AVAILABILITY AND UTILIZATION OF ICT FACILITIES FOR TEACHING, LEARNING, AND RESEARCH: THE LIBRARIAN'S PERSPECTIVES

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ABSTRACT

This paper examines the availability of Information and Communication Technology (ICT) facilities in the library and the use of it in enhancing teaching, learning and research in the University environment. The concept of ICT was discussed with an adaptation for this discuss. The historical development of ICT in the library was examined, while the use of library friendly software was also discussed. The use of ICT to library functions has its challenges. These challenges are identified and appropriate recommendations provided. The provision and development of ICT facilities in the library has encouraged and improved students' usage of the library and teaching easier for lecturers as necessary references are easily found and brought to the notice of students' users; lecturers are able to conduct research that improves their output to their students. The paper concludes that ICT has remarkably benefited university libraries efficiently in enhancing the achievements of the goals for which they are established.

Introduction

Information and Communication Technology or Multi-media have immensely covered all facet of human endeavor, ranging from cultural, educational, and administrative to commercial etc. It has powerfully penetrated in to all aspects of human endeavor across the globe. Library and Information Science as a profession whose primary responsibility is to acquire, organize, store and disseminate information cannot be an island to this development. ICT has entirely revolutionized the services and operations performed by the libraries. That adopting of ICT brings many opportunities to librarians by providing more services to patrons efficiently, and failure to utilize it will render them joblessness. The acquisition of information resources which used to be a rigorous process is now influenced by ICT and has become simplified. Libraries and information centers now acquire newly published books, subscribes to journals in different forms via the internet. Information dissemination and access on the other hand has also become global, in the sense that, information and information materials can be accessed from all angles of the world. Preservation of information has equally taken a new dimension   materials are preserved digitally, and research and publications have become more efficiently done, because of the numerous current publications that are spread through the internet from all angles, which provide ample opportunity to researchers to get access to latest publications as much as they can. In short, Information and Communication Technology has significantly influenced the activities and operations of libraries to the extent that it is very difficult to find a single area that is not covered by this phenomenon.

Concept of Information and Communication Technology:

ICT as the name implies is a tool that can be used to explore various fields of knowledge. However, no standard definition of ICT, but many scholars have defined ICT in different dimensions. Chauhan (2009) defined ICT as "Technologies that are used for collecting, storing, editing and passing on communication in various forms." In the same way Chiefwepa (2008) defined ICT as "a diverse set of technological tools and resources used to communicate and to create, disseminate, store and manage information". Other definitions include the one given by Kapma (2009) as "Hardware, Software, Networks and Media for collection, storage, processing, transmission and presentation of information in the formats of voice, data, text and images". As review paper therefore, the World Bank definition will be adopted. ICT can be seen as the combination of capturing, processing and telecommunication facilities used for acquiring, storing, organizing and disseminating of information to various users across the globe effectively and efficiently.

Development of Information Technology in Libraries:

ICT have immensely revolutionized the entire process in which library activities and operations are carried out. Originally, the ICT facilities were not purposely produced to carter for the needs of libraries and information centers, they are found to be convenient for effective and efficient library services. Libraries and information centers' activities are primarily to acquire process, store, organize and disseminate information to its patrons. With the coming of ICT facilities, the services, of these centers can now be rendered to numerous users, all over the globe, and at greater speed and efficiency. Gama (2008) pointed out that: The paper cutter, staplers etc were forerunners to the advance technologies like microform readers, projectors, telephone, radio, television sets. Later, are the -sophisticated ones such as computers telecommunication and micro electronics facilities which are being significantly used in libraries.

Furthermore, ICT facilities have continue to develop and adopted in libraries from one stage to another. For example, the "Meddlers" project (Medical literature analysis and retrieval system) begun in 1960's to effectively handle the medical literature of National Library of Medicine in USA. The work on "serials control" pioneered by the Southern Illinois University of California at San Diego was a step forward. Similarly, the "MARC project" (Machine readable catalogue) by Library of Congress and the "Intrex" are initiated in late 70's to provide the format for cataloging. Likewise, both "OCLC" and "Ballots" became operative in 1967.These projects were developed along with relevant soft ware's that are library friendly and compliant. Many soft wares were tested before the final adoption of a suitable one. These include such software's as CDSIS, TINLIB, KOHA etc. (Shariful Islam and Nazmul Islam, 2006).

Use of ICT for Teaching, Learning and Research

ICT has been used in the library to enhance teaching, learning and research in a number of ways. Because of the versatile nature of the ICT environment, teachers are able to access a lot of relevant information that are otherwise difficult to come by for the enhancement of their Corse works. These information are readily available in the numerous websites, most of which are on the library's subscriptions or available on open access. Relevant references are visited directly for the purpose of enhancing research profiles of lecturers and by so doing improving students

information profile. This has also become multi dimensional as students, as learners have been able to directly use the myriad of information available through the internet to enhance their learning. ICT has been adopted in the libraries to perform various functions and operation for effective library services delivery to the users. Ogunsola (2004) lists the following as some of the functions of ICT in the libraries:

i. ICT has been employed in the library to handle a lot of activities such as:

(a) Acquisition; which refers to systematic procedures of acquiring new document to the library by paying or obtaining them free of charge.

