

## ICT based best practices in library

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### Abstract

Information and communication technologies (ICTs) are a diverse set of technological tools and resources - used for creating, storing, managing and communicating information. For educational purposes, ICTs can be used to support teaching and learning as well as research activities including collaborative learning and inquiring. One of the main applications of the ICTs in higher education is teaching and learning based on these new technologies. The development of ICT has changed the traditional concepts of libraries, changed the nature of collections and the needs of users. The composition of ICT includes computers (Hardware and Software), Internet, Wireless technology, Radio Frequency Identification (RFID) and use of various library resources in ICT e.g. E-books, E-journal, Library network, Web OPACs, According to their needs user can access wide variety of information resources such as text, sound, image, Video etc.

This paper includes traditional best practices, information technology based best practices like web page, institutional repositories, e-mail alerting services, extension services and general best practices also.

**Keywords:** ICT, Information technology, Internet, E-resources, Library

### Introduction

Human history has gone through different phases and witnessed different revolutions, such as agriculture, industry, and information. Libraries and library professionals have also undergone various changes that have come about because of these different revolutions in our society. Library professionals explained their journey from clay tablets and palm leaves to today's digital content for reading material. (According to Urs, Shalini (2004). Education is the most important factor for human development. Information and communication technology has become a fundamental and accepted part of everyday life for people. In this time day to day value of ICT is increasing in education. Rapidly developing information and communication technology are creating new opportunities and challenges for traditional teaching and learning systems. Electronic publishing has become a foundation for the new information society to get the right information to the right person at the right time. Today's period of information and communication new technologies and this technology most of library professional/users/teachers used internet based education curriculum.

The role of librarians and information professionals in this new environment has been strongly influenced by these changes. Now the traditional library and librarianship is undergoing significant changes due to the digital revolution through ICT application and it affected all aspect of role of librarians in providing information provision in a library.

### What is ICT?

The term of 'ICT' describes the use of computer based technology and the internet to make information and communication services available to a wide range of users. ICT means,

**I – Information:** The word information means a message received and understood. Information is something that can be recorded, Communicated, and computed with. Information units can be put together to form larger systems and can be processed with basic operations acting on a small number of units at a time.

**Data**  $\longleftrightarrow$  **Process**  $\longleftrightarrow$  **Information**

**C – Communication:** In ICT communication is defined as a 'diverse set of technological tools and resources used to communicate and to create, disseminate, store and manage information.'

**T – Technology:** Technology is defined as 'a science and technique of methods of doing or getting things done, related to an arts, science or a particular profession.' Technology is a scientific way of evolving and applying these techniques.

### Changes in the role of library

ICTs have brought about changes in different aspects of human life in the 21st century. New opportunities offered by ICTs in the fields of business, learning, communication, etc. have thrown the world into a new society called Knowledge Society or Information Society. Thus, the world has become a global village. The internet where you can migrate from one computer chain to another is called the super information highway. Information and communication technologies, ICTs have brought about socio-cultural, political, educational and economic changes. The library is one of the main areas deeply impacted by ICTs, a pillar of the information age. This is because the library is the main place of information and knowledge; it has become virtual, so that library and information services extend beyond walls and physical buildings.

**Table 1**

From	To
Information resource in one medium	Information resource in multi media
Library has its own collection	Library without wall
Procurement of information sources by individual library	Procurement of information resources through consortia
Service in good time	Service just in time
In-sourcing of all activities	out sourcing of all activities
Local reach of resources	Global reach of resources through networks
User's want print resources	Users want print, non-print, online resources
Users go to library	Library come to users
Local users	Users from any place

**Library Resources in ICT era**

1. E-books
2. E-journals
3. E-theses
4. Electronic Databases
5. E-papers
6. E-groups
7. Digital archives
8. Library networks and websites.
9. Web OPACs
10. Virtual conferences
11. Virtual helpdesks
12. Bulletin boards
13. FAQs

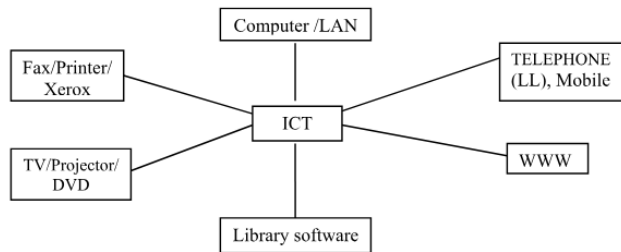
2. No any restrictions of geographical boundaries for users
3. Library users are live connected to another from long distance
4. Use of technology by getting the information is accurate, authentic and reliable
5. Anytime, anywhere (24 x 7) and save the time.
6. Greater flexibility in when and where tasks are carried out
7. Gains in ICT literacy skills, confidence and enthusiasm.
8. Easier planning and preparation of lessons and designing materials

**Best practices of library**

According to online dictionary of library and information science the best practices; "In the application of theory to real -life situations, procedures that, when properly applied, consistently yield superior results and are therefore used as reference points in evaluating the effectiveness of alternative methods of accomplishing the same task. Best practices are identified by examining empirical evidence of success."

