



Utilization of ICT in College Library

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Abstract:

Application of ICT in all spheres of human life have brought a great revolution all over the world and its effect can be seen in the developing world as well which has witnessed a rapid growth in mobile telecommunication, internet, web-resources, databases etc. Today, we can have access to any kind of information by just sitting by the computer at any place be it at home, office, institution etc. The library also has under gone a vast change simultaneously such as from the traditional library to the automated, electronic, digital and now to the borderless library or the library without walls. The increasing use of Information and Communication Technology (ICT) is making the LIS professionals to rethink and readjust to the change in teaching, learning, research and librarianship. ICT components in LIS must be evaluated on the basis of its feasibility to meet present and future challenges and accordingly it should adopt certain changes, if required.

Keywords: Communication, ICT, Information, Library, Technology

2. Definition of ICT

Wikipedia consider IT as ICT and define as "ICT is a based subject which deals with technology and other aspects of managing and processing information as specially in large organization, particularly IT deals with the use of electronic computer software to convert, store, protect, process, transmit and retrieve information" From many other definition it can be said ICT umbrella covers many aspects that can be summaries as under. ICT = IT + CT (Information Technology + Communication Technology)

IT (Information Technology)	CS	CT (CCT (communication Technology)
* Computer science	* Computer Hardware	* Internet
* Photocopying Technology	* Computer software	* Networking
* Micro filming & Scanning	* Input Output Devices	* Digital Devices
* RIFD Technology		* Web Designing
* Management		* Telephone, Mobile
* Video photography		

The application of ICT can be distinguished in following stage as the progress and advanced technology available time to time.

1. Traditional library to automated library

The automation process includes all types of routine work of library using computer technology.

2. Network Development

Two or more libraries are linked with each other to share their documents to satisfy the user's need. Further use of internet had made support for the network development.

3. Electronic library

Transmission data, technology has made possible to exchange the document. World wide web technology made possible to make available the document in an electronic form. CDROM played a vital role in the development of electronic library. A library can have printed as well as non-printed documents.

4. Digital library

The printed document can be transformed into electronic form and stored, and retrieved and sent through e-mail. A document can be transferred in other forms like audio, video etc.

Thus library has been found to keep pace with the use of information technology, computer software and hardware and communication technology.

3. Major Challenges for College Librarian

In a fast changing ICT, the methods of storing, organizing and dissemination of information have shifted from traditional to digital information. This shifting leads to a variety of challenges for librarians. The major changes are:

- Exploration of Information and Knowledge;
- Revolution of information and Communication technology;
- Proliferation in use of Web-resources;
- Growing demand for ICT resources;
- Changing pattern of scholarly publication;
- Shifting from paper based to e-media.

4. Need for a College Librarian in the Digital Information System Management

It is due to information explosion almost in every field of 'Knowledge'. Libraries are facing manpower and monetary constraints to provide precise and timely information from every document under the root. ICT librarians are required to:

1. Organize digital information and knowledge.
2. Provide digital reference service and e-information services.
3. Provide universal access and retrieval of digital knowledge.
4. Catalogue and classify digital documents.

5. Role of College Librarian in ICT Resource Management.

- Provide access to a large collection; capture, store and manipulate information. For that reason libraries will need to upgrade architectures to accommodate digital materials (i.e. high speed local network and fast connection to the internet ; full text search engines , FTP servers etc.)
- Building ICT resources (i.e. e-journal, full-text, CD-ROM databases, book, RSS feeds, Web2.0, Blogs etc.) for access , preservation and managing good qualities of information.
- Digitization is the process of building ICT collection. It refers to the conversion of an item from one format into electronic format
- Provide preservation of digitized documents. Digital preservation means the planning , resource allocation and technologies necessary to ensure accessibility, usability, durability of information contained therein.
- Provide retrospective search services to the user.
- Improve cost-effectiveness of library services.

