Impact of ICT And E-Resources in the development of Library and Information Science Professionals & Library Services.

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Abstract

The paper discuss about the Impact of ICT on Library and Information Services to enable to improve its processes, activities, E-Resources and high quality information value added services to its user. The effectiveness of Information Communication technology depends how well it provides its users with information rapidly, economically and authentically. The paper has suggested the importance of ICT in Library and Information Services. We also discuss under (a) E-Resources (b) ICT based services. It concludes that the Impact of ICT and E-Resources in Library and Information services can provide best services and best E-Resources to meet and needs of the users.

Keywords: Impact of ICT, Computers, Internet, Digital Library, ICT, Information service

Introduction:

The use of ICT in designing and delivery of library services achieves economy, ease, extension (or expansion) and efficiency. ICT helps to provide traditional library services more efficiently to innovate new facilities and capabilities in library services to transform the nature of library services. In the specific context of library and information services, one of the implications of use of ICT is that libraries can reach out globally to provide their services 24-hours a day in very cost effective manner. ICT has enabled users to avail many services without any human intervention, the role of the library and information services professional is changing from an intermediary to a facilitator and enabler.

The human society is undergoing a sea change due to phenomenal growth of information and its management through the application of high degree of computerization along with electronic transformation of information. The development and convergence of computer and communication technologies, which are jointly termed as Information and Communication Technologies (ICT) has affected almost all aspects of human life. Libraries are no exceptions. ICT is meant for better information management and communication, which is also the prime objective of a library.

Objectives:

1. Show the benefit and opportunity of ICT;

2. Explain the ICT Enabled services in academic libraries.

3. Impact of E-resources in ICT based Libraries

4. Impact of ICT in Libraries.

The advantages of the ICT application in libraries:

Use as a tool to solve the problem of information explosion and growing user demands;

1. Quicker, cheaper and accurate data processing;

2. Sharing and transferring data between different systems and

Media;

3. Availability of Distributed Information System (Internet);

4. Increased capacity of data storage and data transmission;

5. Decreased cost and size of equipment;

6. Increased reliability of hardware and software to perform

Repetitive jobs.

ICT Enabled services in libraries

Online Public Access Catalogue (OPAC):

An Online Public Access Catalog is an online database of materials held by a library or group of libraries. It is a computerized library catalog available to the public. Most OPACs are accessible over the Internet to users all over the world. Users search a library catalog principally to locate books and other material physically located at a library.

Another convenience that OPAC offers is accessibility from outside the library from a computer connected to library Local Area Network (LAN). With modern library systems offering interface to OPAC, it is also possible to provide access from anywhere in the world via Internet. Internet enabled OPAC is called Web OPAC. Web OPAC can be searched using any common browser, such as Microsoft Internet Explorer or Netscape Navigator. Apart from searching OPAC, some libraries allow their remote users to avail certain online services like book reservations, loan requests for postal loan, loan renewals, membership application, address change, suggesting books, etc.

Some of the important changes that developments in ICT have brought about in information services are:

1) Changes in formats, contents and methods of production and delivery of information products, and a new business model for use of information products. This requires procedural and infrastructural changes and cost implications in libraries.

2) Emergence of Internet as the largest repository of information and knowledge.

3) Extinction or significant transformation of some of the conventional information services such as press clippings, contents pages, company information, etc.

4) Use of new tools and technologies for dissemination of information.

5) Transformation of role of LIS (Library and Information Science) professional as the subject specialist and end-user gets directly involved in the information work and consequent need for new skills.

6) Shift from physical to virtual services that offer convenience of time and location for access to services.

Impact of E-Resources in development of ICT enabled libraries (Reference Service):

Reference services include information about the library and its resources, quick answers to factual questions, citation verification and directional assistance. Asynchronous tools such as e-mail, subject gateways, FAQs, and electronic libraries and interactive tools like chat rooms, virtual reference desk, and ask-me are replacing the conventional means of post, phone or in-person reference enquiries. The reference librarian either provides an answer, links to resources or links to a subject expert.

Bibliographic Service:

Compilation of bibliographies, reading lists and state of-the art reports is one of the most important aspects of LIS work, particularly in research and academic libraries. Browsing through the manual indexes and abstracts is a tedious and time consuming work, and does not always produce up-to-date result. Availability of databases in electronic form on CD-ROM or online, offers convenient, efficient and cost effective information retrieval. Electronic databases also provide unique search features such as searching on multiple criteria (keyword, subject, author, source, classification code, year of publication, Language, etc.), and variety of display formats and styles.

Current Awareness Service (CAS):

A current awareness service may be as simple as copy of table of contents or a bulletin containing bibliographic records, of articles selected from the current issues of journals and other material, and usually organized by subjects. Libraries now compile current awareness bulletins using predefined search strategy and running on the databases either on CD-ROM or online periodically and getting the desired output. Some publishers even offer free e-mail update of table of contents. Free Pint (w.w.w.freepint.com) is example of web-based current awareness services.

