Discovery Service as One Stop Information Services

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Abstract

Libraries spent million ringgit annually for purchasing and subscribing information resources (books, journals, multimedia, online databases, etc.). These resources can be accessed through library portal and online catalog. However, the usage statistic shown that it is not very cost effective. With the advent of Internet and Google, many professors and students gravitate to Google as gateway to research. Due to this, the libraries have to change their approach in providing information access to users. Instead of bewildering users with a bevy of specialized databases—books here, articles there—many libraries are bulldozing their digital silos. They now offer one-stop search boxes that comb entire collections like Google style by using discovery tools. Among discovery tools available in the market are: Ebsco Discovery Service; Summon; Primo and WorldCat Discovery Services. This paper will discuss on the features, strength and benefits to the library as one stop information services.

Keywords:
Discovery tools, One Stop Information Services, library, Google
1.0 INTRODUCTION

Library is a repository of knowledge in a multiple format such as printed books and journal, e-books, online databases and multimedia. For centuries, the library catalogue has been a mainstay of the library and one of the major tools for access their collections and subscribed resources. With the ICT advancement, knowledge is virtually everywhere; it has broken free of the constraint of buildings. Currently, 86% of IIUM Library’s collections are in digital format (e-journal, e-books, indexes and databases). These resources can be accessed through library portal and online catalog. With the advent of Internet and Google, many professors and students gravitate to Google as gateway to research. Due to this, the libraries have to change their approach in providing information access to users. Instead of bewildering users with a bevy of specialized databases—books here, articles there—many libraries are bulldozing these. The library’s prime function is now making that knowledge available and encouraging exchange and reflection upon it. Libraries today need to facilitate multi-modal access to information and, at the same time, encourage the creative use of knowledge.

In a recent OCLC report: “At a Tipping Point : Education, Learning and Libraries : a Report to the OCLC Membership” (http://www.oclc.org/reports/perceptionscollege.htm) found that seventy nine percent (79%) of Internet users begin their online information search on a search engine especially Google. 32% of the overall online
population begin their search via search engine and end up at a library website. Also discovered that, the library website is used by 83% of online learners. Accessing article and journal databases (52%) was the most-used service on the library website. The use of the library catalog, accessing e-books and checking hours of operation round out the list of most-used services among these online learners. The vast majority found all of the items they used from the library website to be useful (OCLC, 2014).

Figure 2: Web Searches Lead to Library Website Use

When analyzing the perception, there is a need for the library to have a discovery service. Libraries and their content providers are competing with the “open web” for the attention of end users. Discovery tools are conceived and created in an attempt to help libraries and their content providers compete with Google (including Wikipedia) for the attention of students and even many faculty. These systems enable library users to access the full universe, or as close to it as possible, of content held by a library. Additionally, users can find high quality content freely available to the world through the same single search box. Primary mission of discovery systems are to connect users to the whole library’s physical and electronic holdings through an easy-to-use, single search box interface. This paper will discuss on the features, strength and benefits to the library as one stop
information services. Discovery service act as one stop service in providing searching facilities to multiple resources in one click.

2.0 DISCOVERY TOOLS

Discovery tools have existed for over 4 years. Fagan (2012) defined discovery tools as web software that searches journal article and library catalog metadata in a unified index and presents search results in a single interface. This differs from federated search software, which searches multiple databases and aggregates the result. Examples of discovery tools include:

- ProQuest Summon: serialssolutions.com/en/services/summon
- EBSCO Discovery Service (EDS): ebscohost.com/discovery
- Ex Libris’ Primo Cenytral Index: exlibrisgroup.com/category/PrimoCentral
- OCLC WorldCat Local: oclc.org/worldcat-loca.en.html

Discovery tools, which import metadata into one index, apply one set of search algorithms to retrieve and rank results. This different is important because it contributes to a fundamentally different user experience in terms of speed, relevance, and ability to interact consistently with results. Combining library catalog, article indexes, and other source types in a unified interface is a big change for users because they no longer need to choose a specific search tool to begin their search. Federated search software was unable to completely fulfill users’ expectations because of its limited technology. Now that discovery tools provide a truly integrated search experience, with greatly improved relevance rankings, response times, and increased consistency, libraries can finally begin to meet this area of user expectation. However, discovery tools present new challenges for users: will they be able to differentiate between source types in the integrated results sets? Will they be able to limit large results sets effectively? Do they understand the scope of the tool and that other online resources exist outside the tool’s boundaries?

