JISC Library Management System (LMS) Programme

#jisclms - A Final Synthesis

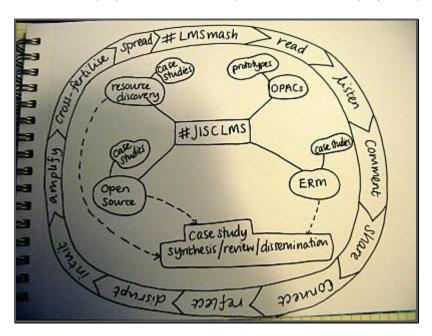
Helen Harrop – helen.harrop@sero.co.uk – [v1.0 released 30 March 2011]

Project blog: http://lmsmash.blogspot.com/

1- Introduction

As a JISC LMS Synthesis deliverable, this was originally billed as 'the final blogpost'; however, the extent, richness and scope of activity interwoven between the projects has dictated something a little longer and more formally structured. The important thing is that this report is evidence based – seeking to establish useful patterns from the actual project narratives. In addition, we have also developed a shorter positioning paper that seeks to highlight key themes and opportunities for library management and systems strategies.

In broad terms, our role as 'synthesisers' within the <u>JISC LMS programme</u> was to monitor the ongoing activity of the projects to identify common themes and to share anything of interest that came up via their blogs and tweets with the other projects and with the wider world. This mode of 'live' (near real-time) synthesis was made possible by requirement of the programme and the commitment of the individual projects to the use of open social media for project reporting.



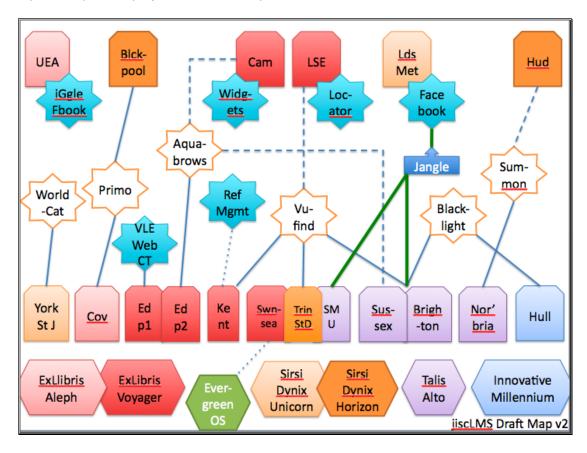
The JISC LMS synthesiser role displayed graphically

Whilst much of the thinking and findings can be encapsulated within the broad theme of 'the library in the web', the projects proposed to address specific problem spaces and pain points. They were segmented into strands for the purposes of the programme but in practice they had several different cross-cutting areas of focus and connection, including:

- Usability and user testing
- Open source software and systems

- Search functionality
- Electronic Resource Management
- Web widgets and mobile interfaces
- Core Library Management Systems

The programme meeting held in Glasgow (September 2010) gave us an opportunity to redraw our conceptual map of the projects and how they were connected:



At the end of the two day event the projects were asked to develop a 'what, why, who' style, one minute elevator pitch. The resulting blogposts are a useful entry point into the projects:

- #bfcesearch http://www.blackpool.ac.uk/blog/en/one-minute-blog/280910
- #covprimo: http://covprimo.blogspot.com/2010/09/covprimo-one-minute-blog.html
- #credaul: http://credaul.wordpress.com/2010/09/26/elevator-pitch/
- #culwidgets: http://culwidgets.blogspot.com/2010/09/one-minute-pitch.html
- #enclavelms: http://enclave.lib.ed.ac.uk/?p=109
- #janglefb: http://jiscjanus.wordpress.com/2010/09/23/one-minute-pitch/
- #swwhepsrch: http://swwhepsrch.blogspot.com/2010/09/why-and-what-is-swwhepsrch-brief-pitch.html
- #yocalcat: http://yocalcat.wordpress.com/2010/09/14/yocalcat-oclc-worldcat-local-outputs-one-minute-blog/

2 - Theme Focus: Usability and User Testing

Usability was a core concern for the <u>Strand A</u> projects but during group discussions at the programme meeting in Glasgow, it was identified as being an important consideration for all the projects, particularly those developing a user interface or implementing a user service.

The project blogs are a rich source of observations about the challenges and benefits of conducting user testing, resources which other institutions can use when they carry out user testing, and reports on the test results themselves.

There are three posts on the synthesis blog which focus on this theme in greater depth:

- Part one
- Part two
- Part three

The range of particular challenges faced by the projects can crudely be summarised as issues centred around time and/or users:

- the time needed to learn how to run usability tests (for those who hadn't done so before)
- the time and effort required to recruit usability volunteers
- the time needed to review, analyse and then report on the results of the tests (particularly for smaller institutions such as York St John).
- the complexity of users which meant in some cases that the usability test results were divided or somewhat inconclusive (such as for the #blathull project).

