Chapter 13

Emerging Trends in Digital Libraries: Mobile Technology and Mobile Learning

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ABSTRACT

New Technologies pose new challenges when libraries build their virtual collections. With the growth and popularity of e-books and other portable devices, collections can no longer be evaluated purely on the bases of content. Today, there is a growing trend in seeking information using mobile devices. Libraries can extend new types of services to users of mobile devices and develop, license, or otherwise make available scholarly content configured for mobile devices. Libraries will soon become part of an institutional planning process for the development of services for mobile devices. Only users can indicate how these platforms will be used as mobile tools for study or entertainment devices. The University of Technology Library (now a part of Aalto University) 2009-2010, in collaboration with the Usability Research Group, surveyed various e-book readers. Furthermore, the California Lutheran University ran a two-semester pilot to explore how course use of e-readers affects student learning from 2009-2010. To improve access to digital assets at the Norwegian National Library, an Android App was created and tested for mobile use. In addition, two military educational schools conducted a study of current mobile device ownership and use by their students. Survey results revealed that a majority of students say they would engage in mobile learning if it were available. This chapter examines surveys and emerging trends in Digital Libraries, mobile devices, and mobile learning.

INTRODUCTION

Digital libraries have been an emerging trend since the 1990s and more recently there are Mobile Digital libraries. Mega companies such as Google and Yahoo have even set up partnerships with digital libraries to make billions of digitized pages available. National digital library projects such as Europeana, the Digital Library of Norway and Korea are flourishing. The Digital Public Library of America is about to makes its debut and set to launch in April 2013.

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As mobile technologies develop and become more integrated into our daily lives, libraries are applying them in innovative ways to support key functions such as gaining access to resources and helping users discover more information. Many are experimenting with functionality such as developing mobile Websites, specific library apps, or utilizing mobile technologies such as using location awareness and cameras for scanning QR codes, barcodes or enabling virtual reality. More recently in collaboration with publishing house Humanitas, telecom operator Vodafone Romania launched a digital library at the Piata Victoriei subway station in Bucharest last year. Their aim is to attract more young people to reading. The digital library contains books and audiobooks for downloading on tablets or on mobile phones in Romanian. Booklovers need only scan the QR code of the book, which is one of the library’s “shelves”, after which they will be directed to a Website from where they can download part of the book.

The penetration of e-books and mobile devices has made digital libraries more important

Library patrons and college students alike are embracing mobile devices. Electronic books have been around for decades. The Amazon kindle is leading the way in e reader technology. Many libraries are lending out e-reader devices and some universities are providing their new students materials on these platforms.

Today, not only must we consider which content is needed for the collections, but also in which formats and on what platforms it is available. We must ask: How does this new technology contribute to the way e-books are selected by the library? Until recently we have accepted the deficiencies of different platforms as long as the books were usable in one way or another.

Most services required the installation of reader programs or plug-ins, some of which did not work with e.g. Linux. As we start to use e-books as substitutes for print, we need to be more demanding. We should be able to provide the content the user needs on a platform he or she prefers.

How compatible are the current e-resources, which are originally meant to be used on a computer, with this new technology? Do the license agreements even allow the transfer of eBooks to these devices? If the customers asked which of the e-readers worked best with the library resources, would one know how to reply? In the first place, would the customers want to use these new devices for study or work, or will they be used purely for entertainment? (Aaltonen, M. et al., 2010).

E-readers pose new challenges for libraries

There are questions of just how many individuals are willing to pay for an electronic device? Which platform to support? How much money to commit to service? Should users pay for some or all of the costs? How to handle the increase workload? What type of eBooks should be acquired for the library-digitized or titles intended for downloading into a reader?

Today, smartphones, ereaders, and tablets have become commonplace. Currently there is a growing trend in seeking information using mobile devices. When users seek their information as a group, mobile devices make collaboration possible when users are on the move. The users are then subsequently able to initiate information seeking with the help of others at any given time.

Mobile phones for Internet access have been on the rise. There are some Asian and European countries that have more mobile phones than inhabitants. Today, tablets are also on the rise cannibalizing laptop sales. (The Street, 2011). The greatest ownership of mobile devices is among college students. The International Telecommunications Union (ITU) reported that access to