

## BENEFITS OF ICT BASED PRODUCTS & SERVICES FOR THE LIBRARY

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### INTRODUCTION

In the era of information explosion, the tremendous amount of information is being generated and transmitted from every corner of the world in the form of print materials, research articles, lectures, presentations video conferencing, technical reports, standards and patents etc. In the early stages of 20<sup>th</sup> century, libraries were facing the problems, of how to cater and fulfill the users' demand in minimum span of time. The solution was to adopt the ICT based products & services. To deal with new challenges and increasing demand of users, libraries are consolidating; reshaping, redesigning and

repackaging their services and information products by incorporating ICT based products & services.

Owing to ICT enabled products & services, libraries have changed the way, in terms of the provision of information services. These products and services are the integration of computer and communication technologies, which can be, apply, to store and disseminate the information. They have changed the traditional practices of libraries in delivery of services. In the present scenario, users can have access to a variety of information and digital archives of libraries from any corner, as well as can get update activities of libraries by the

SMS on their mobile phones. It also helps to users to access, manage, integrate, evaluate, create, and communicate with other users more easily than ever; it can be made possible by the emergence of library 2.0. The significant developments in ICT have forever changed the way of information gathering, processing and disseminating. The ICT products and services melt the physical walls of library; it has made library without walls or virtual library.

### **Meaning of ICT**

The term 'Information and Communication Technology' (ICT) first appeared in the mid 1980s and was defined as "All kinds of electronic systems used for broadcasting telecommunications and mediated communications", with examples including personal computers, video games, cell phones, internet and electronic payment systems and computers/W etc. The ICT is made of computer and communication technology. The computer technology is the tool for storing and processing information in digital form while communication technology helps us to transfer and disseminate digital information. Additionally

ICT means a variety of technological applications in the process and communication of information. The word ICT is a combination of two words information, communication & technology. Information means knowledge and technology means use of computer & communication. The term ICT can be defined as "the integration of computing, networking and information processing technologies and their applications". Thus, ICT means a combination of computer applications' and communication technology for gathering, processing, storing and disseminating of Information.

### **Benefits of ICT based products & services:**

**The ICT products & services are beneficial for the libraries in the following ways:**

1. It provides efficient and accurate services;
2. It saves the time, space, energy and resources;
3. It helps for controlling the tremendous escalation of information;
4. It assists to provide high quality of services and increases the range of services;
5. It has invented the ways of resource sharing by co-operation and co-ordination;

6. It helps for the betterment of library image by providing better services in modern ways.

### **LIBRARY AUTOMATION**

Library automation was first giant step towards the use of ICT based products & services in libraries. It brings great revolution and save tremendous time of users and library staff for collecting and disseminating information. The libraries started for automation in middle 1950's until 1980's. Library automation refers to use of computers, associated peripheral media such as S/W for automation, magnetic tapes, disks, optical media etc. Library automation makes the provision to provide the 'right information to right reader at the right time in a right form in a right personal way' it is the basic aim of libraries. Library automation fulfills the above demand of libraries by providing the library activities as: very efficiently, rapidly, effectively, adequately and economically. Thus, the ICT made possible for automation in libraries .

Now libraries are using the RIFD (Radio-frequency identification) to prevent the theft of library resources. The RFID is the use of an object (typically referred to as an RFID tag) applied to or

incorporated into an information product for the purpose of identification and tracking using radio waves. For library automation, there is some open source software available: Evergreen, CDS Invenio, Koha, NewGenLib, PMB, PhpMyLibrary, OpenBiblioas well as many commercial software: SOUL, Alice for windows, Netlib, LibSys etc.

### **BENEFITS OF LIBRARY AUTOMATION:**

It fulfills the implications of Rang Nathan's 'the five laws of library science', especially the concept of the fourth law i.e.' save the time of the reader'. In addition there many benefits of library automation such as:

1. Owed to the automation, circulation is one of the most affected areas of library services, which saved a lot of time of users as well as staff;
2. Staff can set fine rules only one time and S/w will provide results automatically
3. With the help of WEBOPAC, users can search information from anywhere at anytime;
4. Users can easily do the reservation of library sources;
5. Check out process of library document is very easy or it may be self check out-process, so there will be no queue of users in library;

6. Users can do self circulation of library resources;

7. It helps to avoid the theft of library resources with RFID system;

8. It provides the multimedia facility, some automation S/w gives the image of resources in OPAC (such as Alice for Windows S/w).

### **DIGITAL ARCHIVES**

Libraries must provide the best services to its users, in order to meet the user's requirements, libraries in the past have updated their collections. Nevertheless, in the present scenario, libraries must not only update their collections but also provide better access to information through the new information highways. This can be achieved through digital archives. Digitizations in libraries are today's response towards a faster delivery of information to its users through the digital archives. The concept of digital archives emerges after the rapid advancement of ICT. The advent of digital archives has great impact on libraries. It provides information very speedily to the end users. The digital archives means: collect the information & store it, in machine-readable format or digital format for dissemination to end

users. The digital content can easily reproduce at globally.

### **Digital archives can be as:**

#### **Digital Library:**

A digital library is a library in which all collections of a library are stored in digital formats, and anyone can access to this collections without any barrier. The digital content may be stored locally, or accessed remotely via computer networks. A digital library is a highly organized collection of electronic resources.

#### **Institutional Repository:**

An institutional repository (IR) is a web-based database (repository) of any institute's scholarly materials. Include works of various stages in the process of scholarly inquiry. In addition to published works, an IR may include preprints, theses & dissertations, images, data sets, working papers, course materials, or anything else a contributor deposits. The main task of institutional repository is to collect the scholarly materials to store and disseminate in digital format for widely used.

