The Changing Nature of Information Behaviour

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INTRODUCTION

Searching for information is and has always been an inherent part of human behaviour. However, over the last fifty years searching for information, or information behaviour has been revolutionised through succeeding generations of digital technologies, and is likely to continue to evolve for the foreseeable future. Information users have always searched for information about people, companies, subjects, products, and documents in their various roles of user, consumer, learner, teacher, worker and leisure-seeker, however search has undergone and continues to undergo major transformations. The wealth of information available on the web ranging from the latest research, through health advice, to product reviews, means that the information content of the web can touch every aspect of people's lives. However, in order to make full use of this information, people need to be able to locate the information that they require to support the various activities in which they engage. In response to this inherent demand for search tools, search technologies have been continuously enhanced, so that they are more flexible, easier-to-use, and, with their implementation in smart phones and other mobile devices, are always to hand. Some describe this as the digital age and people as digital consumers. This article argues that it is more apt to think in terms of the 'search age' and 'search-led consumers', and acknowledges that we are on the brink of a future in which search is a seamless part of everyday living, which with the advent of the latest mobile technologies can be performed anyplace anytime. In addition, social media, and most importantly its access through mobile devices, is placing increasing emphasis on the social and collaborative aspects of information behaviour. These changes need to be factored into models and theories regarding information and search behaviour.

The objectives of this article are then to:

- Review established theories on information searching and seeking behaviour
- Explore the following facets of emerging information behaviour:
  - The centrality of relevance, convenience, and trust.
  - The impact of mobile, and social media technologies on information behaviour
- Offer recommendations for further research.

BACKGROUND

Information science has a longstanding interest in information behaviour in general, and more specifically, information seeking and search behaviour. Many of the earlier models were developed in the context of searching in libraries, for both print and online information resources and documents, and often focus on search behaviours in contexts relating to learning or research. However, over the past fifty years there has been a revolution in which first search tools, and then increasingly documents, have become digital. Digital search tools, or search engines, use the natural language of documents, and web pages and any associated author-created metadata to assign search keys or metadata to documents. Key early contributions are the behavioural model of information searching strategies (Ellis, 1989), Information Search Process (Kuhlthau, 1991) and the problem–solving model (Wilson, 1997). Kuhlthau's (1991) model, for example, identified six information-seeking stages: initiation, selection, exploration, formulation, collection, and presentation. These models are grounded on the underlying assumption that information seeking is a process in which information

needs are pursued, or in which problem-solving takes place. Two more recent models that place emphasis on the iterative nature of the process, and go some way towards reflecting the complexity of the process in web environments, are those of Hope (2007) and Foster (2004). The central research objectives for this discipline are to: understand information behaviour (for its own sake); enhance the design of information retrieval and search systems; and, discover best practice to inform the training of information users and information professionals. Key themes are: information needs, search processes, search tasks, and information literacy and expertise.

Theory on everyday life information seeking (ELIS) has been informed by a wider range of disciplinary perspectives than traditional information behaviour. Dervin (1973) proposed an important theoretical basis for ELIS, by viewing people as actors making sense of their daily world. In this role, they are seen as facing problematic situations and trying to make sense of them by posing questions, and seeking answers from various sources. The major problem areas were identified by Warner et al. (1973) as being consumption, health, education, employment, transportation, recreation, and financial and legal matters. Whilst traditional information science studies tend to privilege task, and are often closer to the system and its specific features, studies in ELIS tend to be more interested in context, recognising that problem specific information needs arise from the situation in which people find themselves (Savolainen, 2008). Research and theory on ELIS is an important platform for developing a more holistic picture of the way in which search becomes seamlessly embedded in people's lives. The central research objectives for ELIS are to: understand information practices, emphasising the social and contextual dimensions of search; understand the way in which developments in information technology and media are impacting on diverse aspects of our lives; and, develop models of living that are a perpetual cycle of information acquisition and evaluation. Key themes are: source preference, social search processes, information in life events, and information seeking in specific everyday arenas, or by specific groups. Some studies, such as those that study consumer or tourist behaviour are designed to provide marketers with insights that will assist in the selection of communication media and the design of promotional messages (Carneiro & Crompton, 2009).

FACETS OF EMERGING INFORMATION BEHAVIOUR

The Dynamic Between Relevance, Convenience, and Trust

Traditional information science privileged relevance as the key criteria influencing information behaviour. However, recent research suggests that not only is it necessary to consider different types of relevance, but that convenience and trust are also fundamental determinants of search behaviour. All three affect the use and selection of search tools and digital information sources or documents, and notions of search performance.

Relevance refers to the extent to which a document or a piece of information solves a problem or meets a search need (Rowley & Hartley, 2008). Early discussions of relevance were concerned with algorithmic relevance, or the extent of the match between a set of documents retrieved from the search, and the user's query. However, other types of more subjective relevance are also employed by users, including: relevance to a subject or topic (topical relevance); relevance to the users' existing state of knowledge (cognitive relevance); and, relevance to a task, or problem (situational relevance) (Saracevic, 1996). In addition, there is an increasing body of evidence that trust, trustworthiness, and credibility are important, both in relation to digital information, and in relation to the search tools that are used to identify information and documents. In addition, this is one area where research has been conducted across a range of different contexts. For example, whilst some studies examine credibility on the web or in relation to web content (Hargittai et al., 2010; Metzer, 2007) in general terms, others explore credibility or trust formation in specific contexts, such as web sites (Bart et al., 2005), health information (Harris et al., 2011), Wikipedia (Lim & Simon, 2011), and online shopping (Clewley et al., 2009). In some contexts, trust in digital information is embedded in the wider transaction-based interaction with online retailers and other businesses (Li et al., 2011).

Convenience is often cited as one of the defining characteristics of online environments, due to their inherent anytime, anywhere service availability (Griffiths & King, 2008). Indeed, Connaway et al. (2001) suggest the scarce commodity has switched

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