Chapter 6
The Query is Just the Beginning: Exploring Search–Related Decision–Making of Young Adults

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ABSTRACT
Web search has become an integral part of everyday online activity. Existing research on search behavior offers an extensive and detailed account of what searchers do when they encounter the search results pages. Yet, there is limited inquiry into what drives the particular search decisions that are being made and what contextual factors drive this behavior. This study provides a user-centric inquiry focused on in-depth detailed investigation of search-related decision-making processes. It builds on data collected through analysis of structured observations of young adults performing searches on their personal laptops. It focuses explicitly on the decisions the users make after completing a query and facing a list of search results. The study reveals a pattern of sophisticated use of a variety of explicit cues, tacit and contextual knowledge, as well as employment of an incremental search strategy.

INTRODUCTION
The continuously growing volumes of information pose significant challenges in terms of evaluating credibility, quality, and relevance of online content. In recent years, search has emerged as a major tool through which people find information and experience the online world. Search engines have been referred to as the gatekeepers of online information because they apply algorithms that make decisions about which content to present to the user out of the millions of available options. They have been criticized for enabling the reproduction of the traditional media landscape where a handful of large, influential websites are accounting for the majority of web content and traffic (Granka, 2010). Yet search engines are not a purely technical phenomenon. Hargittai (2007)
described them and their uses as “embedded in a myriad of social processes that are important for social scientists to consider in their research in order to understand the social implications of these important tools of our time” (p. 775). Moreover, she emphasized that “[g]iven their popularity, search engines are important brokers of information, and knowing more about how they represent content and how they are used is vital to understanding patterns of information access in a digital age” (p. 775-776).

There are a variety of studies focused on search engines and information seeking behavior. Depending on the home discipline, they range from system-focused studies (development and improvement of search algorithms and indexing techniques) to the human-focused studies (dealing with users’ information needs and their information seeking behavior) (Kelly, 2009). Studies that acknowledge human agency typically focus on user behavior, with an emphasis on identifying patterns of how searchers interact with search engines. Thus far, there is limited inquiry into what facilitates the searcher’s decision-making as to which search results to follow.

A variety of studies have dealt with the questions of credibility and quality of online information. Some of the early scholarship in this area focused on evaluating the elements of web pages and their content (Flanagin & Metzger, 2000; Fogg et al., 2001, 2003). Another line of scholarship focused on the cognitive processes involved in evaluation of information (Hilligoss & Rieh, 2008; Metzger, 2007). Recently, there is a growing focus on the social aspects of credibility judgments (Metzger, Flanagin, & Medders, 2010). Although on its face useful, there is limited application of this body of knowledge for furthering the understanding of the searcher’s decision-making process when she or he encounters a page with a set of results.

Bridging the two areas of inquiry, this study aims to shed light on what users do know about search engines and the search process, and how they integrate this knowledge with their perceptions of credibility in their use of search systems. It builds on data collected through analysis of structured observations of young adults in the U.S. while they searched on their personal laptops. It focuses explicitly on the decisions users make after they complete a query and are facing a list of search results. In other words, this paper asks not only what elements of the search results people pay attention to or what search results they actually follow, but also (1) how they interpret the various elements of the search results and (2) what aspects of context of their search activity influence their decision about which result to click on. Our goal is to advance a more holistic view of the Web as a longitudinal social experience.

BACKGROUND

Understanding how people search, particularly how they navigate through their search results, is important for those designing search engines, teaching digital literacy skills, as well as for those concerned with the social implications of search. Yet there is limited research into what facilitates people’s decisions to choose certain search results over others. There is extensive literature on what decisions people make when faced with a list of search results or on the information needs that underlie their search behaviors and how to predict them (Agichtein, Brill, & Dumais, 2006; Agichtein, Brill, Dumais, & Ragno, 2006; Downey, Dumais, Liebling, & Horvitz, 2008; Jansen, 2006; Jansen, Booth, & Spink, 2008; Jansen & Spink, 2006; Rieh & Xie, 2006; Silverstein, Marais, Henzinger, & Moricz, 1999). There are numerous studies about the path users take through search results until the moment they decide to click on a particular link (Cutrell & Guan, 2007; Dumais, Buscher, & Cutrell, 2010; Granka, Joachims, & Gay, 2004; Guan & Cutrell, 2007; Lorigo et al., 2008), in other words, how people physically reach a link on a search engine results page (SERP). But there is limited inquiry into what facilitates