



Making resources more discoverable – a business imperative?

Feedback from two leadership workshops run by SCONUL and JISC in Spring 2012 – compiled by David Kay for the Discovery project.

1 - The Problem Space

The student and researcher experience is a crucial business focus. Academic libraries have therefore invested recently in 'Discovery Layer' products to lift resource discovery beyond the bounds of the local OPAC and to cohere access to resources within and beyond the institution. So we might conclude that's it for the time being! Alternatively we might regard resource discovery as a critical battlefield, not only for our users but also in defining the role and reputation of scholarly information services in the age of the ubiquitous search engine. This was the focus of Domain 2 of the SCONUL Shared Services report to HEFCE (December 2009) and is central to the JISC-funded Discovery initiative (<http://discovery.ac.uk>).

This was the context for the workshop organised jointly by SCONUL and the Discovery initiative (23 March, 2012) to establish the appetite for a new generation of highly flexible services based on the possibilities of open data and cost-effective aggregation, not limited by traditional boundaries between libraries, archives, museums and repositories and potentially extending to domains such as teaching and learning resources and research data.

The event was attended by library leaders from 19 universities - Anglia Ruskin, Birkbeck, Bournemouth, Brunel, Buckingham, City, Edinburgh, Hertfordshire, Kent, Leicester, Lincoln, Manchester, Open University, Portsmouth, Royal Holloway, Southampton, Sussex, Westminster, and Wolverhampton.

2 – Headline Observations

A range of headline observations and potential recommendations emerged from these discussions, that suggest how SCONUL, RLUK and JISC might work together with service directors and institutional managers to add profile to the wider 'discovery landscape' debate, to influence the service landscape and to develop practice.

The Resource Discovery business case itself is not an issue but ...

- Discovery is core business, underscored by student satisfaction imperatives
- The means of maintaining a 'No Wrong Door' approach, recognising a variety of channels, needs to be more fully understood
- Discovery services need a clearer view of impact measures and therefore of requirements for analytics
- Positioning discovery services in the wider institutional landscape, notably including research information, is now a mission critical debate

User Expectations

- Discovery layer products are a big step forward for students but not the answer
- What users expect to find when they search varies across levels, subjects and faculties, raising the challenge of personalisation (and vehicles such as recommenders and reading lists)
- Students and researchers display different discovery patterns and service entry points (e.g. Google, reading lists, VLE for students; subject gateways and other specialist channels for researchers)
- There is a spectrum of experience, confidence and information literacy; too much 'stuff' can cause confusion and frustration and undergraduates are typically loyal to trusted sources - they have narrow habits placing convenience over quality
- In all cases, being in sync with the global search engines is crucial; Google brings in most traffic to those who have exposed their records. However, because we have specific purposes (encouraging and enabling scholarship and quality of learning) specificity remains a requirement

Developing the Discovery Experience

- Student satisfaction is the major driver, and tracking and analysis will be crucial in this respect, though wider considerations of institutional reputation and brand are also as important as ever
- The library's strategy should be that there is "no wrong door", ensuring that resources are discoverable through the prevalent range of channels; right now the local discovery layer, Google search and relevant aggregations (e.g. Copac)
- There is throughout a tension between specificity and comprehensiveness and therefore between the one stop shop and niche interfaces
- We need use cases for 'discovery'. The emphasis for students is being able to access electronic resources at the moment of need, not discovering print items, increasingly driven by e-books more than e-journals
- The community should work together (almost certainly with vendors) to define metrics and to promote analysis methods, to understand and benchmark the meaning of 'good enough' for student and researcher use cases
- More thought needs to be dedicated to metrics and qualitative data to qualify them; activity data can play a big part, especially if linked to other learning analytics. Suggested metrics include cost, quality, customer satisfaction and impact, including student success.

Possible Game Changers

- The take-on of e-books and associated acquisition models present a key opportunity to review discovery services and supporting workflows
- The potential of aggregations should be reviewed in the context of emerging discovery models
- The bigger scholarly picture covering repositories, CRIS and research data management is institutionally challenging and cannot be ignored by libraries
- Relationships with user generated content need to be understood
- Linked data or some such tidal wave could change everything, but not so quickly as to negate the former priorities

- Libraries have unique expertise with reference to this landscape; however, new skills are crucial – do they fit in the library or elsewhere?

3 - Current Platforms & Perspectives

Delegates represented what is probably a typical cross section of discovery service provision in academic libraries:

- Four libraries had no local Discovery Layer beyond their LMS OPAC
- Two had developed their VLE / MLE as a discovery entry point for students
- 13 libraries had implemented Discovery Layer services, notably Ebsco Discovery Service, ExLibris Primo and Serials Solutions Summon
- At least two were exposing their catalogue to global search engines through OCLC WorldCat and/or making it open to Google robots.

There were a number of positive reflections on the perceived value of recently implemented Discovery Layer services. These noted the breakdown of resource silos, movement towards a one-stop shop for subscribed content, opportunities to incorporate archival material and evidence of positive responses from students.

