

Wireless Technology and E-Learning in Libraries

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ABSTRACT

As technology develops, communication protocols also evolve. It also explores the real life examples of the libraries that are currently providing high level services by using MT to satisfy the information needs of the pattern of communication today is changing as new technologies emerge, changing the ways people communicate and organize information The Indian educational industry is evolving. It shift from 'd-learning' (distance learning) to 'e-learning' and now from 'e-learning' to 'm-learning' will be the next big wave, which will reform education in India. M-learning will bring about a paradigm shift from the traditional methods of education delivery.

INTRODUCTION

As the scientific knowledge increased, electronic communication began to develop. The use of telephones and computers led to the internet. M-Learning especially its main delivery system, mobile phone system is under observation, and in coming years , extensively and exclusively used or accepted for educators or the general public in India.

e wireless networks can also be used by libraries as frameworks to support other evolving technologies that may be on their 'wish list' of expansion possibilities for internal networks and services. This list includes the use of radio frequency ID (RFID) systems and tags, Voice over IP (VoIP) networks, electronic books (eBooks) and digital distribution, virtual and multimedia reference libraries and even database licensing opportunities.

All wireless LANs, or WiFi networks, employ the same basic operating principle in to transfer data and information via radio waves rather than through wires and cabling. For small-office home-office (SOHO) applications, a WiFi network might consist of a cable or DSL broadband modem and high-speed connection; a wireless router or access point (AP), that communicate with the broadband modem; and one more wireless client devices, such as a notebook computer with built-in wireless connectivity or an add-in wireless card or plug-in transmitter.

MOBILE TECHNOLOGY VERSUS LIBRARIES

Mobile Technology has now come up with "Libraries in Hand" trend. Our librarians are in move to determine how these devices are affecting information access and ensure that they are communicating with patrons and providing web content in the most appropriate and effective ways. Our Librarians must be prepared to take this challenge and put his efforts to

increase the market and demand for mobile access to personalized facts and information anytime, anywhere on one's own handheld device. Since Mobile handled devices truly are personal devices, search histories and physical locations can be harnessed to produce more accurate, individualized information and services. Users on the go don't want to wait for list of web results, Libraries today are covering most of the technologies given by mobile industry like PDA's, Blackberry, iPod, Cell phones, UM PC's (Ultra Mobile PC) and mobilizing library contents in a portable form suit able for small screen and delivering short services in the form of contents/information with device's multiple searching features. Librarians will need to become proficient in using these devices to enable users to access them anywhere from anyplace.

SECURING THE WIRELESS LIBRARY: FROM BOOKS TO BANDWIDTH

Security and user management are obviously of prime importance in library wireless networks, since these organizations routinely deal with a diverse user base and must also comply with a range of internal and governmental guidelines concerning content. In this post-9/11 environment, it is also important for libraries to be able to track user access to specific types of content and quickly identify users if they are legally required to provide data to law enforcement sources. From a technology standpoint, wireless security can break down into three basic levels:

Level 1: Consisting of wireless products that offer some degree of wireless signal monitoring and limited ability to detect wireless traffic within a network environment

Level 2: Includes wireless products that offer a basic signal monitoring and identification capability, and may provide some level of network roaming and bandwidth management. These systems may also be able to identify rogue access points and unauthorized intrusions, and be programmed to perform specific actions as they relate to predefined security policy enforcement rules;

Level 3: Wireless security systems that offer all of the capabilities of Level 1 and 2 systems, but add a strong and proactive control and management capability that is either embedded as part of the controller or independently installed on the outside 'edges' of the wireless network.

These systems may offer flexible content and network provisioning, location tracking and monitoring, real-time logging and auditing, and the ability to identify and isolate unauthorized access and accidental (or deliberate) associations with non-approved wireless access from outside the wireless environment. The best security solutions include controller technology that is able to control and manage user access; software that is designed to automatically discover new devices across a network and apply enforcement, intrusion prevention and policy management rules; and a centralized management console that works in conjunction with independent sensor technology to watch over a wireless LAN and isolate questionable activities before they become serious problems. In some cases, these sensor solutions make use of independent sensor units that can monitor RF activity throughout a multi-story library or across various departments within a library. The most effective sensor systems incorporate a high-gain phased-array antenna to cover a wide area. They are also designed to monitor activity within a wireless network and work in conjunction with centralized controller-based security software, but work independently of the wireless network.

