

Repositioning University Libraries for Virtual Library and Information Service Provision through Mobile Devices

By

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Abstract

This paper discusses strategies for promoting university libraries for virtual library and information service provision through mobile devices. It critically and conceptually reviewed and analysed the concept of university libraries and virtual library and information services. The paper identified that virtual library and information services through mobile technologies can strengthen relationship with the university academic community as well as enhance user oriented services to existing users. To enjoy these benefits, the paper identified and discussed mobile devices for providing virtual library and information service in university libraries and university library services that can be provided virtually. The paper identified challenges associated with promoting university libraries for virtual library and information service provision through mobile technologies such as content ownership and licensing; high cost; limited memory of mobile devices; digital right management and dearth of technological expertise among staff. The paper recommends among others that effective collaboration between academic, industry, corporations and government should be encouraged for promoting university libraries for virtual library and information service provision through mobile devices

Keywords: University libraries, Virtual library, Information services, Mobile devices

Introduction

One of the major objectives of university libraries is to provide services that will help in supporting the objectives of the universities. However, the services offered to the university community were traditionally inclined. This means university libraries were operating at a very low space and less effective manner. Opoku (2011) attests that many issues affect the way services are provided in the library on a regular basis. This calls for the introduction of information and communication technologies (ICTs) such as mobile devices in university libraries to help them operate at a very smart, fast and more effective manner. The act of providing information services to users of the library through ICTs such as mobile devices helps in facilitating the achievements of the objectives of the university library. The objective as identified by

Nkamnebe, Udem and Nkamnebe (2014) is to support the academic programmes of the university by providing relevant information so as to respond to the ever-increasing information demands of the users who comprise the students and academic staff of the university. This is an indication that university libraries need to change their nature and state of traditional service provision and delivery to a more effective and efficient one called virtual library and information services using mobile devices or hand held devices such as smart phone, tablets and notebook for the provision of library and information services in university libraries.

Conceptual Framework

A university library according to Reitz as cited by Nkamnebe et'al (2014) is defined as a library or library system established, administered and funded by a university to meet the information, research and curriculum needs of its students, faculty and staff. This means that a university library has something to offer to the university community and that which it has to offer is provision of information resources and services to meet the information, research, as well as curriculum needs of the university academic community. Similarly, Ekere described a university library as any library that is attached to a university. University libraries according to University of Rhode Island (2018) are an academic division of the University, serving the knowledge and information needs of the University Community and the general public.

University libraries are types of libraries created and located within a university funded by the university with vital and relevant student books, literature, internet access, music, art, student activities, computer access, space, rooms, technology, photocopy service, information stand and various other vital university or educational services a library is inspired to deliver and provide for all students and members of

the community where appropriate with accessible opening hours and access to the building (Harmoneous, 2016).

University libraries provide a range of services. Some of the services provided by university libraries in Nigeria include reference, lending, interlibrary loan, current awareness, exhibition and displays, information literacy, selected dissemination of information (SDI), and referral services. However, with the introduction of information and communication technologies such as hand held devices, a reasonable number of information users heavily rely on them to find, search, locate and use information in satisfaction of their information needs. According to Azubuike and Madu (2017), most categories of people in the University communities rely much on Mobile technologies such as smart phones, cell phones, iPods, MP3 players and tablets as some of the mobile devices used in academic libraries, to locate, retrieve, evaluate and use information and the need for librarians in the university libraries in Nigeria to assist these information users with the use of mobile technologies to professionally meet their information needs. This means university library users have embraced the use of mobile devices as a part of their lives and useful tool for information sourcing.

One of the five laws of librarianship enunciated by Ranganathan the father of librarianship which says save the time of the user have brought about a drastic change in library development in Nigeria in general and university libraries in particular. Khan (2010) noted that mobile library service envisaged the spread of knowledge and literacy among people to whom library services are out of reach. Information users in universities particularly in their offices where library facilities are not available may stand a better chance of accessing and utilizing university library services using their mobile devices such as smart-phones among others.

Rationale for Virtual Library Services in University Libraries

There are various reasons for promoting university libraries virtual library and information services. According to Azubuike and Madu (2017) most categories of people in the University communities rely much on Mobile technologies such as smart phones, cell phones, iPods, MP3 players and tablets as some of the mobile devices used in academic libraries, to locate, retrieve, evaluate and use information and the need for librarians in the university libraries in Nigeria to assist these Information users with the use of Mobile technologies to professionally meet their information needs.