Best practices are available on the NAAC website and ensure that regular updates will be made through consultations on contributing institutions. For college and university libraries NAAC has developed below a list of best practices that can improve the academic information environment and its usability.

1. Automation of library with standard software.
2. Inclusion of sufficient information about the library in the college/ university prospectus.
3. Compiling student/teacher attendance statistics and locating the same on the notice board.
4. Displaying newspaper clippings on the notice board periodically.
5. Career/Employment Information/ Services.
6. Internet Facilities to different user groups.
7. Information literacy programs.
8. Suggestion box and timely response.
9. Displaying new arrivals and circulating a list of those to academic departments.
10. Conducting book exhibitions on different occasions.
11. Organizing book talks.
12. Instituting Annual Best User award for students.
13. Organizing competitions annually.
14. Conducting user surveys periodically

**Fig. 1: ICT components in libraries****ICT in libraries**

The first and foremost ICT component which can be adopted in the libraries is the computer for library automation and to have an in – house database of library holdings in electronic form. As many primary journals and being published in CD form, it becomes necessary to equip the libraries to optimize the use of information. E-mail, Online retrieval networking, multimedia and internet are the other important technologies, which can be used for faster access to information. ICT enables to capture, store, manipulate and distribute information. To introduce and provide new services faster, to provide need based services to user and utilize the user for providing better information services, to support all type of library functions.

**Advantages of ICT**

1. Information access speedy and accurate, use one and more users at the same time

The best practice are mainly classified are the following,

#### Traditional best practice

1. Orientation programme
2. Book exhibition
3. Library hours (Before and After)
4. New arrivals
5. Library Brochure
6. Readers (users) Meet
7. Training programme to use library resources
8. Indexing and abstracting services
9. Carrier guidance cell
10. Best library user award
11. Binding and photocopy services.

#### Library extension services

1. External membership facility
2. Inter library loan (ILL)
3. Document delivery service (DDS)
4. Reprography
5. Newspaper clipping service
6. Career notification
7. Suggestion and feedback box
8. Library security (CCTV, RFID...)
9. Library Help desk.

#### General best practices:-

1. Regular meeting of the Library Advisory Committee.
2. Binding of books and periodical Volumes.
3. Library Information included in prospectus and College Websites.
4. Intercom facility for easy communication among various departments.
5. Pasting of barcode, spine label and stamping in a definite place on the books.
6. Question Paper sets of previous examinations.
7. Library calendar of activity and events.
8. Use of pesticides to keep the book worm away and damage of books.
9. Display of various library charts.
10. Keeping the library premises silent, neat and clean.

#### ICT based best practices

1. **Library automation with library software:** Libraries utilize software's designed to manage different library routines and processes. Most of the software are integrated and have modules for the different activities or tasks carried out in the library like cataloging, statistics, acquisition processes and serial control etc. Many software packages for various applications in the field of library and information management services i.e. SOUL, LIBSYS, KOHA, LIBRARIAN, CDS/ISIS, Dspace, Greenstone and Library manager used for automation purposes.

2. **Library websites/web page:** A medium of communication for libraries to their users. In most of the library website is included all library details like catalogue, list of subscribe journal with access link, back volumes, curriculum, scanned exam papers, photographs-video of function and daily updated news related to users. A library Web page or a Universal Resource Locator (URL) makes it easy to access a single window for various Web-enabled library services. ([http://npdch.edu.in/?page\\_id=27](http://npdch.edu.in/?page_id=27))
3. **Online public access catalog (OPAC):** This is the computerized form of the library catalog or a database of library holding. It is an online database of documents held by a library or group of libraries. It provides access to the catalogues of a library on the local intranet, extranet or even the internet.
4. **Electronic document delivery services:** Libraries may not rely any more on postal services to send documents to users or carry out inter library lending. Libraries send documents through electronic networks that can deliver documents in various format e.g. PDF straight to user's desktops.
5. **CAS and SDI services:** A selection of current awareness services in the form of table of contents alerts, lists of newcomers to journals and books, press clippings, research compendiums, including the abstract and indexing (dissertation) service have library. Selective dissemination of information refers to the tools and resources used to inform a user of new resources on specific topics.
6. **E-mail:** E-mail means communication between the library and the users. Email is very useful for sending messages to and from remote areas with an enhanced network. In addition, it is also useful in various aspects of the library environment. Thus, it can be argued that e-mail can play an important role in information dissemination services.
7. **Electronic resources:** Electronic resources on magnetic and optical media have a significant impact on library collections. The currently available electronic resources are electronically accessible through traditional media such as CDROMs or via the Internet in the form of electronic journals, online databases, e-books or OPACs, blogs, wikis, podcasts, etc.