For those who carried out usability testing as part of their project, the benefits of doing so were a deeper understanding of their users and their expectations, and <u>greater confidence</u> in their project. In particular:

- The #bfcesearch team <u>observed a strong correlation</u> between how users rate themselves in terms of their information seeking skills and how positively they rate the search interface.
- The #yocalcat team <u>identified opportunities</u> for the library service to improve the information skills of their students.

In some cases observing how real users interacted with the search interface challenged the project team's assumptions about usefulness of search features e.g. <u>tag clouds and book covers of 'recently added' books</u>.

In other cases the usability tests revealed that users didn't understand some assumed terminology such as <u>'Search Scope'</u>. In the case of <u>#covprimo's user testing</u>, none of the users knew what was meant by the term 'tag' (which might possibly explain the low response rate to the <u>#vufindkeven</u> project's <u>survey about social tagging</u> and the observed lack of student activity on the live system in using this feature).

It is not clear whether the projects have plans for embedding usability testing as standard within their service but this is something that could usefully be explored by the emerging LibUx community of practice [http://groups.google.com/group/libux?hl=en]. However, as observed at our programme

session at the-JISC Conference, libraries (and other learning services) typically find it hard to locate a focal point of responsibility (i.e. a role) for the user experience (in terms of systems) within their organisation. This is an area that JISC are currently looking at through its ongoing usability work and which will build on the findings of the LMS Programme projects. [See the recent JISC grant funding call: 'Embedding usability & improving the uptake of resources & tools']

Key resources:

- <u>#aquabrowserux</u> authored a series of guides to conducting user research and creating user personas (<u>Part One</u>; <u>Part Two</u>; <u>Part Three</u>) together with <u>examples of real user personas from their project</u>]. They also released guides to <u>developing realistic user tests</u> for search interfaces and <u>carrying out 'in the wild' usability evaluations</u>.
- <u>#yocalcat</u> case study of replacing their existing library catalogue interface with OCLC
 WorldCat Local: http://yocalcat.wordpress.com/oclc-worldcat-local/

3 - Theme Focus: Open Source Software and Systems

The key projects and the open source systems investigated / implemented were as follows:

- #credaul: VuFind and Blacklight

#vufindkeven: VuFind

- <u>#blathull</u>: <u>Blacklight</u>

- #ossviab: Evergreen

Discussion and linkages made at the Glasgow event indicated significant appetite amongst the projects (and projected in to the wider community) to build on the in-roads made by individual projects in to the expanding world of Open Source library systems (i.e. full LMS, Search, ERM, etc). The argument went along these lines:

- There are working OS systems and tools out there some are traditional, some are groundbreaking and we need both
- They have very little traction or even exposure in the UK
- We should share the technical and functional experience of the JISC LMS projects as a starter
- UK HE libraries also need to develop informed views regarding the mechanics of procurement, support and development of local functionality

The outcome was JISC commitment to support initial steps (January to April 2011) to explore how a community of interest and expertise might be developed. The Open Edge-Open Source community event was the starting point. This was a two day event which was run in collaboration with the 'Haggis and Mash' Mashed Library event in Edinburgh – key observations and link to key blogs/presentations

Videos of talks available: http://www.nesc.ac.uk/action/esi/contribution.cfm?Title=1114
 Day one live blog: http://nicolaosborne.blogs.edina.ac.uk/2011/01/25/open-edge-open-source-in-libraries-day-2/

- A brief report on recommendations for further developments is currently being written by Ken Chad.
- The SCONUL Higher Education Library Technology wiki is useful source of post-event information and contacts:

http://helibtech.com/Open+Source

http://helibtech.com/open+source+community

http://helibtech.com/Open+Source+Capacity

Key resources:

- Open source software in libraries JISCMail list: LIS-OSS
- <u>#credual</u> technical installation/configuration guides:
 - Step-by-step implementation of VuFind
 - Connecting VuFind to Talis for holdings information
 - Installing VuFind and Blacklight
- As a result of <u>#ossviab</u> project activity, the <u>UK Core Specification (UKCS v3)</u> has now been released under a creative commons licence.

