Chapter 42 The Intention to Use Mobile Digital Library Technology: A Focus Group Study in the

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ABSTRACT

This paper presents a qualitative study on student adoption of mobile library technology in a developing world context. The findings support the applicability of a number of existing constructs from the technology acceptance literature, such as perceived ease of use, social influence and trust. However, they also suggest the need to modify some adoption factors previously found in the literature to fit the specific context of mobile library adoption. Perceived value was found to be a more relevant overarching adoption factor than perceived usefulness for this context. Facilitating conditions were identified as important but these differed somewhat from those covered in earlier literature. The research also uncovered the importance of trialability for this type of application. The findings provide a basis for improving theory in the area of mobile library adoption and suggest a number of practical design recommendations to help designers of mobile library technology to create applications that meet user needs.

INTRODUCTION

Mobile library technology has great potential to improve student and researcher access to academic resources. It is also seen by libraries as a positive way to improve their image and to meet the needs of a younger generation of library users who are increasingly interacting with services via mobile devices. However, mobile library technology has to be implemented in a way that is acceptable to end users in order to encourage usage and therefore be effective.

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In Information Systems there is now a considerable body of research exploring acceptance factors in technology adoption. While there is extensive empirical evidence supporting the relevance of several broad theories of technology acceptance, there is also a growing concern that certain novel technologies may bring additional adoption issues that will not necessarily be uncovered by simply testing existing theories in a new context (e.g. Mallat, 2007). Another concern is the proliferation of theoretical models encompassing ever more constructs. While this can increase the explanatory power of the models, there is a concern that they are over-complex and that more parsimonious models may exist for particular application areas (e.g. van Raaij and Schepers, 2008).

The research described here focuses on the adoption of mobile library technology in a university library context. There are indications from previous research that mobile technology involves adoption factors which vary somewhat from those covered in generic adoption models (Kaasinen, 2008). Very little previous research has attempted to explore the relevance of existing adoption models to the mobile library context, and the few existing studies focus on outdated SMS-based services. This research therefore sets out to explore the factors which are most relevant to adoption of mobile library technology. A key contribution of the work is to augment current adoption theories in the context of mobile library technology. The findings also have potential practical implications for the successful implantation of mobile library applications in an academic library context. The empirical study described here was conducted in the UAE which, while classed as a developing country, has a very high penetration of smartphone technology. The developing world, particularly the Arab culture, have been under researched in technology adoption literature, so the research also has the potential to uncover issues relevant to this particular cultural context and provide a foundation for possible future cross-cultural research.

This paper begins by giving some background on mobile library services, and then it describes past literature in technology acceptance, in particular studies which address adoption of library and mobile technology. This is followed by a description of the methodology and data collection of the current study and a presentation of the results. Finally the findings and their implications are discussed.

MOBILE LIBRARY TECHNOLOGY

Although libraries today provide many digital resources such as e-books, databases and online catalogues, their resources are not always the first search choice for students (Buzynski, 2007). This might be related to the outdated image that students hold about libraries, an image that does not fit with the needs of the new generation of students who prefer receiving information quickly, and who rely heavily on technology to access information (Albrecht and Pirani, 2009; Prensky, 2001). Students increasingly rely on smartphones to access online services; these have the benefit that they are always connected, unlike desktops or laptops that usually require a person to be in a certain place in order to have Internet access (Choy, 2011). This suggests that students may be more willing to engage with library services if they are provided through mobile library applications; such applications could also help improve a library's image by providing a better match with the technologies that younger people are naturally adopting.

At present the number of libraries providing mobile services are few and are mainly limited to developed countries (Cao et al., 2006; Mills and Sheikh, 2010; Wilson and McCarthy, 2008). Currently, mobile services provided by libraries typically include library news, library hours, SMS reference service, 'ask a librarian', maps and laptop availability information (Vila, Galves and Campos, 2010). In recent years, there has been an increasing amount of literature on library services that can be provided by smartphones

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