However, the group emphasised that the new generation of discovery layer services need to be placed in perspective:

- These solutions are just a stepping stone or holding point as we seek more complete solutions involving such as text mining
- The big picture is a minefield – it's apples & oranges and expanding search across the institution hits territorial and user perception issues
- There is increasingly tension between precision and fuzzily-matched recall that 'flattens' or homogenises the results
- The discovery service is just another tool – not the single answer – and for some users choice spells confusion
- Delegates expressed disappointment with the impact in some subject areas
- The failure rate on linking can be as high as 25%
- Discovery products are hard to maintain independently of the LMS

4 – Direction of Travel

The wider resource discovery landscape is increasingly the 'elephant in the room'. Library managers recognise the importance to the academy, to its researchers and students, of a range of learning resources and scholarly assets curated beyond the traditional boundaries of the library catalogue. These include not only archival and museum collections but also teaching and learning assets stored in VLEs, OERs and research outputs in the form of publications and datasets.

In January 2012, JISC and SCONUL held a Library Directors and Senior Managers workshop to review the evolving requirements for institutional Library Management Systems (LMS) looking to the 2020 horizon. The workshop reviewed a catalogue of over 60 potential library service and institutional knowledge management objectives and their potential to act as drivers of mission critical change. The feedback was strongly aligned with the Discovery specific meeting reported above, as the Warwick delegates ranked Discovery-related change highly both as an end in itself and as a catalyst for changing wider processes and practice, relationships and responsibilities. Discovery developments

represented a significant proportion of the items identified as high priority looking to 2020, ranked as follows. Our table sets these service objectives against the priority timeline considered at the business case workshop.

January 2012: Top Ranked Discovery Objectives from Warwick Workshop	March 2012: Business case perspectives			
	Now	Short	Med	Long
1 - Expose the collection to other search mechanisms				
2 - Provide 1-stop search across all asset types				
3 - Integrate LMS & VLE resources, including reading lists				
4 - Publish open linked catalogue metadata	?			
5 - Emphasise exposure of special collections				
6 - Curate local learning resources, including OERs				
7 - Drive the value of reading lists				
8 - Provide recommender and associated 'social' services				
9 - Curate institutional research data	?			
10 - Expose the institutional repository				
11 - Expose university archives / museum (if applicable)				

Note: Library services can currently ignore [4] and [9] but it is recognised that they may be the most significant breaking waves, globally and institutionally

The headline priorities from the Warwick meeting included

- Providing one-stop search across the range of Teaching, Learning and Research asset types that are authored and collected within institutions
- Integrate reading lists effectively with the discovery of and access to library, VLE and repository resources
- Establishing sustainable curation, workflow management and exposure for all digital scholarly assets – including local learning resources and research data
- Delegates added the priority of providing a persistent personal interface to key assets, typically through bookmarking, using the metaphor of a personal e-shelf

Other challenges such as re-thinking the user access points for resource discovery or collaboration on adoption of widely used authorities and vocabularies were regarded as less critical, though not unimportant. The abandonment of the traditional LMS OPAC received a low vote on the basis that this will be a successful outcome of these broader ambitions.

5 - Discovery Service Boundaries

Taking account of the Warwick findings, delegates discussed the boundaries of and responsibilities for discovery services, raising implications for the lifecycle from creation and curation to ease and perpetuity of access.

What are the boundaries of discovery services?

It was recognised that

- New initiatives bring more candidates for mainstream discovery services – such as teaching and learning materials and research data
- New pressures are arising in research to support collaborative cross-institutional approaches and inter-disciplinary resources
- User generated content has a part to play – but where does co-creation sit with the reputational and quality focus demanded by fee-payers
- Analytics, using a variety of activity data leading to recommendations and routing, is expected to grow as an institutional requirement

- Whilst we should, like Google, be aspiring to a boundless service, there are territorial issues within institutions

There were a number of common areas that delegates agreed to be 'in scope' for resource discovery: Library assets including special collections, university archive and museum collections, full-text research publications and theses. Other areas were seen as far less clear-cut, involving loosely defined 'digital library' content or content subject special systems and access requirements

- VLE content – resources are often hidden inside proprietary VLEs
- Lecture recordings – despite some strict controls, all had lectures they wanted to make discoverable for publicity/recruitment purposes
- Full publication lists for academics - as gathered in the CRIS
- Research Data – whether metadata or the data itself, this a hot topic
- All identified internal access to and joining up of these resources to be challenging – and outside the remit of some libraries
- The integration of VLE, research publication/repository systems and activity data were recognised as areas where academic libraries had started to take a lead

There was uncertainty about the best ways to interact with external services and suggestion that it may be time for new technological solutions to such challenges:

- Making external scholarly resources discoverable (e.g. OA e-journals, OERs)
- Equally institutional resources are often available (or not) in many different places, each one incomplete in some sense – for example, aggregations such as Copac, SUNCAT, Archives Hub, Culture Grid.

