

Chapter 1.7

Tips for Tracking Web Information Seeking Behavior

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ABSTRACT

This chapter provides various tips for practitioners and researchers who wish to track end-user Web information seeking behavior. These tips are derived in large part from the authors' own experience of collecting and analyzing individual differences, task, and Web tracking data to investigate people's online information seeking behaviors at a specific municipal community portal site (myhamilton.ca). The tips discussed in this chapter include: (1) the need to account for both task and individual differences in any Web information seeking behavior analysis; (2) how to collect Web metrics through deployment of a unique ID that links individual differences, task, and Web tracking data together; (3) the types of Web log metrics to collect; (4) how to go about collecting and making sense of such metrics; and (5) the importance of addressing

privacy concerns at the start of any collection of Web tracking information.

INTRODUCTION

Upon first consideration, employing Web tracking to better understand end-user experiences with the Web seems to be a simple process of installing the tracking software, collecting the data over a certain period of time, and conducting the analysis. However, our own experience in setting up, collecting, and analyzing Web tracking data has shown us that the process is surprisingly more difficult than originally expected.

To share what we have learned to help others set up and better utilize Web tracking tools, we have reflected upon what we believe are key tips concerning the use of Web tracking in any Web information seeking analysis. Thus, the overall purpose

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of this chapter is to discuss the practicalities and usefulness of collecting Web tracking data to help measure and assess the performance and usage of a Website or application, particularly with respect to Web information seeking.

Note that the ideas presented in this chapter are grounded in a research project conducted by the authors over the last three years that investigates people's online behaviors at a municipal community portal site called myhamilton.ca (www.myhamilton.ca). The ultimate goal of the project is to understand the relationships among individual user characteristics such as demographics and personality traits, user attitudes toward and perceptions about accomplishing certain tasks (Web services) online, and actual usage behavior. We believe that an understanding of these relationships will provide insight into how characteristics of the individual, the task, and utilization behaviors affect task performance in an online community environment. We also believe that the capture and analysis of Web tracking data is imperative to reaching such an understanding.

The difficulty in utilizing Web tracking data successfully is in knowing how to position its collection and use within the larger confines of Web information seeking analysis. Web tracking is just one tool that needs to be coordinated with other data collection methods to yield a more comprehensive understanding than Web tracking alone could ultimately provide.

The objective of this chapter is to raise awareness of this point and to suggest techniques and approaches for the collection and analysis of Web tracking information that will aid practitioners in their performance measurement initiatives and understanding of how end-users seek information on the Web. Various tips are presented:

- The need to account for both task and individual differences in any Web information seeking analysis assessment

- The benefits of using a unique ID to link individual differences, task, and Web tracking data
- The types of Web metrics to collect
- How to gather and make sense of the Web metric information that is collected in Web logfiles
- The importance of addressing privacy concerns right up-front in the collection of Web tracking information

We begin by providing background on the need to take both task and individual differences into consideration when investigating end-user Web information seeking behavior. To do this, we provide a general model that describes how task and individual differences affect information seeking behavior. Next, methods to conduct a Web information seeking analysis that allows for the collection of both task and individual differences data are presented. Importantly, these methods include the collection of Web tracking data via the use of Web logs. Using a selective subset of variables from the general model presented earlier, our own myhamilton.ca project serves as a point of illustration. We also provide details with respect to the types of Web metrics to collect and what needs to be done to make sense of these data. Finally, the importance of addressing privacy in any Web information seeking analysis is highlighted.

To help clarify things, find below the following definitions of terms:

- *Information seeking behavior* refers to how people seek information in different contexts (Fisher, Erdelez & McKechnie, 2005).
- *Web information seeking behavior* refers to information seeking behaviors that occur over the Web. Choo, Detlor & Turnbull (2000) identify four main modes

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