MOBILE WEB

Mobile websites are made especially for the small screen. They appear as scaled-back versions of their desktop counterparts, mostly with a numbered menu system for quick access to content. Web pages that do not have mobile versions appear as if they have been squeezed onto the tiny screen, with overlapping menus and links. A website can also be 'transcended', or formatting can be applied to make it more readily viewable on a phone.

There are seven reasons why library should go mobile:

- There are three times as many mobile phones in the world as personal computers.
- Mobile makes your content ubiquitous.
- Mobile diversifies your audience.
- Mobile enables you to offer new service types, i.e. location types.
- Mobile enables you to connect to patrons via a new medium.
- Mobile is the way of the future.
- It's easier to access.

ADVANTAGES OF MOBILE WEB

The mobile web is internet for the small screen, and thus provides many of the same benefits as its desktop counterpart, such as:

- Constant connectivity: web enabled mobile devices provide owners with around the clock access to the internet, regardless of location.
- Location awareness: many of today's smart phones and pocket PCs have global positioning systems (GPS) capabilities which make them aware of where they are at all times.
- Limitless access: the mobile web encompasses not only those sites that have been specially designed for mobile browsing, but also the World Wide Web.
- Interactive capabilities: the mobile web offers users the participatory experience of the read/write web in the palm of their hand. Users can create content, share and rate media, make comments, write blog posts, tag resources, and form connections on social networks.

FUTURE OF MOBILE SERVICES

Mobile collections: libraries can also offer their patrons digital media collections that they can take to go, enabling them to benefit from library services remotely. These can include audio book collections, e- books, and video and music files.

Mobile library instruction: library users who don't have the time or inclination to attend an on-site workshop can still get the most out of library resources by accessing classes and tutorials on their mobile devices. Libraries can distribute their knowledge of and expertise in library systems and materials via MP3 and video files that patrons can take with them. A series of short audio files can be created describing the library, how to get reference assistance, and library workshops.

Mobile Databases: it's not only libraries that have seen the writing on the wall with regard to

the mobile web, but academic software and database providers have started taking portability to heart. Many scholarly database management applications are providing search interfaces for mobile web users.

Mobile Audio Tours: Libraries can make guided tours more convenient for patrons with busy schedules by making self-service audio tours available for hand-held devices. Rather than asking patrons to schedule an appointment in advance, or learn to utilize a new technology, these new audio tours can make the most of patrons' MP3 players and mobile phones to impart information.

LIBRARY SMS notifications: Text message alerts provide busy mobile owners with quick news announcements, reminders about important events, or requested information. Libraries can offer these speedy advisories as an added service to patrons.

SMS reference: Reference services in libraries today are becoming increasingly virtual, as more and more researchers are working remotely. Technologies such as instant messaging, e-mail and SMS text messaging are making it easy for libraries to maintain their relevance as information hubs by offering convenient services to busy users. Ask-a-Librarian services can be offered to mobile patrons, enabling them to submit their research questions remotely, by text.

Mobile library circulation: Not all new mobile tools involve direct patron interaction: some can be used behind the scenes to offer improved library services. SirsiDynix has developed a hand-held circulation tool called PocketCirc, which enables librarians to access the Unicorn library management system on a PDA device.

CONCLUSION:

India may well be one of the leading countries in the adoption of m-learning in coming years, owing to the number of young users or 'Gen y' involved in multimedia mobile usage. The Indian educational industry is evolving. The shift from 'd-learning' to 'e-learning' and now from 'e-learning' to 'm-learning' will be the next big wave, which will revolutionize education in India. M-Learning will bring about a paradigm shift from the traditional methods of education delivery, and integrate ICT as an essential component in everyday learning. Web applications such as Google, Face book, and YouTube have gone mobile, thereby underlining their popular appeal. Following the same trends, it is also possible to develop an m-library presence with relatively little effort. Indian libraries need to be indispensable to their users, and to this end they have to include mobile devices as part of their strategic thinking. Mobile libraries have to grow, and this requires greater collaboration between academic, industry, corporations and government. In the current scenario, mobile libraries have the potential to proliferate and we will witness a situation in which the mobile will definitely be used as a tool to spread learning across the country.

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