Today many journals and databases are available in electronic form - some are full text and others contain only bibliographic references information with summary. Some international societies and associations have developed their own digital libraries through which users can access all their publications. The services are available to members of society or associations by subscription. The some electronic journal and online database as,

**Table 2**

EBSCO databases	<a href="http://search.ebscohost.com/">http://search.ebscohost.com/</a>
Elsevier's Science Direct	<a href="http://www.sciencedirect.com/">http://www.sciencedirect.com/</a>
Emerald full text	<a href="http://iris.emeraldinsight.com/">http://iris.emeraldinsight.com/</a>
IEL Online	<a href="http://www.ieee.org/">http://www.ieee.org/</a>
OCLC	<a href="http://www.oclc.org">http://www.oclc.org</a>
Springer link	<a href="http://www.springerlink.com/">http://www.springerlink.com/</a>

8. **Institutional repository (IR):** An institutional repository is an online archive for collecting, preserving and distributing digital copies of intellectual product created by faculty, staff and research scholar of an institution. Such as these, dissertation, reports, conference and seminars papers, notes, career guidance question papers, syllabus etc. can be made available to the user community.
9. **Full-text online service:** A full-text database is a compilation of documents or other information in the form of a database in which the full text of each referenced document is available for viewing, printing or downloads online.
10. **E-Library/Virtual library:** Digital libraries depends on information recorded on digital formats like CD-ROM. Virtual libraries are do not exists physical space or structure but can be accessed via networks.
11. **Social media networks:** Social media networks like twitter, face book, LinkedIn can be deployed for educational user discussion groups, list serves and communities also assist library services.

12. **Online reader consulting services:** Libraries implement web versions of reader consulting and reference services. It helps to find the right information /reading material for the right person at the right time and to provide the best information that matches their needs, interests and reading level.
13. **Competitive exam tutorial:** The entrance and competitive exam like, NEET, GPSC, UPSC, NET, SET, CAT, GATE etc kept in a special section for the students concerned and the teachers preparing for the exams tutorial is provide in digital form.
14. **Portal:** In the library community, portals can be defined as a fusion of services to users where the merger is achieved through the seamless integration of existing services with the help of association officers such as customization and authentication services. The result is a personalized service that allows the person to access the rich content of printed and electronic systems. Portals are either commercial or free. There are three types of portals; Consumer (YAHOO, MSN, AOL), vertical (specified audience) and business (links to subjects or interest-oriented resources located on the WWW.)

### Subject portals web address

**Table 3**

ADAM: Art, Design, Architect and Media	<a href="http://www.adam.ac.uk">http://www.adam.ac.uk</a>
EEVL: Engineering Information	<a href="http://www.eevl.ac.uk">http://www.eevl.ac.uk</a>
History	<a href="http://ihr.sas.ac.uk">http://ihr.sas.ac.uk</a>
OMNI: Organizing Medical Networked Information	<a href="http://www.omni.ac.uk">http://www.omni.ac.uk</a>
Sci Central: Science Resources	<a href="http://www.sciencetral.com/index.html">http://www.sciencetral.com/index.html</a>
SOSIG: Social Science Information Gateway	<a href="http://www.sosig.ac.uk">http://www.sosig.ac.uk</a>

### Advantages and disadvantages of ICT application

The ICT plays a significant role of providing a valuable online library services. Advantage of ICT used in library areas under.

1. Elimination of duplicate work
  2. Effective and efficiency cost in library operation
  3. Easy and accuracy in data handling
  4. Quality library services provided to users
  5. Saving the labor work in library
- The main disadvantage of ICT is unnecessary download of documents and increases probability of cyber crime in the library.

### Conclusion

Best practices help to improve the quality of library services. Best practices adopted in academic institutes should bridge the gap between the library collection and the user community for maximum resource utilization. Library has adopted various best practices in administration, management, collection and services, extent of service use and technology. Technology based services are essential to provide up-to-date information to the user community. In its effective implementation that bring significant changes in the improvement of the use of information sources / services and level of user satisfaction. The above best practices of each university/college library create their own image in the minds of students, faculty and society. The nature of

students watching library professional is a knowledge manager.

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