Building WebPAC for Faculty of Philosophy Libraries

experiences and lessons learned

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Library changes...

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- information technology turned libraries into information centers
- libraries have to go on-line to fulfill it's function - particularly ones that provide support to academic and research purposes
- choosing and using library software can be a nightmare
- but you can decide to play along with IT and make IT fun

Our story is about...

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- what happened during one long period of time
- how we got opportunity to collaborate and know each other
- what we wanted and why
- why we decided to be involved in building of application for our own use

Building the foundation...

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That happened more than 10 years ago, but in a mean time we accepted IT.

- learning and gaining information literacy
- thinking and experiencing more and more advantages of IT
- being under pressure
- more and more motivated
- finding support (SZI and FF)
- starting to work on defining our goal
- exploring how could we benefit from communication
- and how collaboration can make our jobs easier

...in environment like this

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- 19 different libraries
- without central management or central service
- dependent on our institutions for money and support
- insufficient communication
- with similar problems (floor space, working conditions, communication with head persons)
- without plan of work or experience in joint projects
- dealing with information overload

We want to be on-line to!

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- realized possibilities (other libraries had CDS/ISIS records on WWW)
- to provide better service for our users, and to be satisfied with that
- our users were first in our minds because we were dealing with them daily

- we had people skilled and interested in technology

- it was good fist step to take
- in process we realized other problems and possible solutions

Possible approaches

Possible approaches

1. wait for integrated solution
   sick of waiting and believing in integrated solutions
2. buy complete WebPAC solution
   that demanded expensive adaptation; free solution inappropriate and hart to implement; mostly based on proprietary format; no sense to improve that
3. combination of existing Open Source solutions and development of custom parts for our needs

We choose the third way

We choose the third way

- growing community of people advocating Open Source in libraries http://www.oss4lib.org/
- respect open standards and knowledge sharing
- it is a fortunate to be involved in process of building and implementing an application for our needs
- process supported learning and exploration
- in environment of cooperation, rather than competition

- now we know more about what is needed to be done and who are the people willing to do it
- we can ask for IT help in every single task that can be automated

WebPAC as Technological Challenge

WebPAC as Technological Challenge

Component architecture

- allows change of any component if needed
- pick correct solution fist time - **it's hard!**
- implementation has significant overhead compared to monolith
- reasoning for component approach is flexibility without disturbing other parts of system - **supports changing requests**

Pack your components in a box

Pack your components in a box

- *fixed:* CDS/ISIS for cataloging
- *selectable:* WebPAC search engine and UI
- *planned:* circulation

Solution: integration of individual parts, allows incremental development

Different than reasoning of Koha team.

Perfect search engine

Idea and quest

- Don't use RDBMS (unsuitable for text entries)
- use existing Open Source technology, improve it
- main concert HCI, not performance

Search through freshmeat.net, sourceforge.org and finally www.oss4lib.org.

Perfect search engine

Perfect search engine

We where not alone in our search.
Eric Lease Morgan wrote Comparing Open Source Indexers.

1. freeWAIS-sf
2. Harvest
3. Ht://Dig
4. Isite/Isearch
5. **MPS** - *best CGI interface, lack of documentation, hard to install*
6. **SWISH**
7. WebGlimpse
8. Yaz/Zebra

Programming perl...

Programming perl...

- `isis2stream.pl` using OpenIsis libraries to access CDS/ISIS database
- user management using `HTTPD::UserAdmin`
- modification of `Search.cgi` UI (JavaScript, CSS)
- most of the time, we edited formats of stream and bib file

MPS Problems

- code hard to modify (it's C-like and not perl-like)
- html in code, without use of templates (localization problems)
- occasional bug (ISBN* is nasty one)
- Open Source but commercial product, *free as a beer, but not as a speech*

Move to SWISH-E which is **free**, but not "turn-key" solution.

Current status

As of August 2002:

- planning and development of circulation using PostgreSQL, perl and XML/RPC
- evaluating different UI (telnet, Windows using XML/RPC)
- implement single common configuration file
- replace indexing engine with SWISH-E
- publish project on WebPAC.sourceforge.net

Conclusion

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Dispelling the doubts

- software and hardware is most important element of IT (expensive equipment fist)
- only integrated solutions can be successful
- well known vendor provide security and peace of mind

Some of that might be true, but not necessary for us.

By staring a project we managed to define our jobs and responsibilities better and enjoy our work.

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