Always On:
A Framework for Understanding Personal Mobile Web Motivations, Behaviors, and Contexts of Use

Carol A. Taylor, Motricity, Inc., USA
Nancy Samuels, University of Washington, USA
Judith A. Ramey, University of Washington, USA

ABSTRACT

Mobile data services offer a growing alternative means of accessing the Web and have drawn significant attention from the mobile industry. However, design efforts are hampered by people’s motivations, behaviors, and contexts of use when they access the Web on their phones. To help address this need, we conducted a study to explore the following questions for U.S. mobile phone users: 1) What motivations lead people to access the Web on their mobile phones?; 2) What do they do?; and 3) Where do they do it? Based on the findings from Part One of the study, we constructed a taxonomy of behaviors, motivations, and contexts associated with mobile Web usage. In Parts Two and Three, we validated the taxonomy as well as compared iPhone versus non-iPhone user behaviors. We conclude this report by considering the design implications of our findings and future research directions.

Keywords: Field Studies, iPhone, Mobile Adoption, Mobile Internet, Mobile Web, User Behavior, User Motivation

INTRODUCTION

Why, and in what settings, do people access the Web on mobile phones? What Web information do people access and how do they make use of that information? Understanding the answer to these questions is important for understanding how mobile Web services can be made more useful and accessible in people’s daily lives. U.S. carriers are looking to mobile Web browsing and other data services for future growth. However, in the U.S. mobile Web browsing is predicted to increase only from 15% adoption in 2007 to 21% in 2011 (Jupiter Research, 2007). In the effort to accelerate adoption, the mobile design and development community could use a better understanding of the overall patterns of current mobile Web usage to help them target key user needs and desires for future software application design and carrier services.

Past research on mobile Web usage has focused mainly on characterizing behaviors,
settings, and types of content accessed. This study looks at motivations as well—why people access the Web on their mobile phones. Using an augmented diary-study approach, the study first derived (Taylor et al., 2008) and subsequently validated a behavioral, motivational, and contextual framework for understanding mobile Web use.

For our study, we defined the mobile Web strictly as access to Web information available through either a carrier’s portal or a Web site accessible via a mobile device.

RESEARCH BACKGROUND

This study builds on and extends earlier research studies that have yielded classifications of Web usage (both stationary and mobile), descriptions of patterns of adoption of mobile services, as well as motivations for mobile technology use. Also, in designing this study, we took into account recent work on methods for studying mobile usage.

Classification Schemes

Several earlier studies have yielded classification schemes that characterize usage of the Web and/or mobile phones. Church and Smyth (2008) reported a study of mobile information needs that categorized user intent as regarding information, geographical data (local explicit, local implicit, and directions), and management of personal information; the conclusion stressed the importance of the geographical and temporal context of mobile information needs, in contrast with the earlier findings by Broder (2002) related to non-mobile Web search. Sohn et al. (2008) also explored mobile informational needs and how they were addressed. Of special interest here, they asked how (if at all) the mobile Web changed informational needs and behavior. They found that, in using the mobile Web, people were better able to meet their informational needs by themselves, and used somewhat clever strategies to do so, but ultimately felt that the mobile Web was not sufficient for meeting their informational needs.

Hinman et al. (2008) explored the question of mobile-Internet user needs via a PC Internet deprivation study; by asking users to rely solely on phone-based Internet access, they were able to delve into the perceived shortcomings of mobile access, and found that false expectations of performance based on people’s experience with PC-based Internet access constituted a main barrier to a satisfactory user experience. They concluded that designers need to build from the familiar PC experience to create successful mobile-Internet “moments” and should consider developing “micro-services” that deliver consumption-ready information and allow users to “skim the surface” of the Internet. Our study differs from these studies in that its focus is wider than informational needs alone and it also looks for the underlying motivations for reported behaviors.

We found two earlier classification studies of particular interest. The first, by Kim et al. (2002) divided usage into the categories hedonic (related to pleasure) and utilitarian (related to doing tasks), a distinction that our findings support. Hassenzahl (2006) conducts an extensive analysis of the concepts of hedonic and utilitarian usage that traces their evolution in the literature and usefully elaborates the nuances of meaning subsumed by the terms.

The second, by Kellar et al. (2007), identified six information tasks in non-mobile Web-based activities: browsing, communications, fact finding, information gathering, maintenance, and transactions. Our results support refining and extending this basic scheme to describe mobile Web usage, and can be compared to the findings of Cui and Roto (2008). Based on a large multi-method study, they constructed a taxonomy of mobile Web use focused on “activities.” In their taxonomy, which also builds on Kellar et al. and other earlier work, they posit four main categories of activity: information seeking (for knowledge or entertainment), communication, transactions, and personal space extension. Information seeking includes fact-finding, information
Speech for Content Creation
www.igi-global.com/chapter/speech-content-creation/69634?camid=4v1a

IT Implementation in a Developing Country Municipality: A Sociocognitive Analysis
www.igi-global.com/article/implementation-developing-country-municipality/2928?camid=4v1a