Landscape Challenges

A number of strategic questions arise from these considerations of boundaries

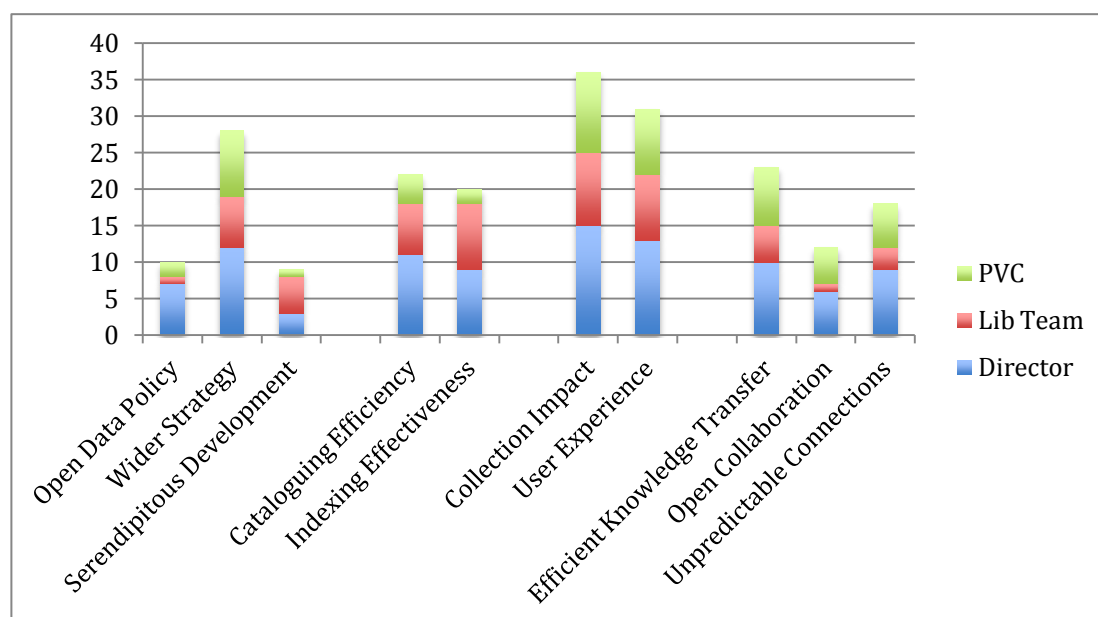
- Who should define the scope of a library?
- Where should the library / institution dedicate available effort to get most return?
- Where do you develop and locate the skills to operate in a wider landscape, involving such as research data?
- How do you cope with the uncontrolled nature of innovation with its potential to tarnish the institutional or library brand?

6 - Making the business case

The Discovery blog post on possible business cases provides some background – <http://bit.ly/vKC6h7>. A follow on post relating to feedback from the November 2011 RLUK members meeting is at <http://bit.ly/v2PJX9>.

Delegates typically viewed 'discovery' investments as a natural development of library service, filling a space not addressed by LMS. This would therefore not be subject to a new business case, being integral to the core mission and service commitments of academic libraries. There was however recognition that any service improvement (however core or incremental) should be based on the sort of rationale that would underpin a business case. Furthermore any movement to extend or to redraw service boundaries, for example to include learning and research content (see below), would require this type of appraisal. Delegates therefore examined the business case

arguments arising from the work of the Discovery programme to date to assess the importance of each argument for different stakeholders – a relevant PVC, a library or converged service director and library team members.



Based on these considerations, delegates highlighted key business case arguments, each of which needs to be backed up with appropriate service metrics or linked with wider institutional business analytics for such as recruitment, retention and success.

Institutional Drivers	1 – Policy Commitments: Fulfilling institutional policy commitments to Open Data
	2 – Strategic Objectives: Adding momentum to crosscutting strategic objectives such as personalization, user co-creation and the integration of scholarly resource management
	3 – Public Good: Contributing to the public good , recognising the responsibilities arising from public funding and motivated by a belief in the power of knowledge to benefit the UK, its businesses and communities
LAM Practitioner Benefits	4 – Professional Time: Maximising limited professional time by embedding records improvement in core workflows and / or by automating separately
	5 – Shared Mechanisms: Providing efficient shared mechanisms to generate effective indexing and access points based on standard authorities
User Benefits	6 – Collection Impact: Amplifying the impact of the collection by broadening the scope for discovery, achieving greater utilisation and enabling downstream discovery
	7 – User Experience: Using open metadata to enrich the user experience by creating opportunities for a variety of interface, surfacing the unpredictable connections and breaking down knowledge silos
	8 – Self-directed Learning: Developing support and encouragement for autonomous learning in a digital environment as a vital 21 st century skill
	9 – Community participation: Opening data to the participation of a wider community , leading at low cost to unknown benefits to research, teaching and learning, and to serendipitous and sustainable service developments