The sea change brought by discovery tools also raises challenges for librarians, who have grown comfortable with the separation between the library catalog and other online databases. Discovery tools may mask important differences between disciplinary searching, and they do not currently offer discipline-specific strategies or limits. They also lack authority control, which makes topical precision a challenge. Their usual prominence on library websites may direct traffic away from carefully cultivated and organized collections of online resources. Discovery tools offer both opportunities and challenges for library instruction, depending on the academic discipline, user’s knowledge, and information seeking need.
3.0 FEATURES AND SERVICES OF DISCOVERY TOOLS

Discovery tools provide a fast streamlined search through a single box, but within the context of a greater experience that pulls together intuitive features and functionality.

3.1 Fast, simple access and ease of use.

Most discovery tools offer a simple interface requiring the user to enter little more than some search term. Discovery tools for libraries should provide users with the popular Google like experience; a single search box, fast response time, the ability to query a vast amount of content, and results ranked by relevancy.

![Single Search Box (IIUM Library Portal)](image)

Figure 3 : Single Search Box (IIUM Library Portal)

3.2 Variety of resources or contents

A discovery tools should providing “instant access to the breadth of authoritative content that is the hallmark of great libraries. The contents should include:

- Local contents (library’s catalog, institutional repository and archive).
- Subscribed resources (e-journals, e-books, databases, etc.)
- Open access publications (open access e-journals, institutional repositories, etc.)
- Wikipedia

A library that licenses or subscribes to the service has its catalogue holding indexed along with other resources from participating publishers and content providers, creating a “unified indexed (Howard, David, 2011)
3.3 Quality results and relevancy ranking

Searches using discovery tools will produce better quality of results than using some of the common web search engines, because they are more focused on educational content. Having said that, if the source has relatively few resources there might be nil results returned that are not relevant to a user’s particular requirements.

Relevancy ranking of search results has been a concern in discovery service (Randall 2006). Both EDS and Summon present results in a relevancy ranked list by default. Each system places the most relevant records higher in the list. EDS ranked the search results based on the currency (more recent journal articles rank higher), document type (lower relevance) and length (article of more substantial length have a heavier weightage).

3.4 How results are saved

Discovery tools should provide a facility for saving the results of a search. It may be possible to select individual references or resources available as web links which are of particular interest from the returned results list. These results might be
saved in various formats. They might be saved and posted to a user’s email address or saved to the local hard drive as a Word or pdf document, or Excel spreadsheet. While this is all well and good, if it can be saved in the form of XML documents.

3.5 Search Refinements

The system should have a variety of options for using search refinements. Users take advantage of using the refinement to enhance their searches. As in the Summon study, participants relied heavily on the refinements, making use of them most often as a post-search refinement technique. Unlike the EDS study where the most common choice was limiting to peer-reviewed records (Foster, 2013).

3.6 Discovery, Resolution and Access Holding information

A Discovery tool may return a list of results specifying that certain books or journal articles are located in the library. This information is useful in itself – it is good to have some idea about the existing knowledge on any particular topic. Examples are as in figure 4.

3.7 Serve Users in any Languages

The discovery tools platforms’ should have built-in multilingual and Unicode support. It should allow users to change language on the fly and display search result using Roman and non-Roman character sets.

3.8 Mobile Access

All discover tools should support accessing of information through IT gadgets such as smartphones, iPADs, PDAs, and tablets.

3.9 Support

Further customization of discovery tools is desirable. To ensure the portal and search facility are properly done, the collaboration on technical aspects need to be strong.

4.0 BENEFITS

4.1 Meet Users’ Expectations

Many users specifically mentioned Google as a tool to emulate their information searching (Li Fu, 2014). It became apparent to the library management to offer users a Google-like interface to the library’s e-resources. Discovery tools, with
their streamlined interface that can provide a ‘single point of access leads to a wide range of library content through a Google-style search box.

4.2 Increase accessibility of resources

With discovery tools, library can better utilize its resources while bringing the expanse of its substantial resources to the fingertips of users in full glory. Discovery tools like Summon and EDS exist to maximize resources use, minimize student frustration and ensure libraries’ pivotal role in information use and retrieval. Every library that has implemented discovery service has reported on the whole usage of e-resources has gone up (Aaron, 2013).

4.0 CONCLUSION

UTC (Urban Transformation Centre) is one stop service provided by Malaysian Government under its Blue Ocean Strategies. The centers provided several government services (police, emigration, clinics, and etc.) and it gets positive impact. Same as discovery service where it provides user experience to search information through multiple resources (journals, books, e-contents, indexes, etc.) and format with one click. This service meets users’ expectations where they are able to search all databases at one time, sort of like with Google. Thus, it will give positive impact to the libraries, increase usage statistics and cost effective.

REFERENCES