6. Skills for College Librarian

ICT revolution has altered our life, Remarkable advances in computer and telecommunication and the advent of Internet have changed the entire information scenario. This rapidly changing condition demands extremely efficient librarians. The skills of ICT Librarian which are to be greatly developed are :

6.1 Management Skills

- **Conceptual skills:** The mental abilities needed to analyze and interpret the information received from various sources and take complex decisions are the called the conceptual skills. It include the capacity to analyze and synchronize.
- **Administrative Skills:** Abilities to follow polices and procedures process all work speedily and minimize the expenditure.
- **Human Relation Skills:** It is the ability to interact effectively with the user, and to build team work at all levels. He has to keep pleasant relation with customers (user).

6.2 Community and IT Skills

In digital era a library professional should acquire following technical knowledge:

- Operating systems – Windows, UNIX, LINUX,
- Word Processing, Graphics, Spreadsheet and Presentation.
- Bibliographic Database Management Systems.
- Programming skills – C, C++, Java, VB and Scripting Languages.
- Web page Development by HTML, ASP, PHP etc.
- Information Retrieval software for online CD-ROM and Internet.
- Software Development and Support Environments-Oracle, My SQL ,SQL Server.
- Content Management
- Networking

Scanning technology: Scanners-Scanning / OCR- saving in several file formats OCR software-Omni page- Text bridge-Fine Reader

Acrobat – Reader – Writer – conversion to PDF files Digital camera – capturing and storing Building a ICT Library Projects

6.3 Information Skills

Information professional must have the following information skills..

- Skills of information collection, structuring, retrieval and filtering.
- User studies and user education related skills.
- Skills of digital information and reference service.

6.4 Presentation Skills

- Skills to cultivate reading habits among all levels of users;
- Present information to user as per their needs;
- Convey information to users using varied presentation technique.

6.5 Measurement Skills

- Techniques of evaluating the quality of information;
- Regular and periodic analysis and assessment of user needs;
- Design new resources and services by evaluating the result oh present use.

6.6 Search and Dissemination Skills

- Sound Knowledge about tools and techniques , strategies, engines related to search;
- Expertise in searching database, Web resources and catalogues.

7. Recommendation & Suggestion

1. The more the staff understands customer preference the more a refined segmentation can be achieved. He must try to offer different information access and delivery mechanism, such as Network CD-ROMs, Video conferencing and downloading via the web, etc, to the customer.
2. To ensure that the library catalogue is readily and easily accessible via the web (not just via the internet).
3. To provide more and more value-added services, such as the renewal or borrowed materials, reservation of books; etc automatically delivering overdue / fine notice, delivering a lost of newly added materials (books, print / electronic journals, databases etc.) directly to patrons e-mail.
4. To deliver the right message to the right customer at the right time in the most courteous and professional manner. To build strong customer relations by knowing their details and preferences.
5. Librarians and staff must be receptive to feedback and suggestions from customers. They should use Newsgroups and Online – Forums to discuss and consult customers.
6. Librarians should also continuously review and improve the ICT Library System.
7. Last, but not least, it should be remember the ICT library technology is there to assist human librarian not to totally replace them or render them useless.

8. Conclusion

ICT enable library and Information science discipline to make optimum utilization of resources for acquisition, storage, organization, retrieval and dissemination of information. Various software packages, online information retrieval system, use of information networks, on-line databases, multimedia, web 2.0, RSS, feeds, Blogs and CD-Rom technology etc. are important consideration to face the challenges enforced by the technological revolution in the field of library and information science. ICT is an indispensable managerial tool for dealing with the problems caused by 'Information Explosion'. The staff of the digital library will have to be flexible, project based, aware and that the scholarly communication environment is intrinsically unstable, if dynamic and demanding. Qualified library staff coupled with excellent customer service will boost the overall customer satisfaction and confidence in using the digital library. It will make a core contribution to words a higher level of digital library usage among the communities.

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