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A plan of M-Library for Smt. Hansa Mehta Library: A study

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ABSTRACT

The M-library system can auto-detect users, devices and bring them to the appropriately formatted version (mobile or desktop) of the site. It provides opportunities to increase the boundaries of anytime and anywhere learning for students. This paper presents the Proposed M-library system design of the Smt. Hansa Mehta Library (HML), the University Library of M S University of Baroda, Gujarat and services and deploy the M-library are discussed.

Keywords: *M-Library, Mobile, Communication, Virtual Access Library 2.0, Web 2.0, Social Networking, Pod casts, Vodcasts, RSS, XML*

1. INTRODUCTION

Information is considered a vital source for communication and dissemination of knowledge of one individual to another from the early stages of human civilization, and has therefore become an inevitable element of all human activities and development. Online teaching and learning has been there providing great opportunities to increase flexibility in time and location of study, in terms of availability of information and resources, synchronous and asynchronous communication and various types of interaction via the World Wide Web[1]. Today, as the .new buzz in the air along with a growing cacophony of beeps, ring tones, vibration [2], education is about to shift once again to an upper stage: M-learning [3] [4]. Mobile learning is enabled by the use of portable computing devices, such as PDAs, ultra notebooks, smart phones, and tablet PCs, communicating over wireless networks. A key benefit of m-learning is its potential for increasing productivity by making learning available anywhere, anytime. However, it is a resource that is currently untapped as it seems few academic libraries, if any, are taking significant strides to accommodate access and display for mobile devices. More and more Americans as well as India are using devices such as cell phones to seek information, not just to communicate. Why should librarians actively investigate mobile technologies and plan for services that take into account a range of devices beyond desktop and laptop computers? Some blogs and conferences are beginning to address issues related to mobile technologies or to present projects by early adopters, but treatments of the broad range of issues related to libraries are few [5].

In Gujarat, currently 27 University libraries are there, all of which are on campus connected with Departmental Libraries. It is essential that both appropriate existing and emerging technologies be implemented for effective development, delivery, and support for these remote students. The mobile-friendly library and associated applications will continue Indian tradition of excellence and innovation in Instructional design by maximizing accessibility and convenience for students. It describes the development and the ongoing research and evaluation of the M-library. Some of the challenges in design and deployment of the M-library and possible solutions will also present.

2. HANSHA MEHTA UNIVERSITY LIBRARY AND MOBILE USERS

Shrimati Hansa Mehta Library (HML), the University Library of M S University of Baroda was established on May1, 1950. At the time of establishment of the M. S. University of Baroda, a collection of 25,000 books belonging to the two State Libraries (Huzur Political Office and Secretariat Library) was handed over to the University Library. There were several colleges in Baroda - Baroda College (for Arts), Science Institute, Commerce College, and Secondary Teacher's Training College etc. These colleges had libraries of their own. These libraries continued to remain as Faculty Libraries and were administered independently. Thus the University Library System was established on 1-5-1950.Smt HML facilitates OPAC, E-resources (E-Books, E-Journals, E-databases, Library Consortium etc.), Virtual Library, Open Archives, Media Library etc. Out of department libraries, many faculty and others involved in the educational process express concerns that Net Gen or Millennial students are wasting their time with technology and that their use of technology may even hinder their learning. However, students who are effective learners in the digital environment,[6]

- Use mobile phones, laptops, and PDAs to support their learning
- Use software to create, manipulate, and present content
- Seek peer support via informal networks of family by using e-mail, texting, chat, and Skype, "an underworld of communication and information sharing invisible to tutors"

Mobile User of Smt. HML

- Faculty conducting research or teaching activities
- Students who study entirely at a distance as well as regular.
- Students whose courses include online and on-campus components
- Learners in the field, e.g., clinical settings, professional internships
- Learners using mobile devices such as clickers in the classroom
- Learners using mobile devices for learning activities outside of the classroom.

It is likely that more than one type of use will be evident on any given campus, and faculty may have both similarities and differences from student use.

3. OBJECTIVES OF THE STUDY

The present study is undertaken the following objectives.

1. To be familiar with the concept, issues and identify the facilities offered by the M-library.
2. To know the availability of Mobile facility in the HML library and its use in collecting information for their academic programmers in health science.
3. Examine the existing situation of M- library and finds the most advanced Model of Mobile libraries for HML.
4. To improve the efficiency and use of library network in different Libraries through M-Library.

