Exploring the Factors that Affect Intention to use Mobile Phones in Jordanian Academic Library

Mohammed-Issa Riad Mousa Jaradat, Faculty of Prince Hussein Bin Abdullah for Information Technology, Department of Information Systems, Al al-Bayt University, Mafraq, Jordan

ABSTRACT

This study presents an extended technology acceptance model (TAM) to explore the factors that affect intention to accept and use mobile phones in Jordanian academic library. This study explores the utilization of mobile phones in an educational environment and investigates students’ expectations and intention toward mobile library services. The proposed model was empirically tested using data collected from a survey containing 23 questions. Results show that user acceptance and use of mobile library services can be predicted from the users’ behavioral intentions, which are affected significantly by social influence, perceived ease of use, and perceived usefulness. It has been found that a direct effect exists between behavioral intention and actual use toward accepting and using mobile library services in Jordan with 85.1% of students respondents’. This study also gives quantified indicators and a model that might help in understanding the mobile library environment in Jordan.

Keywords: Jordan Academic Library, Mobile Library (M-Library), Quality, Social Influence (SI), Technology Acceptance Model (TAM)

INTRODUCTION

The topic of mobile libraries (access to a library via mobile phone) is very important and highly timely. The need of library services is increased continuously. However, these services are only available during office hours and in the library counter. Even though through online computer, users are able to access the services anytime, but not everywhere, they must be connected to the internet which limits their access to these services. Although library related services via a mobile phone is not yet implemented in academic library in Jordan, such services is inevitable in the future if and only if there is an acceptance of that technology. Thus, mobile technology has been identified instead of the tradition way as well as online computer (Alzaza & Nasir, 2007). Mobile technology has now come up with library in hand trend (mobile library). Stone (2004) claimed that one day two or three billion people will have cell phones and they will not continue to have PCs for the reason that mobile phones will become their digital life. In Jordan, according to Jordan telecommunication market establishment sta-
Statistics there are 419,533 fixed telephone lines and 7,758,968 mobile lines which is exceed the number of population (Telecommunication Regulatory Commission Jordan, http://www.trc.gov.jo). This implies that most of the people desire to use mobile technology.

Mulliah and Stroulia (2009) claimed that “Mobile devices are becoming increasingly powerful and accessible as wireless networks cover most of our daily environment and a variety of software frameworks”. Moreover, Karim, Darus, and Hussin (2006) said that the widespread use of mobile phones among students might have also lead to the positive opinion and perception on its application in the library related services. Therefore, the library users can now renew books and pay fines for overdue loans without stepping into a library as long as they carry their mobile phones.

Mobile library (m-library) can be viewed as another meaning of e-library but without the need of cables. Mobile library is generally defined as a mean of e-library which occurs via mobile device. Mobile library can be defined as: any library that offers service(s) or operation(s) anytime, anywhere, without the need for cables via wireless devices (mobile) for their students. By means of information systems m-library can be defined as organized collection of people, procedures, software, databases, and devices that support any library service(s) or operation(s) via wireless devices (Mobile phone). Mobile library services or operations in general are presented as follows:

- Checking records of books borrowed;
- Getting alerts on overdue books;
- Getting alerts on outstanding fines;
- Receiving reminders to return library items that will be due soon;
- Renewing library items;
- Referencing enquiry services;
- Receiving text alerts to new resources on the library web site;
- Getting alert on library event information;
- Getting information from the library database;
- Contacting librarian for help, etc.

Mayer (2002) introduced several steps through which institutions may follow in providing SMS services. The steps involved collection of mobile phone numbers, setting up a centralized SMS service center (Reading the books lists, Lectures, meeting schedule, exam dates, Academic information about the students, Crucial homework reminders, Web link, Urgent messaging, Announcements, Changes in schedules; and Mobile author application: it will help lecturers, teachers, instructors, and tutors to create and author their computer-based courses), and sending group SMS via a network.

This study aims to explore the utilization of mobile phone services in the educational environment as an introduction to ubiquitous University (U-University), assist developers in building of mobile library systems, and exploring students’ intention towards the use or avoidance of mobile library in Jordan.

**THEORETICAL BACKGROUND**

This study investigates key factors that affect students’ intention to use mobile library in Jordan. These key factors include social influence and quality; these factors are chosen because of their strong support from previous studies and their applicability and suitability in the context of mobile libraries. This research will evaluate the effects of these factors by using the technology acceptance model (TAM), a well-known model of information technology-acceptance, adoption and use.

**Technology Acceptance Model (TAM)**

TAM was initially introduced by Davis (1989). It has become one of the most widely used models in the investigation of user acceptance of information technology. TAM has been evaluated to be not only a powerful model for representing the determinants of system usage but also a valuable tool for system planning, since the system designers have some degree of control over easiness and usefulness (Taylor & Todd, 1995). The theoretical basis of the model was
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