



Librarians' Attitudes towards Mobile Services

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Abstract:

Mobile technologies and services are becoming a central topic in our information world. This study aims to explore whether librarians whose work focuses on information are familiar with the new technological innovations and whether they are ready to accept them. Do librarians understand the power of mobile services in the libraries? Are they ready to adopt new tools? The theoretical background for the current research is The Technology Acceptance Model (TAM) (Davis, 1989) which postulates that users' Information Technology (IT) acceptance consists of two cognitive beliefs: perceived ease of use and perceived usefulness (Davis, 1989). Furthermore, researchers assumed that personal innovativeness may also influence librarians' attitudes. To gather data, researchers used two questionnaires: one covering personal details, and another focusing on perceptions of library mobile services. All three hypotheses were accepted supporting the TAM model.

Introduction: Mobile Libraries

With the increasing number of mobile technologies, mobile devices, and mobile technology users, the question arises as to whether it is time for libraries to develop a fully mobile web site. According to Choi (2009), a mobile library provides services anytime, anywhere, using mobile devices, including the concept of mobile Internet service. In addition, mobile technology enables flexibility for library services as well as real-time access to up-to-date information (Herman, 2007; Karim, Siti, & Ramlah, 2006). However, Lippincott (2010) asserts that only few libraries consider the huge potential implications of mobile devices on

user communities and on use of digital information resources. Different researchers have reported that students want to access the library catalog from their mobile phones frequently or occasionally (Mills, 2009; Meier, 2010). In addition, Walsh (2010) found that students do not perceive library text messages as intrusive. Yet, these findings emphasize that students were really interested in mobile library services only when they have a need or there is an immediate benefit for them. In a recent study, Paterson and Low (2011) suggest there is a strong desire among students for mobile library services.

Based on the above, the current study aims to explore whether librarians are familiar with the new technological innovations and whether they are ready to accept them. Do librarians understand the power of mobile services in the libraries? Are they ready to adopt new tools? This study will examine whether librarians' behavioral intention to use mobile services in the library is affected by the following variables: perceived ease-of-use, usefulness, and personal innovations.

The TAM Model

An important component of the theoretical background for the current research is the Technology Acceptance Model (TAM) (Davis, 1989) that describes how job-related Information Technology (IT) innovations are adopted by workers for their routine work. The model suggests that users' IT acceptance consists of two cognitive beliefs: perceived ease of use and perceived usefulness (Davis, 1989). Perceived ease of use is defined as the degree to which an individual believes that using a specific technology will be free of effort, and perceived usefulness refers to the extent to which an individual believes that using a certain system would enhance his or her job performance (Davis, 1989). The TAM model contains three basic relationships affecting behavioral intention: perceived ease-of-use that impacts perceived usefulness, perceived ease of use that leads to behavioral intention, and perceived usefulness that affects behavioral intention (Lopez-Nicholas, Molina-Castillo, & Bouwman, 2008). The TAM model has been validated across genders (Adams, Nelson, & Todd, 1992; Venkatesh & Davis, 2000) and cultures (Straub, Keil, & Brenner, 1997). Furthermore, over the years, researchers have used the TAM model to investigate users' acceptance towards different technological applications such as the Graphic User Interface (Agarwal & Prasad, 1999), mainframe applications (Dishaw & Strong, 1999), and computer resource centers (Taylor & Todd, 1995). Researchers also used TAM in educational issues, such as student satisfaction with online learning (Drennan, Kennedy, & Pisarski, 2005) or the effect of technical support on student acceptance of the WebCT online course management system (Ngai, Poon, & Chan, 2007).

Personal Innovativeness

Another essential variable which may influence librarians' attitudes towards mobile services is personal innovativeness. Agarwal and Prasad (1998) define personal innovativeness as the individual's willingness to try out new information technology. Researchers found that people with higher levels of personal innovativeness tend to develop more positive beliefs towards new technological innovations compared with those having lower levels. They are more daring and more likely to adopt new technologies despite the high level of uncertainty which is an integral part of new technological adoption (Lu, Yao, & Yu, 2005). Other researchers note that personal innovativeness is an essential predictor for

perceived ease of use (Lu, Yao, & Yu, 2005; Serenko, 2008; Yi, Jackson, Park, & Probst, 2006), and of behavioral intentions (Crespo & Rodriguez, 2008; Taylor, 2007).

Hypotheses

Based on the assumption that perceived ease of use, usefulness and personal innovativeness may predict librarians' behavioral intention to use mobile services the underlying assumptions of this study are:

1. The higher the level of perceived ease of use librarians have, the higher their behavioral intention to use mobile services in the library (H_1).
2. The higher librarians perceived mobile services usefulness, the higher their behavioral intention to use mobile services in the library (H_2).
3. The higher librarians' personal innovativeness is, the higher their behavioral intention to use mobile services in the library (H_3).

Procedures

The research was conducted during the first semester of the 2012 academic year. It encompassed 157 Israeli librarians who answered an e-mail questionnaire. To gather data, researchers used two questionnaires: one covering personal details, and another focusing on perceptions of library mobile services.

Results and Discussion

All three hypotheses were accepted. The higher the level of perceived ease of use librarians have, the higher their behavioral intention to use mobile services in the library. Furthermore, the higher librarians perceived mobile services usefulness, the higher their behavioral intention to use mobile services in the library, and the higher librarians' personal innovativeness is, the higher their behavioral intention to use mobile services in the library. These results are not surprising as they support the TAM model, suggesting that perceived ease of use and usefulness are crucial factors that affect workers' willingness to accept technological changes in their organizations. Thus, these two variables may predict librarians' behavioral intention to assimilate mobile services in their libraries. In addition, findings reveal that librarians' level of personal innovativeness also influences their behavioral intention to use mobile services in the library. These findings are consistent with previous literature that concludes that people with higher levels of personal innovativeness tend to develop more positive beliefs towards new technological innovations, compared with those having lower levels (Lu, Yao, & Yu 2005). Although previous researches addressed the TAM model in the librarianship arena (e.g., Heinrichs, Lim, Lim, & Spangenberg, 2007; Hong et al., 2001-2002; Lin, Chan, & Wei, 2006), no one has so far investigated the application of the TAM model to mobile services. Hence, this paper promotes the issue of mobile services and adds the parameter of personal innovativeness. Researchers suggest that developers of mobile services to libraries should try to design simple interfaces, as well as emphasize the usefulness librarians and patrons may gain from these services, and thereby affect librarians' behavioral intention to use mobile services. However, it should be remembered that the current study examined only intentional behaviors and not actual use of technological innovations. Therefore, an additional study may address this question, checking whether there is a correlation between librarians' intentional behavior to use mobile services and their actual use of such services.

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