NEXT GENERATION CATALOGUES: AN ANALYSIS OF USER SEARCH STRATEGIES AND BEHAVIOR

BY

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DISSERTATION

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ABSTRACT

The movement from online catalogues to search and discovery systems has not addressed the goals of true resource discoverability. While catalogue user studies have focused on user search and discovery processes and experiences, and construction and manipulation of search queries, little insight is given to how searchers interact with search features of next generation catalogues. Better understanding of user experiences can help guide informed decisions when selecting and implementing new systems. In this study, fourteen graduate students completed a set of information seeking tasks using UIUC's VuFind installation. Observations of these interactions elicited insight into both search feature use and user understanding of the function of features. Participants used the basic search option for most searches. This is because users understand that basic search draws from a deep index that always gives results regardless of search terms; and because it is convenient, appearing at every level of the search, thus reducing effort and shortening search time. Participants rarely used advanced search but selected it as a secondary alternative, especially when searching for local library or print collections. Participants understand an online catalogue as a list of library holdings that provides access to local print collections; and offers options for refining voluminous result sets. Participants frequently used author, title, subject, keywords; and citation, search within, print, save, e-mailing, fulltext download that offered clear alternatives to searching and search reformulation respectively. Such features are familiar to users from past search experiences and puts them in control of the system. Participants understand the function of VuFind features based on their perception and preference that: VuFind will give relevant and current information because of the large collection size at UIUC; because of their prior experiences with quick, minimal effort search reformulation strategies; and VuFind's large result sets, presented in systematic and logical order. The evidence confirms that information tasks guide and shape the way searchers select and use system

features. Participant search processes change during and after using a specific system. Alternatives to improve the design of more robust search features are proposed.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

"*In principle, evaluation should be a significant check of a system's capacity to deliver what is required of it.*" (Twidale, Randall, & Bentley, 1994, p. 441)

To get the attention of library users libraries are providing Web applications that offer centralized access to widely sourced library content. Next generation catalogues like VuFind offer such access and have many features and functionality similar to commercial search tools like Amazon, Google Scholar, and Facebook but from the user's point of view these tools perform similar functions to each other. Current access tools provided by libraries do a poor job of creating effective access. By working to gain better insight into how users interact with the features of next generation catalogues and how they respond to using these systems, libraries can overcome user confusion and frustration. Taking a qualitative approach, this dissertation research explored empirically how graduate students interact with the VuFind installation at University of Illinois at Urbana-Champaign (UIUC). Particular attention was paid to the systems features a group of graduate students use in their information seeking tasks. This research echoes Mitev's assertion that any decision to improve system design should be "*accompanied by an evaluation of its use and success or failure with the users*" (1989, p. 169). There is rich literature focusing on the search and discovery process (Johnston, Salaz, & O'Connell, 2013; Majors, 2012; Moore & Greene, 2012; Skinner, 2012), how to construct a search query (Bauer & Peterson-Hart, 2012; Borgman, 1986b; Pirmann, 2012), and how to narrow results to a usable number in relationship to users' backgrounds, age, academic level (Bauer & Peterson-Hart, 2012; Kules & Capra, 2012; Preater, 2010), subject interest, and experience with computers and type of library (academic, public, school and special) (Ahmad, Mushtaq, & Imran, 2012; Gallaway & Hines, 2012; Madhusudhan & Aggarwal, 2011; Ruzegea, 2012). However,

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