**Benefits of Digital Archives:**

Some basic benefits of digital archives, which are as follows:

1. Ability to provide a large number of users' at single time access to unique or special collections, this is the most attractive feature of digital archives.
2. Easily accessibility to information and content can be delivered directly to end-users and retrieve remotely
3. Flexibility of the digital material, since the data is not "fixed", as with paper or printed text, it is easy to reformat, edits and prints.
4. Providing access to primary material can help to "publicize" the material to other departments and peers, and to demonstrate the importance of the collections.
5. Digital archives are very useful to save the place

**Library 2.0**

The concept of library 2.0 derived from web 2.0. The library 2.0 encompasses a range of new and contemporary products & services of ICT that used for evolving collaborative environment required for library 2.0. Owing to library's services, have focusing more on the facilitation of information transfer and

information literacy rather than providing controlled access to it. New products & services based of ICT in forms of "Library 2.0" are the interactive, collaborative, and multi-media web-based technologies to web-based library services and collections.

The library 2.0 is a loosely defined model for a modernized form of library service that reflects a transition within the library world in the way that services delivered to users. With library 2.0, library services constantly updated and reevaluated best serve library users. The library 2.0 also attempts to harness the library user in the design and implementation of library services by encouraging feedback and participation.

.Michael Casey coined the term "Library 2.0" on his blog Library Crunch as a direct spin-off of the terms Business 2.0 and Web 2.0. Casey suggested that libraries, especially public libraries, are at a crossroads where many of the elements of Web 2.0 have applicable value within the library community, both in technology-driven services and in non-technology based services. He described the need for libraries to adopt a strategy for constant change while promoting a participatory role for library users.

There is some tools and techniques of library 2.0 which are being used by today's libraries: Blogs, Streaming Media, Tags or Tagging, Social Networks, RSS Feeds, Synchronous Messaging, Pod casts, Mashups and etc.

### **Benefits of Library 2.0:**

Some benefits of Library 2.0 are as follows:

1. CAS can receive in very effective manner.
2. A very quick communication can possible with library staff.
3. Library can easily get users feedback in minimum span of time.
4. It can keep update to library's users regarding its daily activities.
5. Multimedia data can be accessing by user and able to give feedback.
6. Users can have Chat referencing/ instant messaging with library staff.

### **Mobile phone services of the library**

ICT has collapsed all the barriers and promoted fast communication by across boundaries. To cope with the basic challenges of life and responsibilities has informed the invention and the use of information technologies. Before the advent of ICT, communication in the library was possible

through notices, circulars etc. in libraries' notice boards, means users had to come to library to get the update about the library activities. As scientific knowledge has increased, electronic communication systems began to develop. The library can inform through a single SMS on his users' mobile phones about any new activity. Means it is not necessary come to the library for its users. Therefore, we can say, now libraries are without walls with dawn of ICT, libraries may have started exploring the feasibility of its products& services. These would support library-to-user, user-to-library, and user-to-user online interactions. It made possible by Global System for Mobile Communication (GSM). Mobile phones have revolutionized the daily lives of all over the word. The GSM also enhance library operations. The application of telecommunications to an automated library can bring more efficiency of library services on mobile phones. Libraries are investigating ways to deliver their services to mobile phones so their users can access them any time anywhere. Further mobile phones can be use for sending text message alerts about their reservations becoming available or overdue books.

Moreover, some vendors are having mobile version of catalogue for their customers or announced plans to produce an I Phone-optimized version of their catalogue, such as Sirsi/Dynix and Innovative.

### **Examples of Library Mobile Services**

District of Columbia Public Library I Phone software

([dclibrarylabs.org/projects/iphone/](http://dclibrarylabs.org/projects/iphone/))Denton Public Library ([library.cityofdenton.com](http://library.cityofdenton.com))

### **Benefits of mobile phone services of libraries:**

Some are as follows:

1. Short Message Services (SMS) facilities available on all mobile phones, could be use to create awareness amongst the academic library users about upcoming events and new arrivals.
2. With the help of GPS, users can find the location of multiple branches of the central library.
3. Libraries can provide to access their digital library on users' mobile phones.
4. Web OPAC on mobile phones; it can help users for searching the information from anywhere.
5. Users can subscribe to RSS feeds using software on mobile phones. When library updates

any information, phone will be able to receive the new information.

6. Library S/W can configure as automatically to send text message alerts for hold, over due materials and reserved resources available.

### **CONCLUSION**

The current scenario of world's libraries are changing very fast by ICT based products& services. The change enforced by ICT, to adoption of products and services of ICT in libraries are robust indicator of this response. It provides a means for overcoming historically intractable problems of isolation and lack of access to information and knowledge, crucial impediments to libraries development. The ICT products and services have reshaped the educational landscape by transforming the content and modes of release of information. Apart from facilitating the global networked ICT, also enhances knowledge creation and innovation. The modern libraries are using ICT based products and services for their enhancement of services such as library automation, digital archives, library 2.0 and library services on mobile phones etc. As the above discussions to use of ICT based products

and services by the libraries, it is the continuous process, and has some distinguish qualities in every stage of development. There is a symbiotic relationship between the library and ICT, such that any development in ICT accelerates library development. In the same vein, any development in the library today can only be through the deployment of ICT. Thus, exploitation of ICT based products & services by libraries, can be broadly valuable in terms of 4 Es, namely economy, ease, extension (or expansion) and efficiency. In this modern era, libraries are totally dependent on ICT based products & services to fulfill the hi-tech users' need.

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