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Resource Discovery at the British Library: New Strategic Directions

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Slide 1



Resource Discovery at the British Library: New Strategic Directions

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Introduction

The search for better resource discovery services has always been at the heart of libraries. Through the development of our catalogues and other services we have constantly sought to improve the range and quality of information we offer to our users. So the current focus on resource discovery in libraries is nothing new.

What is new, however, is the environment within which we are working. The fast pace of change, innovative new web services which capture the imagination and the expectation of access to everything at the click of a button – all these present us with enormous challenges.

We are in the middle of what seems to be a crisis of confidence in our catalogues, in making our collections available and in adapting quickly to what our users want.

Like most libraries, the British Library is making a fundamental review of our resource discovery services and I'd like to tell you a little bit about this work today.

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What do users want from resource discovery services?

- Academic researchers
 - Journal articles and monographs still most important sources
 - Want seamless integration and comprehensiveness
 - Easier access to information content
- Google generation
 - Take instant access for granted
 - Social networking, recommendations, tagging
 - Music, video, images
 - Want fun!

What do users want from resource discovery services?

We are all asking what do users want and how can we provide it? In the British Library we are aware that our strategy must address the needs of both current and future generations of researchers.

In a recent survey of academic researchers in the UK, the Research Information Network¹ found that some aspects of behaviour were still very familiar.

Journal articles and monographs are still the most important sources

Journal articles are the most important resource to 71% of interviewees. Monographs were the second most important, but only mentioned by 32% of interviewees.

Want seamless integration and comprehensiveness

Researchers want a high level of integration to save repeating the same search in several separate discovery services. Hence the popularity of Google, Google Scholar and other search engines, despite the often imprecise and unwieldy nature of the results sets they return.

And comprehensiveness is more important that precision and accuracy in result sets. Most researchers prefer to sift large result sets themselves as fear of missing important information is greater than time pressure.

■ Easier access to information content

The biggest frustration was not the search and navigation services themselves, but not always having a clear set of options to obtain a full copy of the item you have discovered, whether it is digital access or physical.

But if we compare this with the world within which the researchers of tomorrow live, we see different challenges.

■ Take instant access for granted

We know from reports such as OCLC's² that students increasingly expect everything to be on the internet - and take instant access for granted. If it is not on the net it does not exist for many of them.

Social networking, recommendations, tagging

They expect a high level of community involvement in recommending, tagging and discussion as part of information services

■ Music, video, images

They take a multimedia approach for granted in the online environments they use most.

■ Want fun!

And lastly they expect these environments to be fun and imaginative to use.

With such different user expectations, we must go far beyond the traditional catalogue and think how we can offer our collections and services in totally new ways.



Analysis of the resource discovery environment

5 strands agreed as main strategic drivers going forward

- 1. Baseline catalogues and data
- 2. Web 2.0 functionality and services
- 3. New technology service layers
- 4. Digital Discovery
- **5.** End to end discovery to delivery solutions (UK Higher education)

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Analysis of the resource discovery environment

In 2006, we looked at the range of issues facing the Library as well as the organisations and communities with whom we work in close collaboration.

On the basis of this we defined 5 core strands under which we'd take the strategy forward. These are

- 1. Baseline catalogues and data
- 2. Web 2.0 functionality and services
- 3. New technology service layers
- 4. Digital Discovery
- 5. End to end discovery to delivery solutions (UK Higher education)

Let me tell you about each of these in turn



Strand 1: Baseline catalogues and data

- Manuscript and Sound collections to be integrated
- Ongoing collaborative work to develop union databases and other catalogues e.g. ESTC
- Enrichment of the core opac (book-jackets, reviews etc)
- Completion of retrospective conversion of card and print catalogues
- Ongoing data quality projects for discovery and interoperability

Strand 1: Baseline catalogues and data

Despite the current wave of criticism of the catalogue, it is not yet dead. But we do have to rethink our approach to it.

Researchers still use library catalogues, but we need to ensure that they are more integrated with other services than in the past. We must also make sure that our catalogue metadata is exposed as widely as possible in a range of discovery services for maximum visibility.

To ensure higher levels of integration for researchers we intend to continue the work on reducing the number of separate catalogues. In 2004 we made a huge step forward by integrating 23 separate databases into our main web catalogue. But this work is not complete. The remaining challenges are to integrate the discovery of our world class Manuscripts and Sound Archive collections.

An important part of our strategy is to continue to work collaboratively with the research community nationally and internationally, to enhance important resources for researchers. Our recent work on the English Short Title catalogue (ESTC)³ is an important example of this. By making the catalogue available from within the BL systems infrastructure, it is now a freely available resource to researchers worldwide.

We know that it would help researchers in selecting resources if they had additional information beyond the core catalogue data. We are currently in

negotiation with suppliers to enrich our core catalogue data with a range of images, reviews and other data.