4. REVIEW OF LITERATURE

Keren Mills (2009) published the research report "M-Libraries: Information use on the move". This research involved an online survey questionnaire of students and faculty at both the UK Cambridge and Open Universities. He found that respondents felt would be most useful to access using a mobile phone: Open hours, Location map, Contact information, Library catalogue (OPAC), Borrowing record. [7] CARL (2009) published Char Booth's research report "Informing innovation: tracking student interest in emerging library technologies at Ohio University, 2009." Research conclusion reached was that "library tools such as texting, mobile browsing, and web calling were perceived as very usable in a library service setting by a smaller proportion of respondents, and potentially usable by a larger proportion of respondents.[8]

ECAR (2008) Study of Undergraduate Students and Information Technology examined the "technology behaviors, preferences, and attitudes of higher education's undergraduates" and was found that two-thirds of students who responded owned an "internet-capable cell phone", although only 30.8% reported using it to access the Internet. The chief reason reported for not doing so was cost. [9] Todd (2008) research study "Handheld Librarians: A Survey of Librarian and Library Patron Use of Wireless Handheld Devices" for Collection development librarian at Bradley University.This paper results that are of the perceptions that librarians rather than patrons had of the need for wireless device access. [10] Ryerson University Library Another studied (2008). They conducted a survey of library patrons' cell phone/mobile device usage. They found that of the eleven library services listed in the survey, there were six services that more than 50% of respondents indicated that they would likely utilize via their mobile phones. [11] Karim, Darus & Hussin (2006) published a refereed research paper, survey to examine the "perceptions and nature of wireless phone use" of students at two Malaysian universities. Although this research was conducted a number of years ago, the results are still relevant in gaining an understanding of which library services students will likely want to use.[12] Latour (2005) talks about the complexity of this process as being tied to the negotiation and production of knowledge. He studied that the intricate mobile devices providing access to complex, time-consuming and dense clinical digital resources are not used in daily decision making. Similarly, the simplistic mobile devices alerting clinicians as to when they should wash their hands have received negative uptake responses. [13]

5. METHODOLOGY

Present study will base on descriptive and experimental method. This Investigation carried out at Hansa Mehta University Library (HMUL), about their current situation for virtual access, use of mobile information services such as text alerts, use of SMS reference services and use of the mobile internet. Due to the organizational structure of HMUL through mailing lists, websites, blogs and news feeds by the College, department and Faculty libraries.

6. OPERATIONAL DEFINITION OF CONCEPTS

Current mobile devices are limited by the speed of the wireless internet connection, small screens, slow processing and limited storage capabilities. One of the most obvious obstacles is the limited memory of mobile devices. Considering how technology or the medium affects the information displayed, defining what amount and what type of information is appropriate is an important factor of a successful M-library. The actual and potential uses of mobile web devices such as cell phones, iPhones, and Blackberries in relation to academic mobile

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library (m-library) services. The "mobile web" refers to the World Wide Web as accessed though a mobile device, and is not limited to sites that have been designed specifically for mobile devices. [14]

Libraries are gradually beginning to offer mobile services to patrons in several ways:

- Reference services via text messaging
- Text message alerts and circulation services
- mobile library (m-library) online public access catalogues (m-OPACs)
- Audio tours and library instruction[15]

7. LIBRARY-BASED SERVICES

- M-Libraries offer the opportunity for the expansion of existing library-based services into the mobile domain.
- Two m-Library services envisaged for implementation within this architecture being:
    1. Library Catalogue, Loans & Reservations Service
    2. The Interactive Library Map Service.
    3. Recommendations Service
- These services enable users more efficient access to resources and information whilst moving throughout the library.
- This infrastructural system, and its inherent mobility, affords an ideal opportunity to enhance the user's library experience.

Strategy for HML's M-Library

The proposed strategy is to reach the remote learner/user through mobile telephony. According to the statistics there has been a rapid increase in mobile phone use, especially among youth and the working population. Recent reports have mentioned that in Gujarat and that 80% of the land area is covered by the mobile networks. This trend provides an opportunity to implement mobile technology-based library services for distance learners as an outreach strategy. According to the m-learning systems explored, mobile technology is unlikely to be able to supply the necessary service on its own, but needs to be integrated with digital technology. The following prerequisites were identified:

1. Digitized information base
2. Information products designed for an e-platform
3. Electronic information service delivery
4. Design of electronic access systems.

If Smt. HML considering the library web portal, the following conditions can be identified as favorable to embarking on a mobile technology-based library service:

1. Fully automated catalogue with web-based OPAC
2. Automated circulation system

3. Online Services
4. Automated Selective Dissemination of Information (SDI) service
5. System-generated new acquisition lists
6. Web-based HMUL portal
7. Other Services such as describe in Table 1

Table 1: Mobile Based different Services

• Email
• Text Messaging
• Music & Radio Software &
• Instant Messaging
• Social Networking
Social Mapping Networks
Media Sharing Social Networks
• Search
Multimedia Search
Local Search Shopping Search
Visual/Camera Phone Search
Voice Search
• Mapping
• Widgets
• E-Books
• Audio Books
• Travel Information
• Browsers, News
• Blogging
• RSS Feeds
• Microblogging
• Mobile Web QuickPicks
• iPhone Only Applications
• iPhone QuickPicks

