# The future of library systems

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A report from a recent Jisc and SCONUL workshop that marked the end of the Jisc library systems programme and provided the library community with an opportunity to think, discuss and debate the current and future needs of their library systems.

What will the library systems landscape look like in 2016? It is likely, given the current legacy systems many libraries are using, that somewhere around 50% of libraries will be using a different management system (LMS). Similarly, given current levels of interest and involvement, more than 80% of libraries will be using shared services for operational purposes.

We seem to be on the cusp of significant change in the library systems environment.

### A TIPPING POINT ...

These figures represent a huge potential change for libraries. More importantly, these changes are also being driven by new developments in library systems, with proprietary and open next-generations systems helping rejuvenate the systems landscape.

This picture stands in contrast to the situation just a few years ago. In 2008 Jisc and SCONUL published their *Library Management Systems Landscape report*, which made it clear that there was a sense of inertia in the library community when it came to library systems development: the systems seemed to lack the kinds of functionality required to meet the rapidly changing needs of libraries and their users; procurement was costly and often little more than a tick-box exercise; and the systems lacked the ability to talk with other systems, meaning the library remained somewhat isolated, in terms of data management. The recommendation of the report was clear: If you *must* change your current system, then proceed with caution.

Five years on there is a definite change in the air; there is a vibrancy infecting the library systems landscape. This rapidly transforming landscape formed the background to a recent Jisc and SCONUL workshop exploring the work of Jiscfunded projects to experiment with the future of library systems by developing new shared and collaborative approaches, resources and tools. (See below for an index to the various projects.) The discussion and debate at the workshop tended to build around three key themes.

## Users

The user is increasingly at the heart of the conversations about library systems. It is tempting to view the library system as a 'back-office' solution, immune from the requirements of the student, researcher or member of the public. However, library systems tend to exist on a continuum: what happens at the back effects what the user gets at the front (or doesn't get, as the case may be!). Systems, such as the library management system, need to be as efficient and effective as possible to ensure that users get the experience they expect - they find the book they want or access that specific journal article. At the same time, the resources that were previously needed to maintain and manage the legacy systems can focus on user-centric developments and services.

The library systems continuum also works in reverse: the data resulting from user actions and interactions can feed back into the decisions and services that the library develops and delivers. The possibilities are there for systems that increasingly learn from user interactions and can provide users with resources, support or guidance tailored to their specific needs.

The future of the library system is a constant conversation, where the library and user can interact and learn from each other.

# Culture

The implication of a user-centric approach to library systems is one of change – constant and disruptive in nature. There will be no easily navigable route from where we are today to a stable point in the future. This has significant implications for the culture of libraries. In particular it implies that entirely new expertise and skills may be required alongside the roles we typically think of as part of the library; these may include usability experts, data scientists, designers, developers and so on.

Beyond roles and expertise, the very structures of the library itself may need to be rethought and redesigned. A good example of this kind of organisational change is the establishment of the Government Digital Services (GDS) inside the Cabinet Office. This small team is made up of diverse roles and expertise to lead the transformation of government departments into world-class digital services. GDS provides government with the right mix of both leadership (from within the Cabinet Office) and participation (each department's staff are heavily involved).

For libraries, it is critical that they be able to strike a balance between having effective leadership and the participation and engagement of staff. Again, keeping the needs and requirements of the end-user in mind provides the opportunities for both leadership and wider staff participation, and ultimately delivers great services to the user.

#### Technology

Library systems must serve the library in meeting user needs, rather than perpetuating redundant processes. The implications of this for the system, and indeed the library, include the need for:

- Flexibility: there may be no single solution, so systems and components will need to be flexible and adaptable.
- Interoperability: systems whether finance or learning systems – will need to share data with each other.
- Agility: systems and services may be shared or hosted elsewhere, but you need to ensure changing requirements can be acted upon fast.

In the future it is unlikely that there will ever be a single system solution that will incorporate all the functionality and integration a library requires. The LMS leaks outward into new spaces, spaces which it didn't inhabit before, such as reading lists, repositories, learning systems, research data management and so forth. Furthermore, it is likely that the future of library systems will consist of a mixture of open and closed systems as well as local and shared (or hosted) services. With an increasing move towards closed platforms (like Facebook, for example) and proprietary ecosystems (like Apple), libraries will be required to navigate these different spaces and ecosystems. Indeed, it may no longer make sense to think of the systems of the library; instead, they are simply

part of the enterprise infrastructure of the institution, their importance increasing as they become a critical component in a wider institutional user experience.