However, we have not lost sight of the most fundamental improvement we can make to meet researchers needs and that is to make all our metadata available online. To this end, we are continuing our programme of systematically converting data in card and print catalogues and indexes to online form. This conversion is also important to provide metadata for future digitisation projects.

Underpinning all of this is a review of data quality. We want to ensure that the descriptive data we provide about our collections is good enough to meet modern research needs and in standards that allows its interoperability with other services at national and international level.



Strand 2: Web 2.0 functionality and services

- Expectations of Web 2.0 functionality from new generation of users
- Mediaeval manuscripts project
 - Descriptions enriched by wider expert communities
- Archival sound recordings project
 - Augment oral history records with additional textual descriptions, commentary etc
- UKPubMedCentral
 - Community based tagging and authority control models
- Issues
 - Do we need to moderate/authenticate content?

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Strand 2: Web 2.0 functionality and services

Users expect to see networked library services that are in line with those they see elsewhere on the web. As well as richer functionality than traditional library catalogues can offer, they also expect that they and their community can be involved in the development and shaping of services.

We are looking at ways of enriching the catalogue descriptions and other web based information for our world class collections. The main aim is to add greater value to the discovery process through involvement with the wider community.

Good examples of this type of approach are current projects to establish web 2.0 services for mediaeval manuscripts and archival sound recordings.

For mediaeval manuscripts we are planning to work with university based medieval researchers to allow them to tag and enhance the catalogue descriptions and interpretation of manuscripts provided by our manuscript curators.

We launched the Archival Sound Collection⁴ in 2006. We are now establishing a project where the wider higher education community can augment oral history records with additional textual descriptions and commentary.

UK PubMed Central⁵ is a new service in which the Library is a development partner. Initially a mirror site of PubMedCentral from NLM, it acts as a repository

for publicly funded research output in Health Sciences for the UK. We are exploring ways in which access to the materials ingested into the service can be enriched by tagging and additional description provided by authors at the time of submission. In addition, we are also working on a project to develop community based author authority control services, which will enrich traditional library authority control services.

A key challenge is to ensure that we continue to provide accurate, authoritative and trusted sources of information. We are discussing whether we need to moderate or authenticate content by others. We intend to use these projects as pilot studies, to explore this issue with the wider community and develop future projects in line with our findings.

But there is no doubt that web 2.0 services have the potential to enrich traditional discovery services in new and exciting ways.



Strand 3: New technology service layers

- "Single Entry Point"
 - Cross searches catalogue, table of contents, web pages and digital images
- High level requirements
 - Comprehensive and integrated view of the collection
 - Ability to deliver specialist views e.g. manuscripts
 - Links and connectivity to other resources and collections
 - Faceted and contextual searching
 - Relevance ranking, user defined scoping, clustering
 - Wide range of web 2.0 functionality
- Extension of existing opac functionality to offer short term improvements in bibliographic services
- Assessment of commercial products for large scale digital discovery underway with procurement expected in 2008 and implementation in 2009 -

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Strand 3: New technology service layers

Of course, much of the future potential is dependent on the library having access to the right software and system tools. On our website we have recently developed a "single entry point" ⁶. This is a Google-type search which works across our major networked services (online catalogue, journal article table of contents, web pages and digital images).

This provides a major step forward in integrating services, but we are aware it is only a first step and we need far richer functionality.

Our shopping list of requirements is much the same as everyone else's. However, because of the scale and the complexity of the collections we are working across we have divided our approach into 2 separate phases.

Phase 1 will be to add functionality which will offer us short term improvements in developing discovery services, but largely based still on bibliographic and other descriptive metadata. We are investigating the use of the Ex Libris PRIMO product to upgrade the functionality of our existing Ex Libris opac.

The next phase is to explore the range of enterprise search technologies which we will need to offer discovery and delivery services from the rapidly growing body of digital content which the library is acquiring. We expect this phase to go to procurement next year.



Strand 4: Digital Discovery

- Twin track approach
 - Fully integrated with discovery of physical collections
 - Separate, specialist discovery services
- Current projects
 - Improved click through access to e-journals and digitised books through Opac
 - Evaluation of tools for web archive access with IIPC
- Future projects
 - Push content out to the researcher and integrate it within the desktop environment where the researcher works
 - Take advantage of API's offered by others to build new mashup services with our own content.
 - Make our content available to others via API's to allow them to build imaginative and creative discovery services which we cannot do ourselves.

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Strand 4: Digital Discovery

As I mentioned in the last slide, we have a rapidly growing body of full text digital content which is at the heart of our future discovery strategy.

This content is the result of many different strands of development in digitisation, harvesting, deposit and licencing. And at present much of this content is accessible only through separate discovery services, such as the UK web archive⁷ and UKPubMedCentral⁵.

We have a twin strategy for our digital content.

- Firstly, we intend to integrate discovery of all digital content with the wide range of physical content held in the library. We can further integrate this with discovery at national and international level.
- Secondly, we realise that the scale and richness of this content will make much of it a unique resource that will require customised discovery services to allow researchers to fully explore and exploit it.

