Chapter IX

Illustration and Validation of the Interactive IR Framework

Overview of the Empirical Study

Objective of the Study

In order to illustrate and validate the planned-situational interactive IR model, I conducted an empirical study. This study was a pilot of a large-scale study, discussed in the summary of this chapter, that focuses on the investigation of how people seek and retrieve information in their research proposal writing process. The objective of the study is particularly concerned with whether multiple information-seeking strategies were applied and shifts in information-seeking strategies occurred in users’ information-seeking and -retrieving process. This study addressed the following research questions:

1. What are users’ levels of goals/tasks and their representation?
2. What are users’ personal information infrastructures?

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3. What is the social-organizational context for users’ information seeking and retrieving?
4. What types of IR systems do users access and what types of influences do these systems have?
5. What are the types of information-seeking strategies employed by users?
6. Do users shift their current search goals and information-seeking strategies in the information-seeking and -retrieving process? If yes, how?
7. What are the factors that lead to different levels and types of shifts?

This research helps us understand the nature of information seeking and retrieving, in particular, the nature of interactive IR. Applying empirical data to examine the major components of the planned-situational interactive IR model and their interactions effectively assists us to validate and illustrate this model. The major contribution of this study is that it investigates users’ dynamic information-seeking processes related to their work and search tasks instead of a snapshot of an information-seeking activity. The empirical data further enrich and enhance the interactive IR framework. In addition to this study, I also incorporate some related studies to validate and illustrate the planned-situational interactive IR model.

Methodology

Twenty-one subjects were recruited from the School of Information Studies at the University of Wisconsin-Milwaukee (UWM). These subjects were students in a class in which they were required to write a research proposal as a final project. The data collection process lasts about a semester (about three months). The data were collected from the following means:

1. The subjects were instructed to fill out a prequestionnaire that consisted of their demographic information and their past experiences in information seeking and retrieving.
2. The subjects were instructed to keep a diary of the information-seeking and -retrieving process for writing their research proposals. Each diary records the following information: research proposal topic, search topic, the time spent on each of the information resources, his/her interaction with each of the information resources, types of problems encountered, how he/she solved the problems, results of his/her interactions, his/her next steps, and so forth.
3. After the subjects were done with information seeking and retrieving, they were instructed to fill in the postquestionnaire, which included the changes or lack of changes in their search topics and associated reasons; their assessment
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