

The 21st-century library: a whole new ball game?

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Over the last few years the shift in emphasis from print to electronic collections has posed a new series of challenges for libraries. Issues regarding physical logistics are now being replaced by URL management and appropriate copy, licence agreements, linking problems and, first and foremost, the growing challenge of how to make users aware of the virtual cornucopia of e-books, journal articles, text and images. In addition, users expect this information in a one-box interface. With a reduction in many libraries' staffing, this session asked: how do we cope?



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Introduction

The provision of electronic resources uses an increasing amount of the resources in today's academic library. Over the past ten years libraries have, to a varying degree, sought to manage and expose this invisible part of the physical library. Early adopters of e-resource systems are now looking for next-generation systems in order to increase value for money of their resources. In addition, several usage surveys show that libraries often fail in making their resources discoverable and that users place a lower and lower value on the library as a gateway to finding research material. How can the libraries restore their importance and reclaim their position?

Early adopters

Computing and Library Services (CLS) at the University of Huddersfield was an early adopter of e-resource systems to administer the growing number of electronic titles. CLS moved its e-journal collection to EBSCO's A-Z in 2003. This now links over 25,000 journals and provides MARC 21 records for the Horizon Library Management System. In 2005, it was decided to adopt MetaLib and SFX from Ex-Libris, giving federated searching and OpenURL linking.

Other universities adopted similar practices or launched in-house systems, such as the University of Bolton, who in 2001 launched an in-house system using Microsoft Access to provide a semi-automated A-Z list and a basic link resolver from the catalogue.

These early adopters bought the systems as they came to market. While this was the right approach to take at the time, hindsight has revealed that an overall strategy was sometimes lacking, resulting in a number of different systems often duplicating effort. Other early adopters were unfortunate in that they purchased what are now legacy systems, or because their house systems began to deteriorate after key staff left or when network software, such as Microsoft Access, was upgraded.

Another key issue was that early adopters found that the variety of systems in place were not always as interoperable as they would now expect; this is certainly true of legacy and in-house systems. A major challenge for technical services departments is the amount of administration required if different systems are in place. For example, Huddersfield maintains two A-Z lists and separate link resolver information, and it also downloads MARC records to the catalogue. However, these often need tweaking. The result is that three different knowledge bases are effectively

maintained, which do not necessarily agree, although this does not reflect on the providers of the data.

With the introduction of more advanced systems, early adopters are in danger of falling behind. There is a real need for many libraries to re-visit e-resource systems and processes to keep up – not only with the systems themselves, but also to reflect user comments regarding their dissatisfaction about having to deal with these different systems.

However, the recent economic turmoil resulted in very real and harsh budget cuts and staff freezes. Together with the 'savings' in the spend on maintaining print collections, such as binding budgets, this means that it is potentially difficult to find a way to improve e-resource systems on a reduced budget, thus resulting in inertia.

Where do we start?

The UKSG KBART (Knowledge Bases And Related Tools)¹ working group, is investigating ways to 'develop and publish guidelines for best practice to effect smoother interaction between members of the knowledge base supply chain'. However, years of mixing and matching systems in libraries in order to improve the service to users in such a rapidly developing area has resulted in a very complicated process within the library itself. Figure 1 shows in its simplest form that, without proper planning, one change will have many knock-on effects that were not there when the

system was originally purchased. There are a number of resources that are not fully discoverable, including in-house systems, subscribed databases and even the repository!

Another potential barrier to change is the concern that the upgrading or replacement of systems could prove very costly in staff time and therefore is too much to take on; however, this thinking will leave us with systems that are often under criticism from our users².

The one-stop-shop approach

Librarians have often been guilty of making decisions on behalf of users, and this has been the case with e-resources. By creating lists of recommendations or choosing subject areas for federated searching we might miss something that can be of real use. However, federated search as it is, is not popular with users, who often revert to the traditional way of selecting resources from subject lists, resulting in information overload.

Long lists often mean that many users do not get past the first page of resources; equally, 'familiar' resources such as Business Source Premier and Emerald may have excellent usage, but this could be at the expense of more specialized resources that are underused, but potentially more appropriate in some cases.

What is needed is a true one-stop-shop approach that can be customized based on users' needs. This customization can be ascertained through usage log analysis or tagging, in addition

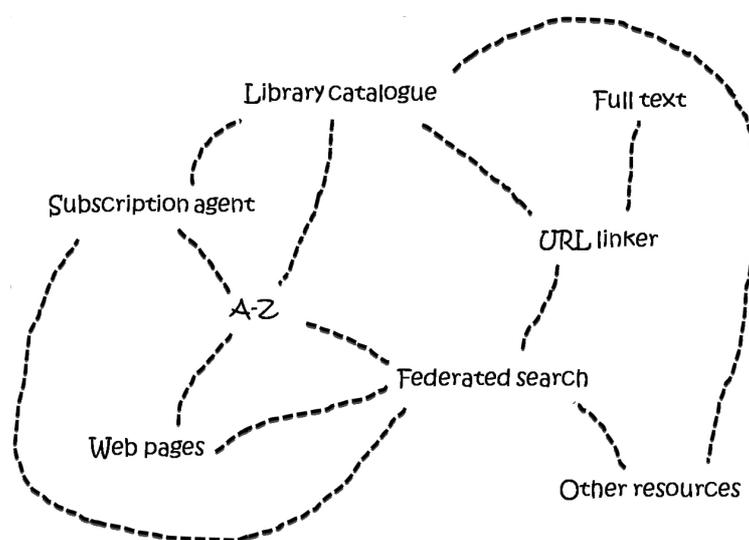


Figure 1. Simple illustration showing some of the complex aspects involved in e-resource provision

to usability testing, rather than by the traditional method of deciding on behalf of the users.