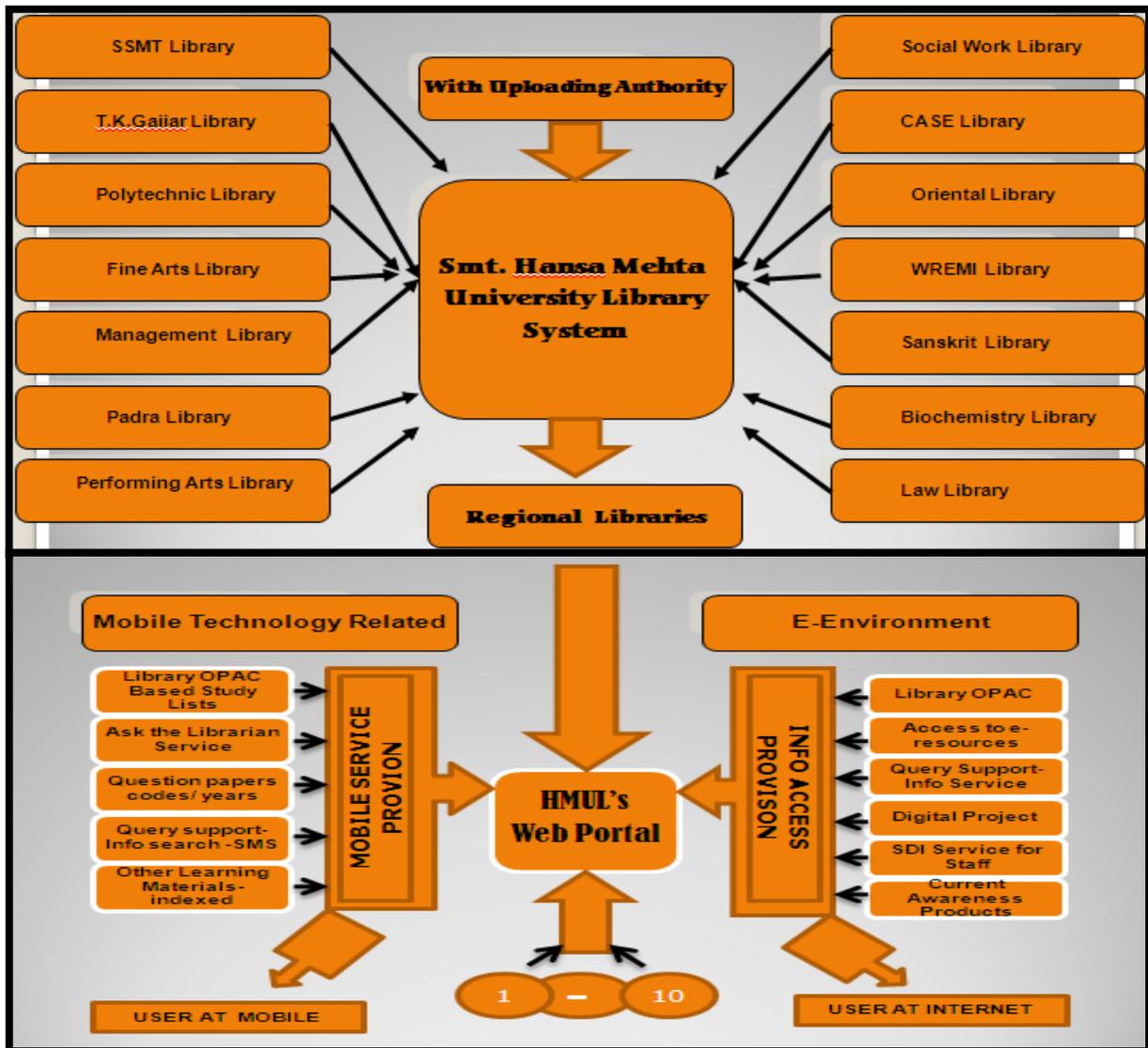http://www.esjournals.org

Figure 1: Proposed Design for M-Library (Smt. HML)

The Smt. HML library portal should be based the automated and e-services, hence it is considered significant in planning mobile-based services for library clients. It will intend to reach remote learners as a course-oriented learning support, a lifelong learning support and an information delivery portal. The website also help and has facilities to search the catalogue, databases, access to e-journals and printed holdings, circulation-related searching and reservations, question paper search, query handling service and access to information products such as CAS (Central Authentication Service) and services such as SDI.

8. CONCLUSION

This design of M-Library has been designed to build a platform for Smt.HML to develop an effective M-library and evaluate how to use it to support m-learning

and teaching. As a result, the library website has been re-created to ensure that it displays well on a variety of mobile devices. Now students can access a wide range of digital resource and library services and truly engage in learning activities using any mobile devices wherever and whenever they choose, not just at their desktop PCs. Developments in MP3 format, pod casting, and support for a third generation of smart phones puts Smt. HMUL Library at the leading edge of new and emerging trends in mobile learning and education.

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