Virtual library and information services can strengthen relationship with the university academic community as well as enhance user oriented services to existing users. Saxena and Yadav (2013) observe that in this changing scenario, mobile technology will be of great help to academic libraries towards strengthening their relationship and providing enhanced user oriented services to existing users as well as reach out to remote users who are considered unlikely to connect because of absence of a medium.

Mobile devices can effectively and efficiently revise and improve access to library and information services by the university community who have little or no access to the physical walls of the university libraries. According to Rattenbury (2014) following a decline in borrowing numbers over recent years, the delivery of library services to people with limited access to libraries will be revised in order to provide a more targeted and cost effective service. To achieve this, Singh (2014) state that mobile devices help to connect with patrons by creating a library application (“app”) or mobile Web site that allows patrons to access library hours, view their library account or even search databases.

Mobile Devices for Promoting University Libraries for Virtual Library and Information Service Provision in Nigeria

There are different types of devices for promoting university libraries for virtual library and information services provision in Nigeria. Beside laptop computers, Saxena and Yadav (2013) also identify smart phones, cell phones, iPods, MP3 players and tablets as some of the mobile devices used in academic libraries. The rapid pace of innovation in this arena continues to increase the potentials of these devices, challenging our ideas of how they should be used and presenting additional options with each new generation of mobile devices.

A smart phone is a handheld device that is capable of integrating mobile phone capabilities with the more common features of a handheld computer or PDA. A smart-phone according to Rouse (2018) is a cellular telephone with an integrated computer and other features not originally associated with telephones, such as an operating system, web browsing and the ability to run software applications. It allows users to store information, e-mail, install programs, along with using a mobile phone in one device (Mehta, 2016). The features of a smart-phone are usually more oriented towards mobile phone options than the PDA-like features.

More so, Apple (2018) described iPad as a "magical and revolutionary" device for "browsing the web, reading and sending email, enjoying photos, watching videos, listening to music, playing games, reading e-books and more. MP3 player is a machine that is used for playing and listening to music that are downloaded on the internet.

A mobile or cellular phone as defined by Mehta (2016) is more frequently called a cellular phone or cell phone. According to him, they are communication devices that connect to a wireless communications network through radio waves or satellite transmissions. For the purpose of this paper, mobile or cell phones are information and communication devices that are capable of connecting and providing voice

communications, short message services, multimedia Message Services (MMS) as well as internet services such as web browsing, instant messaging capabilities as well as electronic mail popularly called e-mail.

Personal Digital Assistant abbreviated PDA is a pen-based and small handheld mobile device which have the computing, telephone/fax, Internet and networking features. It functions as a cellular phone, fax sender, Web browser and personal organizer. PDAs devices are usually pen-based, which requires the use of a stylus rather than a keyboard for input (Mehta, 2016). PDAs today are available in either a stylus or keyboard version. Traditionally, PDAs have not had phone or fax services.

University Library Services that can be provided through Mobile devices

There are different kinds of university library services that can be provided through mobile devices. Some of these services as identified by Odu and Omini (2017) include current awareness services, reference services, circulation services, among others.

Current awareness Services: University libraries can make use of mobile devices to create awareness of the availability of a new library resource and service on social media platforms such as facebook, whatsapp. For instance useful information regarding the new services, documents and resources can be efficiently sent to library users to intimate them on newly added library and information services that are newly introduced by the university library and subject specialists who are involve in information resources selection through facebook.

Reference services: for reference services, reference librarians can make use of the mobile devices to provide answers to queries put before him or her by users without cost, stress and time wasting. Some libraries are offering “text a librarian” service ideal for simple questions that can be answered with a brief response (Nalluri and Gaddam, 2016).

Circulation Services: Traditionally, university libraries provide circulation services through the provision of access to information resources, taking statistics and general housekeeping operations, charging and discharging, sending overdue notices and payment of fines. However, these traditional circulation services are now automated to facilitate continuous interaction with users for feedback on social media platforms through the use of mobile devices. Rosenbalt cited by Sani and Dika (2017) opines that while the conventional means of interaction such as meetings, suggestion box, surveys and interviews are still important, use of new means of communications such as email, web forms, bulletins boards, discussion forums and listserv are fast replacing these. This is because they do not only provide fast and convenient as well as transparent and cost effective medium but also afford to offer scope for innovations and greater peer participation.

Document delivery services: libraries can send document to library users in low cost and also receive documents or messages at a low cost and within a shortest possible time. According to Odu and Omini (2017) sending and receiving messages using facebook services is one of the quickest and fastest methods of communicating. Librarians can now send messages and also attach documents before sending oftentimes, while attempting to perform library operations, librarians need to communicate with one another who may not be in close proximity.

