Information and Communication Technology in Academic Libraries to develop scholarly communication

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Abstract—Rapid developments of Information and Communication Technologies (ICTs) have changed the traditional concept of libraries. Modern academic libraries are more powerful, dynamic and can reach their users without the restrictions of geographical boundaries. In this Internet era libraries fast moving to digital mode and can be accessed universally. With the advent of new communication technologies libraries redesigned their services to borderless world and become lifeblood of the community. Use of ICTs in libraries has become great advantage for its users as they open up opportunities for interoperability and information exchange. Users can access wide variety of information resources such as text, sound, images etc according to their needs under one umbrella. Therefore, application of ICTs provides considerable impact on the way in which libraries relate to their user communities and become an essential part of evolving information society..

Index Terms— ICT application, ICT service,; value of applying ICTs, academic library resources, e-learning, scholarly community

I. INTRODUCTION

Modern Internet is rapidly progressing beyond the creation, delivery, management and preservation of its resources to provide quality services for the humanities. The explosion of information through the WWW and human interaction through wireless devices and mobile telephony is increasing day by day. ICT tools have become backbone of the human community. They conduct their surveys online and trying to reach their goals using online resources. At this point, academic libraries provide greater service to accomplish their goals. If not they will become frustrated like keeping inefficient inattentive sales persons on big shopping mall. Therefore, academic libraries facilitate universal access of scholarly brains and allow scholarly community to accomplish their goals as efficiently, reliably and predictably as possible. Once they are satisfied with the libraries, they will repeatedly search for the resources and recommend those academic libraries to the others. Eventually these libraries become Aladdin's Cave for its communities.

1. ICT Application in Academic Libraries

The emerging new technologies have revolutionized the methods of information storage and retrieval in academic library field. In this Internet era more and more libraries in the world make use of these new technologies for storage, retrieval and dissemination of information in more effective way. Libraries can store huge amount of information using new technologies and transmit this information to any where anytime without any geographical barrier. Scholars fulfill their thrust of information using new technologies without wasting their precious time. ICTs facilitate for rapid transmission of information globally through its networks. It helps library professionals to manage their housekeeping and documentation activities such as circulation, acquisition, maintenance of catalogue, periodical management etc. in the libraries by automating them. These innovative technologies made convenient platform for the scholars to make use the information as well as to explore them. Following technologies have applied in libraries to face their housekeeping problems and to seek better solution –

- ➢ Computing technology (hardware/software)
- ➢ Communication technology
- ➢ Network and Internet technology
- ➢ Web world
- ➢ Printers/Publishing technology
- ➢ Reprographic and micrographic technology

Some library users are adopting electronic habits, making increasing use of the new ICT including computers, the Internet, the Web, Intranet, Extranet and other technologies. As a result, library users are placing new demands on their libraries. They require access to the

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latest information, updated information resources and access to ICT facilities that they could use in their work.

Use of ICT in libraries enhances users' satisfaction. It provides numerous benefits to library users. Some of the benefits are:

- Provide speedy and easy access to information
- Provides remote access to users
- Provides round the clock access to users
- Provides access to unlimited information from different sources
- Provides information flexibility to be used by any individual according to his/her requirements
- Provides increased flexibility
- Facilitates the reformatting and combining of data from different sources
- Libraries are also providing various ICT-based services to their user, including the following
- Provision of Web access to OPACs
- Electronic document delivery
- Networked information resources
- Delivery of information to user desktops
- Online instructions
- Online readers advisory services

2. ICT Services @ Academic Libraries
- Automated library services
- Internet
- In-house databases
- CD-ROM databases
- Subscribed databases
- Library network links
- Multi-media facilities
- Microform services

3. Value of applying ICTs in Academic libraries
- Act as an effective tool for scholarly communication
- Can be accessed instantly @ anytime anywhere
- No geographical barrier
- Can be reached globally
- Physical space not required
- High update rate
- Available @ 24hrs
- Less manpower
- Paperless, wall less environment
- Provide e-learning facility
- Bridge between users and authors
- Facilitate instant downloading

4. Academic Library Resources in ICT era
- e-books
- e-journals
- e-theses
- Databases
- e-groups
- Digital archives
- Library networks

- Library Websites
- Web OPACs
- Virtual conferences
- Virtual help desks
- Web exhibitions
- Bulletin boards
- FAQs

5. E- Learning in Academic Libraries

With the application of ICTs in libraries, access to information has become more dynamic for the scholars who need to gain specialized knowledge. Modern ICT tools has changed traditional teaching methods and made distance learning education more effective and efficient by providing multimedia data repositories which can serve as continuously changing up-to-date information. ICTs facilitate closer cooperation among libraries and distant learning communities. Therefore, it improves quality of people's life providing easy access to range of information which need for their day to day lives. E-learning can be described as online learning, virtual learning, distributed learning, network and web-based learning. They all use ICTs for teaching and learning activities. It can be referred as intentional use of ICTs in teaching and learning. E-learning can be done online or offline or via networked or standalone computers and other electronic devices. And also, e-learning is different from class room learning. ICTs have dramatically changed the world of learning and teaching in this digital era.

Information and communications technology also enables the capture and storage of information of various types including print, audio, and video. Networked information and communications technologies enable access to this content in a manner that is not possible within the spatial and temporal constraints of conventional educational settings such as the classroom or the print mode.

6. Academic Libraries and Scholarly Community

With the emergence of ICTs, traditional libraries have undergone massive transformation on their methods of library development. They have become hybrid libraries where traditional and digital services are being provided and play major role in learning, nation building and development. In this Internet era, academic libraries do integral part of educational sector by strengthening learning outcome and contributing for massive success of its scholarly community. ICTs facilitated storing rich digital documents in electronic form, submitting scholarly data electronically and publishing them digitally via the WWW. Academic libraries are providing nutritious foods to the scholarly brains around the world. It can be easily located, readily accessible and delivered via WWW. It has

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become valuable assets to the scholars. As we are living in the digital era, academic libraries are a key component of any institution, organization, university or even countries

II. CONCLUSION

Academic libraries are facilitating more timely exchange of information among scholars and improve distance learning without any geographical barrier. It supports teaching, learning and research while reaching unreachable without walls. Greater revolution has occurred in the libraries recent past converting paper-based libraries to electronic based ones. With the emergence of ICTs and availability of national and global networks, libraries have turned their attention to digital collections rather than building printed-based collection. In this way, librarian's role dramatically changed and is responsible for what e-repositories available for their users and how users can access to the available information within the physical walls of the library or elsewhere. Many libraries, particularly academic, have provided access to good-quality information sources only

to find that many of their customers display conservative tendencies.

REFERENCES

[1] 1. Dede, C (2000). Emerging technologies and distributed learning in higher education. In D. Hanna (Ed.), Higher education in an era of digital competition: Choices and challenges. New York: Atwood.

[2] 2. Kakkar, Anuradha (2006). Evaluation of Changing User Needs of Social Scientists in an IT Environment, In International conference on Digital Libraries 2006: Information Management for Global Access, The Energy Research Institute (TERI), New Delhi, 5-8 December, Vol. 1, pp. 131-141.

[3] 3. Naidu, Som (2006). E-learning: A guide book of Principles, Procedures and Practices. Chapter 1, p.1, CEMCA, New Delhi.

[4] 4. Ranganadham, D. S. (2013). Qualities of Library Professionals in ICT Environment. Indian Journal of Applied Research, pp. 366-367.

[5] 5. Kamini Perara and Dinesh Chandra (2010) http://file:///C:/Documents%20and%20Settings/DRW/My%20Documents/ETTLIS%20paper%20(2).pdf