4 - Theme Focus: Search and Web Interfaces

The experiences of the projects that were investigating the User Experience (UX), developing search interfaces, 'widgets' and mobile services underlined a number of useful lessons:

- Designing a basic search interface that is simple, elegant and easy-to-use for all users remains a challenge. This challenge is even harder when it comes to designing 'advanced search' functionality, traditionally perceived as an essential requirement for library users. A number of the projects reported that some users didn't use the advanced search at all during testing, and those who did found it confusing (see the <u>#swwhpsrch</u> and <u>#bfcesearch</u> blogposts for details).
- Implementing a new search interface surfaced data issues which required additional time and resources to be resolved (<u>duplicate records, inconsistent results</u> etc.)
- For the projects that were developing web widgets the central issues were the security of personal data and <u>gauging students' opinions</u> regarding the appropriateness of taking the library into social spaces such as Facebook.
- The 'interface framework' developed as part of the <u>#ueawolfie</u> project is another example of a piece of work that will potentially deliver far-reaching benefits across the sector. Widgets and mobile apps, and back-end plug-ins that are developed against the framework can be reused across HEIs. The expense of developing components could be shared and significantly reduced, allowing HEIs to focus on the content which makes their institute unique and distinct. It also makes the cost of implementing services on new platforms much cheaper and less risky (avoiding iPhone mania/entrapment) and lowers the skill bar for

developing widgets (the project has <u>launched a competition</u> to encourage students within UEA to develop their own apps using their web service).

Key resources:

- #enclavelms have made their Wordcloud source code available on <u>Sourceforge</u>
 [http://enclave.lib.ed.ac.uk/?p=228]
- #culwidgets have made a whole suite of API web services available via their website:
 http://www.lib.cam.ac.uk/api/ and written user guides for anyone who wants to develop their own web service or widget: http://www.lib.cam.ac.uk/api/widgets intro.html
- #ueawolfie developed an 'interface framework':
 http://ueawolfie.jiscinvolve.org/wp/files/2010/04/framework-design.jpg

 Also, they are submitting their project to the Edunify directory:
 https://demo.edunify.pesc.org/ in the hopes that people from a wider audience may find it useful.
- The <u>#aquabrowserux</u> project is part of the University of Edinburgh's UX2.0 initiative which has a whole treasure trove of useful resources via <u>their wiki</u>, including a number of <u>technical</u> <u>guides</u> for implementing faceted search using Apache Solr and integrating Twitter services.
- A couple of large scale, high-profile search betas were launched within the sector during the course of the programme:
 - http://library.wales.org/catcymru/
 - British Library search beta

5 - Theme Focus: Electronic Resource Management (ERM)

ERM was reinforced as a major pain point for library management as a result of the <u>SCONUL Shared</u> <u>Services study</u> in 2009 and therefore included in JISC LMS scope.

The University of Salford designed the <u>#salfmeri</u> project to capture and document the workflows that are essential to local electronic resource management, covering e-journals, databases and e-books.

The project has now gone on to be involved with the <u>SCONUL ERM project</u> which is developing use cases and corporate business case for 'above campus' shared services for which they will extend their workflow analysis and examine Open Source ERM systems (notably CUFTS, Coral, Ermes and eMatrix. [See http://salfordmeri.blogspot.com/2010/12/this-is-interim-blog-post-to-refelct-on.html]

Key resources:

- <u>#salfmeri</u> developed a single ERM process map which documents all of their e-resources processes: http://salfordmeri.blogspot.com/2010/11/our-current-procedures-map.html
- The Salford project team also worked on the ERM Use Cases collected from 16 libraries as part of the ongoing SCONUL Shared Services project:
 http://blogs.ostephens.com/sconulerm/

6 - Final Reflections

Evidenced by their posts and interactions, the JISC LMS projects have successfully generated and freely shared a significant body of practice, evidence, code and ideas – as well as raising important challenges about change processes in terms of both systems and services. Above and beyond all the detail, it seems appropriate and genuinely representative to conclude by highlighting three outstanding features of the work undertaken

<u>Communication</u> – The programme's use of themed blogging and social media as a method for communicating project plans and outputs, combined with face-to-face programme events, was observed to pay substantial dividends in terms of 'in programme' collaboration, dissemination and exploitation. In particular, the face-to-face event in Glasgow gave projects an opportunity to find out areas of overlap which came from work that fell outside the immediate concerns of the funded project but which were relevant to another project's work (particularly in terms of technical knowhow).

<u>Continuity</u> - Although the projects officially came to the end of their funding in late 2010, a number of them are continuing to blog about new project/service developments. This suggests that although the projects were taking on the challenge of innovative work, that work was well embedded in the core functions of the libraries involved, rather than being a fringe activity. These innovations were 'close to market' (or 'close to service') in the sense that it resolved real issues for the institutions/services involved and this seems to have generated strong practitioner engagement and management interest:

- #covprimo: http://covprimo.blogspot.com/2011/02/new-year-major-update.html
- #culwidgets: http://culwidgets.blogspot.com/2011/03/loans-feeds-in-library-widget.html

<u>Communities</u> – The mechanisms and enthusiasms described above are likely to wither on the branch unless wider communities of interest are enabled, requiring in the case of library systems a combination of 'grass roots' engagement (as illustrated in such as Mashed Libraries) and strategic buy-in (these opportunities impact everyday core services).