The developments taking place in the library systems landscape, like those of commercial vendors or the collaborative shared services exemplified by the projects in the Jisc library systems programme or Knowledgebase+, suggest this vibrant period of systems development will continue. Indeed, it is essential that as the expectations and needs of the user continue to change, libraries and the systems and services they use become resilient and responsive enough to adapt to this constantly shifting landscape.

#### JISC LIBRARY SYSTEMS PROGRAMME - PROJECTS

The aim of the Jisc library systems programme was to investigate what the future potential of the library systems is: How can library systems ensure they are able to serve the needs of nextgeneration library services and users, as well as being both effective and efficient in meeting reduced budgets and rising user expectations?

The work consisted of 7 directly funded projects and engagement with 4 others already underway. A full list of the projects can be found on the Jisc web pages at http://www.jisc.ac.uk/whatwedo/programmes/di\_informationandlibraries/ emergingopportunities/librarysystems.aspx .

The table on the following page provides a flavour of the range of topics, partners and outputs

LMS change	University of	Blog: http://www.lmschange.info/blog/
Mapping the changing	Westminster and	Resources: http://lmsguidance.jiscinvolve.org/wp/
library systems	Sero consulting	
landscape and		
developing a series of		
tools and techniques		
to support libraries in		
systems change.		
Welsh Higher	University of	Blog: http://blogs.cf.ac.uk/sharedlms/
Education Library	Cardiff and	
Forum (WHELF)	WHELF members	
Library Systems Shared		
Service feasibility		
study		
Exploring the potential		
for a shared library		
system for WHELF		
institutions.		
The benefits of sharing	University of	Blog: http://libraryblogs.is.ed.ac.uk/benefitsofsharing/
(How would a shared	Edinburgh;	
LMS improve services	University	
in Scotland?)	of Stirling;	
Exploring the potential	SCURL (Scottish	
of a shared library	Confederation	
system for Scotland.	of University	
	and Research	
	Libraries)	
HIKE (Huddersfield,	University of	Blog: http://library.hud.ac.uk/blogs/projects/hike/
Intota and	Huddersfield;	
Knowledgebase+)	Jisc Collections;	
Exploring the	Serials Solutions	
implications for		
processes, workflows		
and systems integration		
of local proprietary		
and shared community		
systems.		
E-BASS25 (E-Books	Royal Holloway,	Blog: http://ebass25.rhul.ac.uk/
Acquisition as a Shared	University of	
Service in M25)		
Developing	London; Kingston	
collaborative	London; Kingston University; Jisc	
	London; Kingston University; Jisc Collections	
approaches to	London; Kingston University; Jisc Collections	
approaches to e-book procurement	London; Kingston University; Jisc Collections	
approaches to e-book procurement and patron-driven	London; Kingston University; Jisc Collections	
approaches to e-book procurement and patron-driven acquisition.	London; Kingston University; Jisc Collections	
approaches to e-book procurement and patron-driven acquisition. <b>Collaborative</b>	London; Kingston University; Jisc Collections King's College	Blog: http://kclshlccm.wordpress.com/
approaches to e-book procurement and patron-driven acquisition. Collaborative Collection Management	London; Kingston University; Jisc Collections King's College London; Senate	Blog: http://kclshlccm.wordpress.com/
approaches to e-book procurement and patron-driven acquisition. Collaborative Collection Management Piloting the Copac	London; Kingston University; Jisc Collections King's College London; Senate House Library,	Blog: http://kclshlccm.wordpress.com/
approaches to e-book procurement and patron-driven acquisition. Collaborative Collection Management Piloting the Copac collections management	London; Kingston University; Jisc Collections King's College London; Senate House Library, University of	Blog: http://kclshlccm.wordpress.com/
approaches to e-book procurement and patron-driven acquisition. Collaborative Collection Management Piloting the Copac collections management tools at Senate House	London; Kingston University; Jisc Collections King's College London; Senate House Library, University of London; Mimas;	Blog: http://kclshlccm.wordpress.com/
approaches to e-book procurement and patron-driven acquisition. Collaborative Collection Management Piloting the Copac collections management tools at Senate House Libraries and King's	London; Kingston University; Jisc Collections King's College London; Senate House Library, University of London; Mimas; RLUK	Blog: http://kclshlccm.wordpress.com/