Chapter 10
“From Clicks to Taps and Swipes”:
Translating User Needs to a Mobile Knowledge Management Experience

Madhavi M. Chakrabarty
Verizon Wireless, USA

ABSTRACT

Organizations constantly strive to improve the richness and reach of their knowledge resources to ensure optimal performance of their employees in their job functions. Some of the techniques that organizations have used in the past have included state-of-the-art search engines, creating a directed navigation by mapping content to employee transactions, and incorporating user experience design heuristics. Search engine improvement is reputed to be the most used technique, even though its effectiveness in organizational knowledge management systems has not been confirmed. With more and more organizations now having a mobile employee base, there is now a need to provide employees access to organizational resources anytime and anywhere. This chapter provides insight into some of the challenges in organizational knowledge management systems and the implications of designing a mobile system. It proposes some heuristics on designing a knowledge management system for mobile systems and proposes a framework to validate it against available user acceptance models.

INTRODUCTION

Knowledge management systems can be defined as systems that support creation, transfer and application of knowledge in organizations (Alavi & Leidner, 2001). To make a knowledge management system effective, it has to be easy to access, and provide accurate information in a timely manner. For a long time, organizations have depended on a good knowledge management system for the learning and training needs of their employees. In the context of an organizational knowledge management system, knowledge resources include reference content and learning content that employees use to maintain and improve their explicit knowledge (Collins, 2012). A good knowledge management system also helps to capture the tacit knowledge of its user base. The success of an organizational knowledge management system depends on how effectively it can be used by its user base at the time of need.

DOI: 10.4018/978-1-4666-4566-0.ch010
The improvements over time in knowledge management systems were geared towards improving ease of access, time to access information and the accuracy of information accessed from the knowledge management systems (Becerra-Fernandez, Gonzalez, & Sabherwal, 2004). These three parameters are the major driving factors for all the research related to the design, implementation and management of knowledge management systems in general and organizational knowledge management systems in particular. Improving ease of access in design of knowledge management systems have been based on principles and guidelines of usability and user experience design (Karner & Droschl, 2002). The design of the navigation and menus reflect guidelines from user experience handbooks and experts and the influence of these experts on the design of organizational knowledge management systems. Search engine integration to existing knowledge management systems helped to improve time to access information in large knowledge bases (Becerra-Fernandez et al., 2004; Robertson, 2006). The search engines varied from a basic keyword only search engine to more intelligent and smarter search engines (Bughin et al., July 2011). Directed navigation was another attempt to design the system so that it mimicked the behavior of the users and presented the right information at the time of need, thereby attempting to improve the accuracy as well as ease of access of information. Directed navigation required the knowledge managers to understand the different transactions and inquiries that were performed by the users of the system and then design a system that categorized the content based on the type of transactions and where the user was in the transaction. All the above improvements resulted in a progressive and steady improvement in the design, development, implementation and performance of the knowledge management systems over time.

One important factor that enabled the evolution of knowledge management systems was the evolution in the areas of system hardware, software, and other performance driving measures. These factors have impacted the development of IT systems in general. Even as knowledge management systems were becoming more efficient with the right hardware choices, another change that was happening was in the organizational landscapes. More and more organizations were incorporating faster computing resources to handle their IT needs (Chase, 2008). Many organizations were going global and their organizational knowledge needs were growing exponentially with it. Currently, organizations are also becoming mobile, and along with the organizations, the workforce is also becoming mobile (Antill, 2013; Citrix White paper, Oct 2012). Overall, over the last decade, the improving computational resources resulted in the organizations ability to implement more robust and efficient systems and mobilization of the organizations has generated the need for these organizations to create a knowledge management system that can be accessed anywhere and anytime by the user base so that the users can continue being effective in their job requirements.

Many organizations are seeking the solution for a mobile knowledge management system by using traditional usability and user feedback techniques to gather requirements. But preliminary implementations and results have shown that while users know what they want, they sometimes do not know what they need (Churchville, 2008). Many organizations have reported that in going back to the users, the top feedback received was the need for a “Google” search engine. While Google works perfectly in the chaotic Internet world, a search engine implementation does not solve all the issues and requirements of a mobile knowledge management system. Therefore, the need arises to discover the needs of the mobile employees and how they can be resolved when designing a tool that helps them perform their job responsibilities in a mobile environment.

This chapter discusses the progressive improvement of organizational knowledge management systems and the drivers that prompted these changes. The background section discusses the
18 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the product’s webpage:
www.igi-global.com/chapter/from-clicks-to-taps-and-swipes/81175?camid=4v1

www.igi-global.com/e-resources/library-recommendation/?id=93

Related Content

Analyzing the Discourse of E-mail Communication
www.igi-global.com/chapter/analyzing-discourse-mail-communication/42789?camid=4v1a

Identity and Language Use Online: Stories from Syria
Naseem Hallajow (2016). International Journal of Cyber Behavior, Psychology and Learning (pp. 73-87).
www.igi-global.com/article/identity-and-language-use-online/149172?camid=4v1a

Prevalence and Correlates of Internet Addiction in Undergraduate Students: Assessing with Two Major Measures
www.igi-global.com/article/prevalence-correlates-internet-addiction-undergraduate/67340?camid=4v1a

How Do Technology Application and Equity Impact Student Achievement?
www.igi-global.com/article/technology-application-equity-impact-student/54449?camid=4v1a