Table 1 shows a brief overview of what is available on today’s market; however, it is important to note that new products are being developed in beta, such as Serials Solution’s Summon.

No one vendor may fit the needs of every library, and vendors may disagree about definitions used in Table 1, e.g. Ex-Libris and Serials Solutions have a very different definition of a knowledge base from Swets and EBSCO, different vendors will use different algorithms in the search, and so on.

Another factor is that different suppliers have different strengths. For example, it could be argued that the knowledge base from Ex-Libris and Serials Solutions makes their products superior. However, Swets and EBSCO would argue that an ERMS from a subscription agent using subscription information was key. Other systems are attractive in that they can be tied successfully to an existing Library Management System such as Innovative, Ex-Libris or OCLC. In addition, an intuitive search interface or hosting options may prove a deciding factor.

But – if systems are truly interoperable – a ‘pick and choose’ philosophy may suit, particularly with an eye on the future?¹³

Current state

Despite many electronic collections dwarfing their print counterparts, many libraries are still essentially print facing with a mixture of e-resource provision. We have reached the tipping point¹⁴ and therefore

what is needed now is a ‘clean sheet of paper’ approach. Look at where the majority of the expenditure is and concentrate efforts on this by moving ‘e’ to the front and developing strategies around it, e.g. a Collection, Management and Development Policy that cites electronic material as the ‘standard’ format¹⁵.

Make all resources discoverable

Numerous user surveys^{16,17} show that the present methods of making electronic resources discoverable often fail: many excellent, specialized e-resources are underused, often hidden under an unintelligible name in a database A-Z list. Users often go to the well-known more general ‘database’, which can easily be a publisher platform, thus exposing only one publisher’s material¹⁸.

Federated search is a well known and mature product which gives access to searching several databases at the same time. However, it can be slow and in many cases the users find it complicated to use.

Importing e-resources as MARC records into well-known and well-developed OPACs is often recommended as a means to achieving the one-stop-shop, but treating e-material in the same way as print does not work well from the users’ perspective: many users have severe problems distinguishing an article author from a monograph author or a journal title from an article title, and of course the wealth of information searchable through any journal or e-book platform’s full text is completely lost. So users very often end up

	Knowledge base	A-Z	Linking	MARC records	Fed. Search	ERMS	Next Gen. Interface	Usage Stats	Overlap Analysis	Hosted
Serials Solutions ³	X	X	X	X	X	X		X	X	X
Ex-Libris ⁴	X	X	X		X	X	X		X	
EBSCO ⁵	X	X	X	X	X	X	X	X	X	X
Innovative Interfaces ⁶		X	X	X	X	X	X	X		
OCLC ⁷		X		X			X			X
SWETS ⁸	X	X	X	X	X	X		X		X
Summon ⁹							X			X
Aquabrowser ¹⁰							X			X
ELIN ¹¹							X			X
Summa ¹²					X		X			X

Table 1. An idea of the vendors and products available today

getting confused, go around in circles, and finally resort to the well-known simplicity and speed of the internet search engines.

It is important to embrace the possibilities of the electronic medium; it makes resources so much richer, so much more accessible for all users at all times if handled correctly. It is important to build a real digital presence for the library – the logical start for all searching through a simpler library entry page design. It is now possible to make all the library's resources (digital as well as print) discoverable through one search box, which gives a unique opportunity to design access points for electronic resources from the students' perspective, focusing on what is available.

Compare the market

We tell our users to think about their search strategies before searching. Likewise, we need to plan our e-resource strategy before assessing the market. Develop an e-resources plan to see where you want to be in five years' time. Map out the journey of how you want to get there. This is extremely useful as most universities cannot afford a 'big bang' approach and will need to phase change over a number of years, in order to manage both the budget and the change itself. Start with a blank sheet of paper and look at the reasoning behind the strategy, for example, what is the underlying reason for the system you require. Do not look at the market until you are sure you know what you want to achieve:

- a first-class search engine for your users
 - increased user satisfaction
 - increased usage
- a single interface
 - 'one-stop-shop' approach
- improved system management (interoperability and flexibility)
 - mix and match
 - future-proofing
- improved system management (management and administration)
 - less duplication of effort/more efficiencies
 - better control of subscriptions
- improved value for money
 - within existing budget.

The order of these priorities should influence your terms of reference; will assist in weighting any

evaluation of products and services and therefore help you to compare the market.

However, do not be afraid to mix and match if it suits you and allows you to future-proof, but have a plan!

What can't we afford not to do?

There is a cost involved in changing to any new system, but can we afford to stay as we are, with falling entry figures and loan statistics and, in the case of Huddersfield, around 10% of all logins to MetaLib coming from Google?

"Why is Google so easy and the library so hard?"¹⁹

This is not just an e-resources project, with increasing attention being taken of National Student Surveys; e-resources provision can often be an open goal regarding student satisfaction. What our users want is a Google search with Google-like results²⁰. Should this, therefore, be an IT infrastructure project?

"We're facing challenging budget years ahead. It's essential that we raise the profile of the library and demonstrate real value"²¹

New systems should allow us to avoid those duplications of A-Z lists on the web pages, the library catalogue, the link resolver, while bringing in isolated collections in other parts of the university, such as the repository, etc.

Does the one-stop-shop approach mean that the 21st-century library is a whole new ball game or are silos back, becoming discoverable with a slick new interface?

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