

Chapter 5

Web-scale Discovery Tools: A Solution for Inestimable Online Resources

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ABSTRACT

Due to the overwhelming increase in the electronic resources and databases, there is a difficulty in searching and locating the exact piece of information and at this context, resource discovery tools or web-scale discovery services emerged. No person is capable to cope up with all the information / literature available in electronic sources. At this point, resource discovery tools are providing a helping hand to find the precise information at the user's point of view. This chapter deals with various concepts, definitions, needs, type of services offered and different providers of discovery tools are discussed.

INTRODUCTION

For the sake of convenience of searching the resources, the integration of internet and library catalogues were in discussion for past several years. A single search interface which will combine all the results from library databases, catalogues, electronic resources etc are much more appealing than searching each in separate windows. Web-scale discovery services, through the view of Vaughan (2011) are combining vast repositories of content with accessible, intuitive interfaces; hold the potential to greatly facilitate the research process. While the technologies underlying such services are not new, commercial vendors releasing such services, and their work and agreements with

publishers and aggregators to pre-index content, is very new. Web-scale discovery services are able to index a variety of content, whether hosted locally or remotely. Such content can include library ILS records, digital collections, institutional repository content, and content from locally developed and hosted databases. Such capabilities existed, to varying degrees, in next-generation library catalogs that debuted in the mid 2000s. In addition, web-scale discovery services pre-index remotely hosted content, whether purchased or licensed by the library. This latter set of content—hundreds of millions of items—can include items such as e-books, publisher or aggregator content for tens of thousands of full-text journals, content from abstracting and indexing databases, and materials

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housed in open-access repositories. Resource discovery tool not an equivalent to “Googling” something, but it is an evolved function that proposes better results for the library / information users.

Sedwick, M (2012) is of the view that libraries now navigate inexorable turbulence in an information environment irreversibly tainted since the advent of the Internet and migration to digital formats and hence Libraries are struggling with a new flora and fauna which help users in discovering scholarly content, including search engines, social networks, and websites from scholarly societies, academic communities, publishers, and journals. As a result, libraries are no longer the initial point for research, and now a day even it is not considered as necessarily integral to scholars’ research work-flow. And hence, the future of libraries and librarians role became uncertain. Powell, A (2012) says that the magnitude of the sea change in the scholarly communications ecosystem has prompted recognition of a “new norm” that mirrors the new realities for information users and providers in larger society. The Pew Research Center’s Internet & American Life Project has identified eight new realities within the emerging information landscape in the United States, Rainie, L (2012):

- The world is full of networked individuals using networked information.
- The 4 V’s of information change are characterized by the physics principles of volume, velocity, vibrancy, and valence/relevance.
- People are shifting information channels to consult upwards to six online platforms (for news) on a typical day.
- People are not ‘platform zealots’ and, rather, move easily among and to platforms that they perceive to meet their needs, requirements, or expectations.
- People increasingly expect portable (mobile) and participatory information ex-changes.

- People also increasingly expect that information exchange is personal and therefore customized.
- Influence is migrating from organizations to networks and new “experts.”
- Social networks are more influential and are differently segmented and layered.

These realities produce new research workflows and discovery methods and challenge long-held assumptions about scholarly gatekeepers and evaluators, knowledge containers, social norms, and information architecture and policies,¹² along with the emergence of new business models and customer bases.¹³ In response, libraries, publishers, and vendors are leveraging new technologies while weathering turbulent conditions to satisfy--and even anticipate--the expectations and requirements of traditional market shares and new constituency groups.¹⁴

WHAT IS WEB-SCALE DISCOVERY

Discovery tools are most frequently defined by the term - web scale - due to the fearsome quantity of information presented. Teets (2009) defines web-scale as - a system which is Highly Available, Reliable, Transparent, High Performance, Scalable, Accessible, Secure, Usable, and Inexpensive. In this background of discovery tools, web-scale discovery is more suitably defined as — a link between the information user and the platform on or location at which the information resides... with a single search box interface to pre-indexed metadata and/or full-text...intended to provide users with a simple, fast, and easy “Google-like” search experience; to provide librarians with increased awareness and usage of their holdings; and to provide content providers with an opportunity for increased usage, especially by inexperienced searchers, and with a distribution channel that can broaden their brand awareness (NFAIS, 2011).

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