like to call "The Axis of Evil", or "collaboration", as the case may be.

But the good news here is that those libraries that decide to go with Koha and use RFID will be the beneficiaries of *our* "pain and suffering", since it all goes into the Koha code….eventually.

Not all aspects of the integration were difficult if you use SIP just to connect to your products without having to add development. Enriched Content: Enabling Syndetics or Amazon content is fairly easy, and now that our Syndetics contract has expired, we've moved back to the free Amazon, but that might change back. Overdrive downloadable Audio Books were also a snap! SAM (CompriseTechnologies), our PC management software, was also easy, since it connects through SIP.

So, to wrap up there were some lessons learned:
Things are not as simple (or as hard), as they seem on the surface. One thing that helped immensely is we installed our own instance of KOHA locally on our network, so we had the code, and data to work with as a reference point. Also, the fact that I attended courses in Perl, PHP, Javascript,

and MYSQL didn't hurt either. One point that I simply must stress in regards to DATA MIGRATION, and that is to plan EARLY, because no matter what you think you have covered, something else pops up that you didn't think of. And make sure that you have your responsibilities for the migration, and your vendors responsibilities, clearly and distinctly, mapped out and understood. Know what data you want transferred to the new ILS in ADVANCE!

Borrower Services: Fran Bruno was in charged with keeping the status quo as far as our existing customer services were concerned and being able to add new and improved services. These are a few of the new KOHA features that our customers are very happy about.

1- Email Notification.
Previously we had phone and mail only. We now have emails related to item checkout, upcoming events, item due, hold filled, item check-in and advance notice. Customers can have all this or selected features only.

2- Edit Personal Details.
From home customers can edit their personal details, from their library account. After changes are made and submitted it generates an email to the Library and staff members correct their record.

3- Reading History.
For the first time at Middletown customers can keep a reading history. Most people love this ability but one does have the option to 'opt out' of this feature.

4- On Shelf Holds.
Everyone loves this but we limit the holds to 5 per day or the staff would be overwhelmed running for material.

5- Bestsellers Club.
My personal favorite. We have loaded about 40 popular authors into the club. Customers can enroll in a club and when a new title, by that author, is added to the collection a hold is automatically generated for all the members of that particular club. The holds are randomized for each new title.

6- Did You Mean.
Our OPAC now has a 'did you mean' capability. Frequently misspelled words now present no problem. If a patron types Shakespare rather than Shakespeare they will get a list of suggestions to click on.   Spelling is atrocious these days, so this feature is really needed.

More Koha add-ons: Rod Alberse was involved with a lot of odds and ends of the migration, but one of his major responsibilities was to implement another Koha add-on, a phone notification and renewal system.
We really wanted to eliminate this service and go completely to an email system, but felt our customers were not ready for us to take this away, without more new services to offset it.

In the "old days" we used the DYNIX product <u>TELECIRC</u> to telephone our patrons with statuses and allow patrons to transact library functions over the phone—which served us well, but inevitably was on its "last legs". Then our Library's Director found—after a three month search-- Talking Tech's <u>I-tiva</u> product, which took us into the 21st   century—with a slight New Zealand/ English accent!

We saved money by using Skype to communicate with the technical folks in New Zealand . I estimate that I spent many days and nights working on this project due to the 12 hour time difference between N.J. and New Zealand, where the technical I-tiva people work.   We are not completely satisfied with the result, for example: since we were one of the first United States customers, some of the British idioms don't quite translate to American English so we needed to adjust the "plain-vanilla" I-tiva to a more American feel.

We needed an application able to talk to our ILS constantly to handle our patron's telephone requests, and for future SMS messaging capabilities—while our library continues to watch the maturing of open-source based telecommunication solutions suitable for our environment.

We added additional memory to our existing self checkout stations to speed up our patron experience . Each day brought better communications between our Library's new Koha system and the RFID system. For all involved, the many hours of SIP(Session Initiation Protocol) testing and retesting resulted in a customized working product.

We can continue our signature services for our patrons while new open-sourced solutions become available. Our integrated systems will come and go as Koha becomes Americanized—our patron billing solution was recently updated with Koha friendly "wireless printing" from Comprise; our email notification has noticeably reduced our telephone calls to customers.

Doreen Kallfisch on Technical Services: Back to the pain and suffering. Since we migrated in the middle of October, Technical services had to run two systems for the last quarter of the year. We entered orders in Dynix to keep track of the funds and the budget, while we still had to put orders in Koha so our staff and customers could see what was coming in and put holds on the new material. At that point in Koha, not only orders had to be entered, but also assigned a dummy item with a made-up barcode and then checked out to a dummy patron, as you could only put holds on checked out items. Library materials had to be received in both systems – a two step process morphed into a five-step one. Coupled with wrapping up end-of-the-year spending, this gave us a huge backup, which we are still contending with.

We started using Koha acquisitions and cataloging on a stand-alone basis at the beginning of this year, knowing that these two features were the weakest in the system, being the last two modules developed. We also knew that the staffclient side had older code than the OPAC side. We were able to tweak OCLC and Koha code to work together, although we had to add an 035 field in OCLC as a match point because it was more accurate than an ISBN. This pretty much eliminated the duplicate record problem we started out with – the ISBN proved to be a very weak link! – although we are still contending with the duplicate item issue, off and on. We also had to adjust how we print labels, as every label requires a separate pass.

On the plus side, there are quite a few bright spots. First, the larger library vendors are very interested in working with us in an open source environment; I expect they foresee clients going down that road. The Z3950 bibliographic record searching function is very handy – we have it tied into OCLC but there are many other choices there for copy cataloging. Other very easy to use features in Koha are change of item status, deletions from the collection and batching the selection and editing of bibliographic records [customer records too]

This work is very much an on-going process – Technical Services has learned to be extremely flexible and open to the latest problem-solving procedure. We have also learned to voice our concerns when a workflow seems unduly cumbersome compared to past practice – our next development list will reflect some of these concerns. Other library's development lists will also address acquisitions/cataloging features – we look forward to seeing them.

Key Development Sponsored by the Library:
Customer may opt out of reading history
Creation of bestsellers club
Easy change of item status
OPAC holds of individual serial issues
Customizable messages, including show cause when customer is blocked
Fast add function at Borrower Services
Spell checker: "Do you mean?" function
Suspend and reactivate holds in same place in queue
Select and edit all parts of a bib record at same time

COSTS

ILS Team:	Estimated at 20% of week for Computer Technician, Director, heads of Reference, Borrower Services and Technical Services, about 4 days per week for IT.	
Training	Staff [peer to peer & vendor]	$22,500
	Technical:	$ 6,300
	Visits to other libraries and KohaCon 09	$ 3,000
Consultant		$ 1,700
Development		$41,000
Migration & Hosting		$21,900
Phone notice & renewal system		$14,154
TOTAL		$110,554

Does not include personnel costs for ILS team &
partial year with former vendor

IN SUM
We would do this again.
It was the right decision for our library and for us as information professionals.
We will sponsor more development.
We will continue to look for open source software to fit into Koha to meet our needs.
We are looking for a partner with a vendor for Federated Searching.
We will be considering hosting Koha ourselves.

Presenters from the Middletown Township Public Library, New Jersey

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