<u>Dissemination</u> – The synthesis team (David Kay and Helen Harrop) made a final presentation to the 2011 JISC Conference. Readers may find some of the slides to be of value in the context of the observations drawn in to this Synthesis report.

Virtual Goody Bag link:

http://www.jisc.ac.uk/events/2011/03/jisc11/programme/workshopstuesday/reallibraryservices.aspx

A final word

The 'wordle' below is created from the text on the synthesis blog (http://lmsmash.blogspot.com/). It should be noted that certain words are artificially conflated by the presence of standard blogpost furniture on every entry, e.g. links for sharing the post via Twitter etc, but somehow it does still manage to somehow reflect an overall sense of the JISC LMS programme.



http://www.wordle.net/show/wrdl/3333010/JISC LMS final wordle

Appendix A: Project Directory

Project Name	Google Code Page	Final Project Post	End product/prototype
#aquabrowserux	http://code.google.com/p/jisclms/wiki/aquabrowserux	http://lorrainepaterson.wordpress.co m/2010/10/20/aquabrowserux-final- project-post/	http://aquabrowser.lib.ed.ac.uk/
#bfcesearch	http://code.google.com/p/jisclms/ wiki/bfcesearch	http://www.blackpool.ac.uk/blog/en/final-project-blog/221010	
#blathull	http://code.google.com/p/jisclms/ wiki/blathull	http://blacklightathull.wordpress.com /2010/12/16/final-report/	http://blacklight.hull.ac.uk/catalog
#covprimo	http://code.google.com/p/jisclms/ wiki/covprimo	http://covprimo.blogspot.com/2010/1 0/covprimo-final-blog-post.html	http://primo.coventry.ac.uk/primo_library/ libweb/action/search.do?dscnt=1&fromLog in=true&dstmp=1291210899853&vid=COV VU1&fromLogin=true
#credaul	http://code.google.com/p/jisclms/ wiki/credaul	(http://credaul.wordpress.com/)	
#culwidgets	http://code.google.com/p/jisclms/ wiki/culwidgets	http://culwidgets.blogspot.com/2010/ 11/final-post.html	http://ephesus.caret.cam.ac.uk/catalogue/ http://ephesus.caret.cam.ac.uk/demo/
#enclavelms	http://code.google.com/p/jisclms/ wiki/enclavelms	http://enclave.lib.ed.ac.uk/?p=129	
#findmylibrarybook	http://code.google.com/p/jisclms/ wiki/findmylibrarybook	(http://findmylibrarybook.blogspot.co m/)	

Project Name	Google Code Page	Final Project Post	End product/prototype
#janglefb	http://code.google.com/p/jisclms/ wiki/janglefb	http://jiscjanus.wordpress.com/2010/ 10/11/janus-%E2%80%93-final-blog- post-%E2%80%93-11102010/	http://apps.facebook.com/leedsmetlibrary/
#ossviab	http://code.google.com/p/jisclms/ wiki/ossviab	(http://blog.swansea.ac.uk/blog/lshuq hmj/)	
#salfmeri	http://code.google.com/p/jisclms/ wiki/salfmeri	(http://salfordmeri.blogspot.com/)	
#summon4hn	http://code.google.com/p/jisclms/ wiki/summon4hn	http://library.hud.ac.uk/blogs/summo n4hn/?p=164	http://nuweb.northumbria.ac.uk/library/norapowersearch/index.html http://library.hud.ac.uk/summon/
#swwhepsrch	http://code.google.com/p/jisclms/ wiki/swwhepsrch	http://swwhepsrch.blogspot.com/201 0/10/final-project-post.html	
#ueawolfie	http://code.google.com/p/jisclms/ wiki/ueawolfie	http://ueawolfie.jiscinvolve.org/wp/2 010/10/22/final-posting/	[http://mobile.webapp4.uea.ac.uk/ username: jisc password: jisc] http://apps.facebook.com/ueademo/
#vufindkeven	http://code.google.com/p/jisclms/ wiki/vufindkeven	http://blogs.kent.ac.uk/vufindkeven/2 010/10/22/keven-final-project-post/	https://catalogue.kent.ac.uk/
#yocalcat	http://code.google.com/p/jisclms/ wiki/yocalcat	http://yocalcat.wordpress.com/2010/ 10/15/yocalcat-final-progress-post/	http://library.yorksj.ac.uk/