Resource Sharing: In the traditional library system, university libraries provide access to the catalogues of other (partner) libraries which is important for inter-library lending. According to Chauhan (2004) “union catalogues, standardization and machine readable catalogues are aimed at promoting resource sharing. Librarians can now access catalogues of thousands of libraries across the world using internet”.

Selection and acquisition services: With mobile library and information services, university libraries can request information on what is published or about to be published from publishers and vendors on twitter

services for possible selection and acquisition into the university library. According to Odu and Omini (2017) publishers and vendors now send information through twitter on available materials they have in stock to be assessed by the university before supplies are made.

Online Public Access Catalogue (OPAC): One of the objectives of a university is to provide access to information resources and services. University libraries can provide access to their OPACs via mobile optimized websites. According to Savitha, Somashekhara and Dange (2017) Libraries provide access to a variety of its resources and databases. The users can just enter search terms and see results that are designed specifically for mobile viewing. These services include OPAC (online public access catalogue), integrated search, and original document search. OCLC's WorldCat Mobile application allows users to search for and find books and other materials available in their local libraries through a web application they can access from a PDA or a smart phone. For instance, the New York Library mobile beta site supports a mobile PAC and allows users to browse library locations and hours (<http://m.nypl.org>).

Library Instruction: University libraries offer library instruction programmes and library instructional materials can be provided and made available through mobile platforms. for instance, East Carolina University's "Research First Aid" is a series of podcasts for library researchers on the go.

Electronic Mail (Email) Services: university libraries use email to reach out to their patrons in satisfaction of their information needs. It is according to Sani and Dika (2017) used for document service delivery and also help to provide feedback from library clients.

Information Searching: University libraries provide different methods of searching for users information need. Today, there are online databases such as AGORA, HINARI, ERIC among others. Users of the university libraries can reposition themselves to embrace mobile devices so that users can search for their

information needs on the internet through search engines, meta-search engines and subject directories in order to supplement library and information resources.

Repositories: These are information resources that locally originate from within the university community. They include reports, conference papers, seminar papers, workshop papers as well as symposium etc. The use of mobile devices can in no small measure provides better access to these resources and ensures efficient preservation of the resources for users information needs.

Readers Advisory Services: These are services provided in university libraries by experienced public service librarian who is specialized in studying the community and knowing their information needs. According to Sani and Dike (2017) a successful readers' adversary service is one where knowledgeable, non-judgmental staff help readers with their leisure-reading needs. Virtual interaction with users will offer librarians more time to review users request and be less pressured to provide quick answer to users on the spot.

Challenges of Promoting University Libraries for Virtual Library and Information Services Provision through Mobile devices

In spite of the need to promote university libraries for virtual library and information service provision in Nigeria, a number of challenges such as poor or no collaboration between academic, industry, corporations and government, lack of present usage of mobile devices analysis; lack of provision of an overview of mobile technologies, poor or no provision and description of the various activities mobile devices support for effective library services etc are still recorded. Saxena and Yadav (2013), Liu (2014), Shorunke, Ajayi and Akintola (2014) and Azubuike and Madu (2017) highlighted some of the challenges as content ownership and licensing; high cost; limited memory of mobile devices; digital right management and dearth of technological expertise among staff. Other factors that can hinder virtual information services in

Nigerian university libraries are unsustainable technology strategies and policies; the problem of digital gap and insufficient IT training programs.

According to Liu (2013) information security is a major concern, and addressing issues such as authentication and users privacy are of vital importance to offering mobile services successfully. According to the author, there are also certain concerns over barriers to mobile service access, such as intellectual property protection and service fees. Similarly, Shorunke, Ajayi and Akintola (2014) observe that bandwidth problem; poor funding; technophobia; lack of good maintenance culture and unreliable power supply.

Others challenges as identified by Azubuike and Madu (2017) include electricity failure; too many mobile devices to learn; lack of knowledge; slow speed of the internet; inadequate funds, staff and training opportunities in using mobile devices for marketing library and information products and services have been identified as some of the constraints to mobile information services delivery.

Recommendations

In view of the above challenges, some of the following recommendations are made

1. Effective collaboration between academic, industry, corporations and government should be encouraged
2. Adequate usage of mobile devices analysis should be encouraged
3. There should be a provision of an overview of mobile technologies
4. There should be a provision and description of the various activities mobile devices support for effective library services
5. University libraries should have sustainable technology strategies and policies
6. University libraries should reposition themselves in order to fill their digital gap and provide effective virtual services

7. University libraries should introduce and sustain sufficient IT training programs for effective virtual library services provision.

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