

Koha The ILS that keeps on giving

By John Brice

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Slide 1. My talk today is about the open source Koha Integrated Library System. How it came into being, what in the heck does Koha mean, how it works and of course how it works in the Crawford County Federated Library System.

Slide 2. The word Koha means the gift that keeps on giving in the New Zealand indigenous language of Maori. But within the meaning of the word kohā is also an unspoken understanding of responsibility that this gift is to be savored and enjoyed many times over.

Slide 3. We had two basic reasons why the Crawford County Federated Library System decided to use and invest our funds into the Koha ILS project. In short I was upset, as an administrator, of throwing away good serviceable hardware because some new piece of software needed a faster CPU or more RAM. Secondly, I was sick and tired of having to work around software. Current closed ILS's make you alter your policies to fit the program. I wanted to be able to change the ILS program to fit our policies.

Slide 4. The Crawford County Federated Library System has a long history of using open source software in our operations. So it did not scare us when we were investigating purchasing a new ILS to seriously consider an open source ILS. I know using open source in libraries is considered risky however, we have found that it works, is reliable, and is in the long run a very low cost solution.

Slide 5. When we first began to investigate replacing our old DOS based circ system, we actually preferred another proposed open source ILS called OpenBook. Unfortunately OpenBook never released its code. We originally did not consider Koha a viable option because it lacked critical features such as MARC support.

Slide 6. In order to understand our apprehension in the beginning, I need to take a moment and describe how Koha came into being.

The Horowhenua Library Trust in New Zealand found out in 1999 that its old circulation program would not run in the new millennium and that commercial software was way too expensive for its budget. So Rosalie Blake, Head of Libraries approached a local firm called Katipo and they proposed to create a new open source system. After a lot of discussion and some trepidation, HLT agreed to commit to the project.

Slide 7. The original requirements for Koha were rather basic, that it run at a reasonable speed, be easy for staff and patrons to use, have a graphic interface, be used through a web browser, require little upgrading of hardware, and provide decent financial reporting. Sticking to the idea of open source Koha was written using Linux, MySQL database, and PERL programming.

Slide 8. When we first downloaded and installed Koha in 2001 this is the version we first saw. As mentioned above the major problem in running it in a US library was the lack of MARC support. In 2002 Nelsonville Public Library solved that problem by funding a project that added MARC to Koha. Shortly after Nelsonville got Koha up and running CCFLS visited them to see how it worked. The trip brought up one big issue with Koha, speed. We noticed that the response time from the clients to the servers was just barely acceptable. Koha, at that time had what is commonly referred to as a scalability problem. What worked fine for a library with less than 50,000 items would not work well for a library system with 400,000 items.

So, CCFLS hired a third party company, Liblime to create a new version of Koha that used the Zebra Index engine. This modification significantly increased the speed of the program for large libraries and library systems and allowed libraries with collections of up to 4 million plus items to use Koha. This new version called Koha Zoom became operational in early 2007 when it was implemented in a public library in Western Provence, France in January of 2007.

Slide 9. While Koha's index engine was being rewritten CCFLS designed a new user interface for the program. After a series of meetings with system librarians we rewrote the Nelsonville templates to create our own look and feel to the program.

We began using Koha at Meadville Public Library in May of 2007. We shut the old circulation system down at closing on a

Saturday and had Koha up and running, with all of the bibliographic, patron and transaction data reinstalled on Monday morning. Not only did we change the software but we also reconfigured the computers from running Windows to a thin client architecture using Ubuntu as the open source operating system. We then converted the other eight member libraries of CCFLS over to Koha by the end of 2008. We are still running the “devWeek version” of Koha, though we plan to switch over to Koha 3.0 in early October.

Slide 10. The staff as a whole has accepted Koha well. There are a number of things that the staff did not like about the program. In most cases we could fix the problem ourselves, usually within a day or two, or write a new script which added capability to the program. For example, we discovered you could not use the word “not” in the OPAC. That problem took two days to fix. Another example, some staff did not like the results page for title searches. So we added a new script which gave the added ability to list books in the same manner as our circulation system. In fact the biggest problem now, is that the staff knows we can alter the program so they are regularly proposing new things to add. We have also rewritten the fines module, and tied in our Web Kiosk program, LibKi, to authenticate users.

Slide 11. As for costs we did spend almost exactly the same amount for Koha as we would have implementing a commercial vendor. The cost of the upgrade to the Koha software was over \$35,000. We also spent slightly over \$15,000 on new computer servers and barcode scanners. So the overall total cost was slightly over \$50,000, which ironically was within a few thousand dollars of what it would have cost to purchase a closed source ILS.

Slide 12. A major criticism of open source software is that there are no guarantees that a particular program will survive into the future. The key to successfully installing open source software is an active community of users and developers. Koha has a worldwide base of both users and developers in France, United States, Africa, New Zealand and even Nepal.

In our experiences we have found OS software to be more reliable and we receive faster support than closed source firms. However, if you wish to support Koha internally you need access to someone, staff member or consultant, who understands Linux and is comfortable using a command line. Fortunately these skills can be learned. Our Head of IT Cindy Murdock, has an undergraduate degree in Art History and a MLIS. All of her Linux skills have been learned on the job. Two and half years ago we hired a full time programmer, Kyle Hall to help support and modify our open source software programs. Kyle has a Masters Degree in programming which he earned at a Edinboro University.

Another option is to hire a commercial service to help install, manage, support your OSS ILS. CCFLS has in the past purchased support from a commercial Koha service, Liblime. We hired Liblime because we thought we might need help as we migrated. However, we discovered that we could handle 99 percent of the task of migration on our own. We did rely on Liblime for a couple of issues and to help us figure out why things did not work right.

Slide 13. At this moment I would like to just discuss the philosophy we librarians have been following concerning the acquisition of ILS software. From the perspective of the 1980's using a circulation system from a third party closed source vendor was a smart solution. Programming computers was difficult, computer hardware was very expensive, support for hardware in a third tier city was next to impossible and there really was only one computer to support and manage.

Slide 14. From todays perspective using third party closed source vendors to provide libraries with ILS software is no longer the only solution it once was. Software can be easily written in modern computer scripts, running on hardware that is cheap and easily supported by individuals who can be trained at local community colleges. This means that libraries can have individuals on staff that can write and or alter open source software to fit their unique needs.

Slide 15. In conclusion, I would like to leave you with this thought. I believe Koha unequivocally fulfills the need for an open source alterable program that can be utilized by any library of any size. Koha may not be the solution for everyone, however, every library should have a viable open source solution ILS option available to them. If, for no other reason, than to help negotiate the best possible price from a vendor.

Meville Dewey once said “*The librarian must be the librarian militant before he can be the librarian triumphant.*” So in the spirit of the militant tux shown here on the screen and of Melville Dewey I challenge all of you to arm up and look into using open source technology in your libraries.