

Editorial

Libraries are presently operating in silos. Libraries in India are no exceptions. Lorcan Dempsey in his blog opined in 2009 that the library ecosystem includes three classes of systems - the classic ILS, the system for licensed collections (also known as ERMS), and the repository system for open access digital resources¹. Unfortunately, these silos are serving users as independent subsystems within a library system with almost no integration at any level. Libraries are using the ILS for managing housekeeping operations and for providing the library OPAC, while digital repository systems are being used for managing institutional digital assets. In addition to these independently operating subsystems, libraries include repositories for learning materials, cultural objects, subscribed journal portals, subscribed databases, etc. Some of these silos offer retrieval of metadata only, some support retrieval at full-text level and invariably in all libraries user interfaces and retrieval techniques differ from one subsystem to another. As a result, users of our library systems are running from pillar to post (here different subsystems) to retrieve resources against a query in mind. This is not an ideal situation as far as resource discovery in a user-centric environment is concerned.

Here lies the significance of a library discovery system. UKSG, in its report on impact of library discovery technologies (in association with Loughborough University in 2013), reported in the key findings section that libraries are increasingly providing a single search interface linked to full-text for entire library resources to ensure rich user experiences and also confirmed that the perceptions of increased usage of library services following implementation of a discovery service are actually based on real life usage data². Marshall Breeding in 2015 opined in the NISO white paper on the future of library resource discovery that discovery systems are part of a natural progression from online catalogs, to metasearch tools, to the current generation of pre-harvested index-based discovery services³. He also predicted that these emerging tools and technologies will be matured through – i) seamless integration with different library resource management systems in real time; ii) transformation of the present index-based model of discovery to open linked data based discovery in place of or in addition to harvested citations and full-text; iii) increasing use of open source tools (like Apache-Solr, Apache-Tika, etc. as search platforms), open standards (like OAI/PMH, OAI/ORE, etc. as interoperability standards), and open content (like open access journals, open access repositories, etc. as resource base); iv) better search performance and increasing internationalization & localization (I18N/L10N); and v) extension of the domain to include non-bibliographic resources. Similarly, the NISO best practice document entitled *Open Discovery Initiative* in 2014 reported the evolution of library catalogues and other finding tools into index-based resource discovery and delivery systems and recommended structured approaches related to metadata ecology, COUNTER-compliant usage statistics and collection-level descriptions in developing library discovery systems⁴. In the last four years, IGI Global produced two books exclusively on library discovery systems^{5,6} covering almost every aspect of the domain including chapters on possible future applications of discovery systems in libraries of the developing block of the world. Some experts, by analyzing global strategic technology trends for 2013, opined that a new library ecosystem is taking the place of ILS (or LMS) to provide an interconnected and interoperable system environment⁷. The Quali OLE (an open source, futuristic ILS, which is acting as the code base for the next-level open library environment, named as FOLIO project), for example, never included an OPAC module in its distribution, instead encouraging implementations of OLE to apply VuFind (an open source comprehensive library discovery system) as the interface for discovery and delivery.

The foregoing paragraph clearly indicates the rise of a new layer in the library ecosystem as the front-end for retrieval of content from distributed and often unrelated resource management systems. This trend is not yet visible in Indian libraries but almost all large academic libraries in the developed block of the world have already opted for library discovery systems⁸. Indian libraries are increasingly feeling the need of library discovery systems both for the bibliographic domain and other non-bibliographic domains like cultural and heritage objects, museum and monument objects etc. The need of one stop access for a wide range of library resources to save users from accessing different interfaces is another compulsion in Indian libraries where automated library systems and digital library systems are often two separate entities. On this backdrop, this special issue - of *Annals of Library and Information Studies* (December, 2016) is an attempt to unfold different aspects of resource discovery systems in general and the open source library discovery solutions in particular. It includes a total of six papers covering facets like applications of library discovery systems in the cultural domain by using VuFind; a success story of the Pika discovery layer for different types of libraries with groundbreaking achievements like FRBRized discovery and linked open data integration in the discovery layer; a user perceptions survey related to library discovery system in a large academic

library; designing a framework for a full-text retrieval system through integration of Koha as ILS, Apache-Tika as full-text extractor and VuFind as discovery layer; developing a theoretical foundation for inclusion of social tagging in the retrieval subsystem of a discovery layer; and tinkering of a custom search engine as a one stop library access destination and its subsequent inclusion in the library OPAC. A matter of great pride for this special issue is that half of the contributed papers are from abroad and this fact shows the increasing global visibility of ALIS in the domain of LIS research.

The editorial board extends earnest gratitude to Mr. Demian Katz, the developer of VuFind (the most popular and feature rich open source library discovery system) and a global expert in the domain of library discovery system for his visionary suggestions, active advice and all round support in shaping this special issue right from its journey from the idea plane. We acknowledge with heartfelt thanks and deep regards his intellectual contributions without which this special issue would not have been a reality.

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