(b)Cataloguing; this involves the unique and accurate description of physical parts of document for easy location.

(c) Serials control; which involves the controls of periodicals subscription, monitoring and obtaining receipt of issues, as well as filling claims for issues not received etc.

(d) Circulation control; this involves the check in check out of documents. It also involves reservation functions, loans, overdue fine as well as coordinating the calendar for opening and closing hours of the library.

ii.   Communication tools such as e-mail, fax, radio and video conferencing are of outmost importance because it enables libraries to overcome the barriers of space, speed and time, for example in terms of space e-mails are used to provides reference services, such as CAS,SDI to various clients across wide geographical distance. In terms of speed fax machine is suitable to libraries because clients from faraway places are efficiently served, through sharing the exact copies of documents by duplication or scanning and sent from one end to another in speed, and receive by the end user effectively. In terms of time, on the other hand, radio/video conferencing enable librarians and two or more   participants to see and hear one another to be able to ask question and receive answers instantly.

iii. The library has used ICT to enhance its training activities to a widely dispersed audience by means of the two way video cover terrestrial broad band networks.

iv.   The ICT resources provide opportunity for the library patrons to use internet and at the same time access materials, interact with people and resources and exhibit their own web pages created by both teachers and students.

v.   The development of ICTs in libraries is not just giving the patrons access to vast libraries and multi-media resources but also provides access to professionals and the happenings around them world over. Hence the whole world is being regarded as "Global Village".

vi. With ICT libraries are able to online services. This kind of services allows libraries to further their use by their respective patrons in the sense that the patrons get full satisfaction by accessing various available information resources for their needs. The services include newspaper clipping, abstracting/indexing services, and referral services, among others. Other benefits of ICT to libraries include those listed by Uchendu (2005) which includes;

- Faster access to information than manual   library services
- Students have remotes access to information without seeking the assistance of the libraries.
- Produces access to much more information, though the choices may be problematic.

- Resource sharing by libraries has made it possible for libraries to access information they do not have, and make same available to their students and teachers users. Thereby promoting teaching, learning and research in the university community

Challenges of ICT

The use of Information and Communication Technology in libraries has immeasurably affected the way and manner in which functions and services are performed. In fact, it has come up with different capacity that influenced the process where services are rendered, and cannot be possible in the traditional library services. It covers almost all the entire library activities and operations right from the collection, organization, dissemination as well as preservation of information resource. Shariful Islam and Nazmul-Islam (2006) have pinpointed some of the major challenges of ICT, in library environment. They include;

i. The changing role of libraries and librarians: enables many people the opportunity to use digital information through various available websites all over the globe. The information available is enormous to the extent that users may be confused in terms of selecting the most relevant information as the users are relatively in efficient in the manner they manage such information. The encroachment in to the librarians' domain is a challenge that must be watched.

ii. Due to shortage of funds and the increase of book prices etc. libraries may not be able to purchase sufficient books and subscribes to relevant serials effectively. Libraries therefore have no option than to cut down on their own expenditures to be able to meet the cost of upgrade of ICT equipment. The serious financial implications to maintain the ICT equipment, both hardware and software purchase, software license fees, payment for subscribing to e-journals, internet connection and database fees are enormous.

iii. Copyright management: The provision of digital or electronic materials has crop up with greater challenges, because they have an abridge copy rights laws, whereby information content can be tempered or manipulated, through editing, modifying, repackaging or deleting etc..Unlike its printed counterpart that has a known copy right laws, the copyright laws for electronic materials needs better understanding.

iv. Because of the nature of ICT world in the provision of information and materials of diverse nature, weedable materials and information exist in the system, such materials as pornographic, misleading and volatile information are allowed to exist side by side with other very useful academic information.

v. Preservation of digital resources is associated with the difficulty in selecting the medium through which digital information is preserved including hardware and software. Most of the medium have very short life span in comparison with hard copy medium.

vi. The Legal deposit Law: generally required publishers to deposit certain copies of their materials to the national library or archives or any other agency assigned for preservation. For electronic resources in many developing countries the law is confusing because it is not yet clear as to where such type of publications be deposited for long term preservation. Hence, the materials may not be seen in various libraries where the next generation of users can ultimately use them.

Other challenges include those listed by Emanuel and Sife (2008) these are:

* Unstable power supply: ICT resources rely on steady electricity for its functions. In Nigeria there is constant instability of power supply and this will seriously affect the management and utilization of ICT facilities.

* Low bandwidth: Libraries have adopted the use of ICT in their services and operations and are faced with the challenges of low bandwidth into networks. This implies the amount of information that can be carried in a given period (usually a second) over a wired or wireless communication link expressed as bits per second (bps) (Emanuel and Sife, 2008).

Conclusion

Information and Communication Technology (ICT) has remarkably benefited libraries and information centers in terms of their operations and the new method of service delivery effectively and efficiently. By and large it has helped towards the achievements of the libraries ultimate goal in enhancing Teaching, Learning and Research. Library patrons at the same time have gotten opportunities to use much information from the numerous databases across the globe effectively and efficiently.

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