In the short term we are working on projects to provide immediate access to ejournal content and digitised books via the online catalogue. We are also working collaboratively with other national libraries in the International Internet Preservation Consortium to evaluate tools for accessing the growing body of harvested web content around the world. However, we realise that our digital content gives us the potential for developing discovery services in completely new ways for libraries. We are planning to do this in 3 ways:-

- Push content out to the researcher and integrate it within their desktop environment. This also includes integrated links between bibliographic and other data sources such as statistical or chemical datasets. This will require close collaboration with specific research communities.
- Take advantage of API's offered by others to build new mashup services with our own content.
- Make our content available to others via API's to allow them to build imaginative and creative discovery services which we cannot do ourselves.

The key to successful digital discovery does not lie solely within the traditional model of library resource discovery.



Strand 5: End to end discovery to delivery solutions for UK Higher education

Need to integrate resource discovery into broader service context – with initial focus on needs of UK Higher Education community

■Vision

- Integration of existing national services SUNCAT, COPAC, ZETOC
- Define what needs to be done nationally and what is best done at an international network level?
- Ensure all possible delivery options are available free and fee
- Local and regional views of available resources to be supported
- Integration with digital repositories, VLE's, VRE's
- Explore network level collection management options
- New roles and responsibilities for library and information professionals

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Strand 5: End to end discovery to delivery services

As I mentioned at the start, the biggest frustration for researchers recently surveyed in the UK is not search and navigation, but the frustration of not being able to access a copy of the materials they have discovered. This applies both to digital and physical content.

A major part of the British Library's strategy is to work in collaboration with other national bodies in the UK, including JISC and CURL, to develop an integrated network of discovery and delivery services to Higher Education users in the UK.

As journal articles and books still remain the most sought after materials, we have very strong foundations on which to work with national level services⁸ in the COPAC service, SUNCAT serials union database and ZETOC journal table of content services. These need to be integrated further, especially as an increasing amount of content becomes available digitally.

Part of the strategy will involve investigating what it is essential to do at local, regional or national level and what can best be done on a global scale? What is the most effective form of integration for national services with global services such as OCLC WorldCat, Google Scholar and Google Books?

Researchers are confused by the inconsistent services they can use for accessing content – digitally and physically. We therefore need to provide consistent and easy to use access options, both free and fee based. To do this

effectively we will need to build systems where not only the content but the access rights of institutions and the relationship of individual researchers to institutions within the network are clearly defined and actionable.

We will also need to ensure that we integrate with the growing body of content in open access and institutional repositories, as well as virtual learning and research systems.

Two implications of the strategy go beyond the vision for discovery services themselves. Firstly, effective integrated national discovery and delivery services will raise questions about the potential for collaborative collection building and collection management.

Secondly, as digital access develops, it is likely that researchers will pay fewer visits to research libraries. There will be less call on "in person" services provided by library and information professionals. Part of the strategy therefore has to involve looking at the development of new roles and responsibilities, especially those that help library and information professionals work on the network level.

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Next steps

- User needs and expectations research essential to shape future developments
 - > BL "Google Generation" research
 - > UK Research Information Network reports
 - > OCLC
- Integration with review of Reference and Research strategy looking at innovative ways of providing networked services
- Close cooperation with other organisations to ensure integration of BL strategy with developments at national and international levels

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Next steps

We are pushing forward on each of these 5 strands as part of our overall corporate strategy. But, as well as the core strategy, we are looking in particular at 3 related areas.

It is essential to have a clear understanding of expectations from present and future generations of researchers. As well as using external research, we are also conducting our own research into the expectations of the Google Generation.

It is also essential that the resource discovery strategy develops in line with strategy for other parts of our service, including reference and research support, development of our delivery services, and digitisation strategies. They will all influence and shape each other.

And lastly, our relationships with other key organisations at home and internationally are important to ensure that we are building services that work well within an integrated, networked environment. To do this alone is, most likely, to fail.

To conclude, it is clear that in this globally networked environment each library must think carefully about what it can offer that is different, that is unique and that adds value, because the answer to those questions will determine what you

choose to invest in, who you choose to work with and how you will be perceived by users in years to come.

Thank you.

References and useful links

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- 4. The British Library Sound Archive is at http://www.bl.uk/nsa and the Archival Sound Project at http://sounds.bl.uk/
- 5. UK Pubmed Central is at http://ukpmc.ac.uk/
- 6. The "Single Entry Point" to the British Library collections is at http://www.bl.uk/
- 7. The UK Web Archive Consortium is at http://www.webarchive.org.uk/
- 8. COPAC (CURL OPAC) is at www.copac.ac.uk, SUNCAT (Serials Union Catalogue) is at www.suncat.ac.uk and Zetoc (Z39.50 electronic table of contents service) is at www.zetoc.mimas.ac.uk