Document Delivery Service:

From searching the holdings to ordering and delivery have been benefited by the use of ICT. A large number of libraries now host their up-to-date holdings on their website and can be searched on Internet. Many library networks such as INFLIBNET and DELNET maintain union catalogue of their member's journal holdings.

Some of the commercial document delivery services are like Ingenta (http://www.ingenta.com/). BioMedNet, OCLC (http://www.oclc.org/) and Science Direct (http://www.scienceDirect.com). Full-text of electronic journal articles that are available in electronic from may also be downloaded through links provided by aggregator or gateway services such as Informatics' J-gate (http://www.j-gate.informinindia.co.in.

Inter-library Loan and Union Catalogue:

Librarians can now access catalogues of thousands of libraries across the world using Internet. Developments in digital library and Internet technologies have made it possible to automatically update the catalogue records from member library systems, distributed searches using a single user interface, and value added services. RedLightGreen. (http://www.redlightgreen.com/) is one of the world's largest web-based union catalogues. It contains about 130 million records from 160 member libraries of Research Libraries Group (RLG) in USA. In India, bodies like INFLIBNET, DELNET are also providing union catalogues of books, serials and theses.

Audio-visual Service:

Many libraries particularly media libraries and large academic and public libraries hold audio-visual material such as music, films, pictures and photographs, etc. Old media of LP records and tape slide have long been replaced with audio and video tape. The new multimedia of audio CD, Video CD (VCD), and Digital Video Disks (DVD) have advantage of higher storage capacity, random access and longer life than audio and video tapes and cassettes.

ICT based new services:

Apart from the ICT enabled conventional services, Libraries are making use of the potential of Internet and computing power to provide new and innovative services. In a web enabled environment the new LIS services can be grouped into the three categories mentioned below:

Internet Access: As information resource:

Internet is not only a medium for digital communication but also the world's largest repository of information. However, under developed Internet infrastructure in a country like India, poses a serious challenge to the growth of ICT enabled services. Large segment of user groups may still be deprived of personal access to Internet facility. Libraries, therefore, provide free access to Internet and e-mail. Depending upon the availability, users can be given time slots for use of Internet facility. Usually a few Internets enableld terminals are provided in the library that can be used by the users for Internet access and e-mail, etc.

E-Journals:

Electronic journal helps the librarians in addressing these problems to a great extent without significantly affecting the service levels. Electronic journals can be accessed via Internet from any web enabled PC. Depending on the type of subscription, one or more users can access the service simultaneously, either directly from an independent web enabled PC or in a local area network through a proxy server (IP addresses based access). Electronic Journals also offer benefit of full-text searching and downloading of articles. Many publishers of electronic journals offer their journals through consortia of libraries at much lower rates. INDEST (Indian Digital Library of Engineering, Science and Technology), and INFLIBNET's INFONET are two such consortia operating in India. OCLC and J-Gate are some of the examples of e-journal aggregator services. The main disadvantage of electronic journal is that libraries cannot physically possess the journals.

E-Books:

An electronic book is the content of the book made available to the reader in electronic forms. E-book has been described as a text analogous to a book that is in digital form to be displayed on a computer screen. E-books can be read just like a paper book, using dedicated E-book reader such as Gem Star e-Book or on a computer screen after downloading it. There are also some newer technologies developing such as electronic paper, which is much like paper, except that the text can be changed, and talking books in MP3 format. E-book offers advantages like portability, 24 hours access, text search, annotation, linking, and multimedia and self-publishing possibilities. Development of e-book is still in the infancy stage and issues like compatibility, e-book readers, availability and intellectual property rights are to be addressed before it can be implemented on large scale..

E-Theses and Dissertations:

A large number of universities have converted their theses and dissertations collection into digital libraries and have made it available on Internet for global access. A number of universities have also implemented Electronic Theses and Dissertation programmes, where researchers submit theses in electronic format. Some initiatives such as Networked Digital Library of Dissertation and Theses (NDLTD) (http://www.ndltd.org) in development

of web-based union catalogues of ETDs submitted over 100 libraries throughout the world are worth mentioning.

E-Patents:

Many patent issuing authorities now have made their complete full text patent records online. For example United States patent documents can be searched and downloaded free of cost from the site (http://www.uspto.gov/patft/index.html). Some of the commercial organizations such as Derwent also provide downloading of full-text patent from either an online database vendor (e.g., Dialog, STN) or directly from their site to the subscribers.

Conclusion :

ICT enabled library services help to find out any required information at anytime from anywhere by my one through integrated and networked resources and services.

ICT has created great opportunities for the future of library services. But we should remember that technology does not determine change humans do. Library professionals should be able to influence the shape of reference and information services. Library services should aim to serve the community wherever it is located, whether in the library, at home, at work or traveling around the globe because ICT expands the reach of the library to the community and the community's demands upon the library. As a result, libraries are changing from internally focused institutions to externally focused institutions by the application of ICT in designing library services.

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