

Discovery Systems as Convergence:

A Systematic Review of the Research Literature on an Emerging Library Technology



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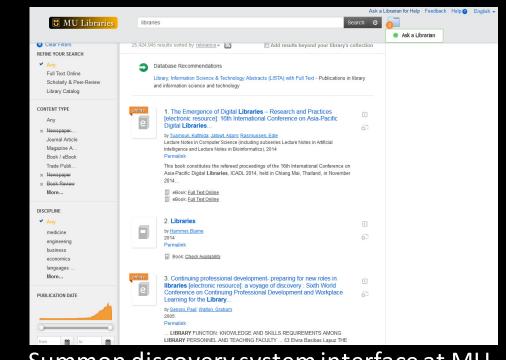
Introduction:

Discovery systems were developed in 2009 and bring together the results from disparate databases such as the library catalog, electronic article databases, and ebook packages (Open Discovery Initiative Working Group, 2014).

Discovery systems contain:

- Central index
- Single search box
- Relevancy ranking
- Facets

(Breeding, 2015)



Discovery systems as a technology have the documented potential to reshape library work and use. This research examines how library professionals are studying the systems and how they are communicating about them, providing evidence about the systems as change agents for convergence.

RQ1: What is being communicated, and who is communicating, about discovery systems?

RQ2: In what way, if at all, has scholarly communication changed since discovery systems were first introduced?

H1: Most publications will be in academic settings.

H2: Communication about discovery systems will change over time.

Method

The goal of systematic reviews of literature is to uncover "the studies of a phenomenon, and then evaluate, analyze, interpret, and present the methods and results of the review" (Cooper & Harris, 2009). They examine the methods, theories, and perspectives of researchers in order to generalize about communication about the phenomenon. Systematic review has been used widely in the social sciences, including library and information science (see Connaway & Dickey, 2010; Hersberger & Demas, 2001).

Scope of discovery system articles retained for review:

- Peer-reviewed research articles indexed in Library,
 Information Science & Technology Abstracts with Full Text
- Published between 2009-2013
- Must be about explicitly about Discovery systems
- Must include a review of the literature (at least five references)
- Must span a length over five standard pages.

Data Analysis

Coding: Article content and information about the articles

- 1) the research method (e.g. case study, survey, theoretical, etc.) and
- 2) The nature of the results (e.g. reporting/discussing results pertaining to implementation, costs, usability, etc.).
- 3) The type of library (academic, public, special)
- 4) The kind of journal (e.g. technology-oriented, reference, cataloging, etc.).

Significance: Given the focus on academic settings, not all library types or users are represented in the literature, which points to a need for further research. This study demonstrates that the scholarly communications surrounding discovery systems are evolving, moving from technologists to a merging or converging of general responsibilities and concerns.

References

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Hersberger, J. A. and Demas, C. (2001). The current state of public library research in select peer-reviewed journals: 1996-2000. *North Carolina Libraries*, 59(1), 10-14.

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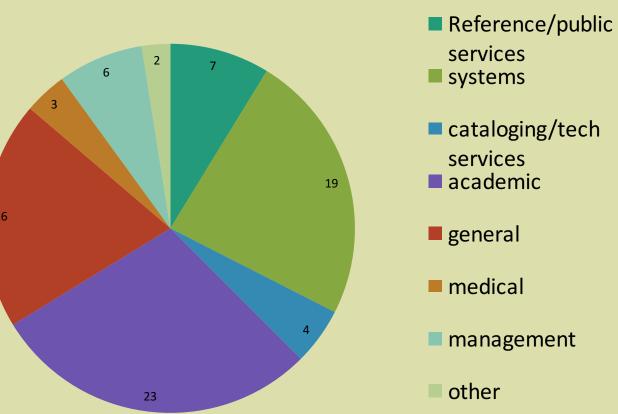
http://www.niso.org/apps/group_public/download.php/14820/rp-19-2014_ODI.pdf

Community of users, by year of article

	Academic	Public	Child- ren	Other/ Mixed	Total articles in year
2009	8	0	0	2	10
2010	4	0	0	1	5
2011	10	0	0	1	11
2012	34	1	0	3	38
2013	14	0	0	2	16
total	70	1	0	9	80

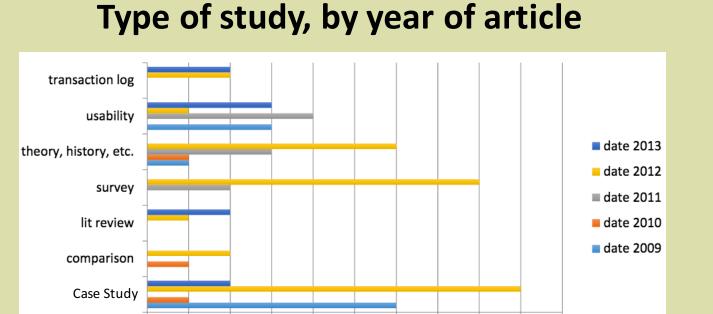
Almost all publications involve an academic community of users. This shows that both public library and children need to be studied so that we understand the full effect of these systems.

Type of journal



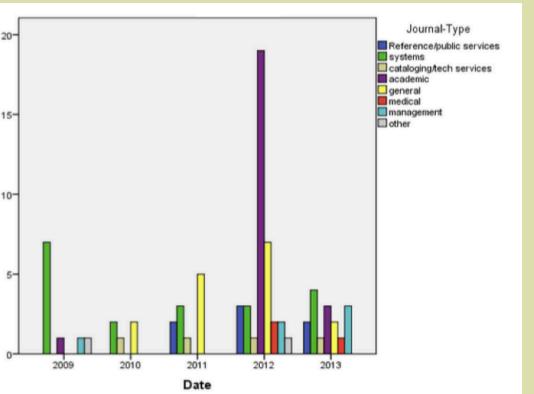
The audience for articles that were published was primarily academic librarians or generalists.

Findings



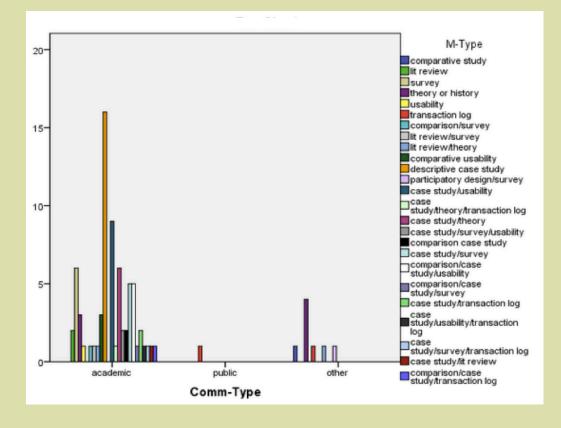
Here, we can see a shift in research methods. For instance, in 2012 the novelty seemed to peak, and there was an exceptional variety of research published as early adopters reflected on their implementation experience and looked to the future.

Journal type, by year of article



In 2009 more technologists were writing about these systems than others. In 2012, there was a demonstrated shift in concern from the technologists to generalists and academic librarians.

Method, by type of community



This unwieldy chart shows the combination of methods that researchers used to answer their questions, and thus the complicated questions that discovery systems yield.