



## **PREPARING LIBRARIES FOR FUTURE TECHNOLOGICAL CHALLENGES**

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### **Abstract :**

*Speedy advances in information technologies have revolutionized the function of libraries. As a end result, libraries face new challenges, competition, demands, and expectancies. instructional Libraries are remodeling offerings and statistics merchandise to feature fee to their offerings and to fulfill the changing facts wishes of the user community. conventional libraries are still handling in large part printed substances that are highly-priced and cumbersome. records seekers need to complement the printed facts with more dynamic digital sources. New era has given upward push to a new concept of modernization of instructional libraries the usage of digital era and now going to grow to be a part of every day work lifestyle of underneath-evolved the situation. On one aspect they're dealing with the challenges of high cost of book , shrinking budgets, increasing value of preservation of collection ,shortage of area and skilled manpower. So these days's library are shifting towards the digitalization and using more and more ICT based technological equipment. The focus of this paper is to study and discuss the demanding situations faced with the aid of digital libraries.*

**Keywords :** Digital Library, Academic Libraries, Information seekers, ICT, Digitalization

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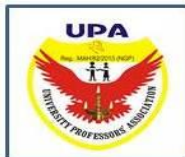
### **Introduction :**

Technology has grown to be the important thing a part of our lives nowadays. Certainly so many factors of our behaviour are governed via the want to live related to the arena via technology. Now a day's adolescents now not need to visit the library for a few hours of quiet reading. Rather, they need a short way for accessing everything information. In this digital era, information looking behaviour is constantly changing and the younger generations need to be drawn in through more modern techonology, greater interesting means. This applies equally to using the library. Librarians these days, are going through challenges in making the younger customers aware of the library sources and offerings. There are unique aspects through which a library could make the facts available at the fingertips of the younger generation and make appeal to them. The possibility to apply the library in a exceptional way will directly and circuitously promote the reading habit among young technology. digital library may be taken into consideration as a contemporary form of facts retrieval systems. It's far considered digital because the collections are stored in virtual formats and accessible over computers or mobiles anytime anywhere. Such functions of library defined and interchangeably used as 'virtual library', 'digital library', 'institutional repository', 'library without partitions', 'virtual library' and so forth. The most suitable and well-known word to such libraries is 'virtual Library'.

### **ICT based Information Services available in Today's Libraries :**

#### **Internet Access :**

Libraries provide free or controlled access to internet and email. Depending upon the availability users can be given time slots for use of internet facility. Usually a few internet



enabled terminals are provided in the library that can be used by the visitors for internet access and email etc.

### **Access to web based Resources :**

Many types of library materials such as journals, books, patents, newspapers, standards, photographs, pictures, motion pictures or music are now available in electronic or digital form. From the library's point of view digital format offers convenience of storage and maintenance, cost advantage, ability to target global users, etc.

### **E-Books;**

An electronic ebook, also called an e-book or ebook, is a book made available in digital form, which includes textual content, photographs, readable on the flat-panel display of computers or different digital gadgets. Even though now and again described as "an digital model of a published ebook", a few e-books exist without a broadcast. E-books may be examine on dedicated e-reader devices, but also on any pc tool that have the capabilities of a controllable viewing display, such as laptop computers, laptops, tablets and smartphones.

### **E-Journals :**

Electronic journals or e-journals", are used for those journals and newsletter that are prepared and distributed electronically . Electronic journals may be defined very broadly as any journals ,magazine e-zine ,webzine, newsletter, or types of electronic serial publication which is available over the internet and can be access different technologies such as WWW ,Gopher ,ftp, telnet, email .several traditional journals are now being publish both on the web and in print .content lists for most the journals are available on the web or distributed to subscribers as an email text massages or through technologies like RSS Atom.

### **Course Material:**

Many universities and commercial organizations offer a large number of web based course ware and teaching aids to facilitate flexible open learning. Many academic institutions have adopted such course material for their curricula. Libraries can provide access to course material to the learners and teacher and thus contribute to open learning. This can be done by providing links to the courseware sites through subject gateways or provide local access after downloading the material.

### **Resource Sharing:**

Resource sharing means two libraries can make available their resources for sharing. The libraries having howsoever large resources cannot be self-sufficient. finally, the library will have to depend upon other libraries for information requirement of its readers. The needs of readers have also changed over the years. As a person does not work in his speciality alone, but research or teaching work being interdisciplinary, he has to draw material from other disciplines as well.

### **Reference Service:**

Asynchronous tools such as email, 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.



### **Bibliographic Service:**

Compilation of bibliographies, analyzing lists and state-of-art reviews are very components of LIS work, specially in research and educational libraries. Browsing through the guide indexes and abstracts is a tedious and time ingesting work, and does not constantly produce updated result. Availability of databases in electronic shape on CDROM or online, offers handy, efficient and cost effective records retrieval. Digital databases additionally provide unique search functions such as searching on multiple criteria (key-word, subject, author, source, classification code, year of publication, language etc.), and variety of display formats & styles.

### **Web OPAC:**

within the library web page OPAC (online public get admission to catalogue) must be included. This must be a real time catalogue and have to be reachable from internet/cell/tab and so forth. The page may also encompass the brand new books on display (photos of the books have to be there). Users can easily search and get to know if any particular e-book is to be available in the library or not. If the e-book is out if so one must be capable of reserve the same online. While the e book is back to the library a SMS/e mail alert can be sent from the machine itself. An online demo can be located at the web site to help the users to search the catalogue of the library. Online search strategies may be added in the demo.

### **Blog writing:**

The blog writing facility must be available on the page of the library website. An user can write his views after reading library books online. There should be someone from the library to assist the reader for this task. Skilled library staff is required to coordinate this on a regular basis which is definitely going to attract young adults. Users can interact with each other to discuss a particular book through this blog.

### **Virtual Reference Service:**

It may be a good idea to incorporate a virtual reference service. Ask a Librarian concept may be introduced so that children can interact via their mobile/tab/laptop/desktop with the librarian from anywhere to get the required information quickly.

### **Library Infrastructure:**

An budgetary allocation must be there for developing the infrastructure of the library which will help in providing new services.

### **Staffing:**

Proper training must be provided to the staff so that they can face the new challenges. Also building proper behavioral competencies is required to make them feel comfortable in serving the user in a new way.

### **Collection development:**

A vital point is to procure appropriate digital/physical collection. A project team may be formed to decide the modalities of the new service.

### **Proper promotion:**

Promotion needs to be done such a way so that the target group gets to know about the project and attract to participate.

### **Future Technological Challenges for libraries :**

In technological surroundings there are so many equipment which virtual library can be made thru networks to operations, which includes E-books, E-journals, web OPAC, e-mails, news companies, mailing listing, bulletin board, SMS, chat, video conferences, digital world. For digital libraries setting up distinct hardware consisting of computing device, network, energy Backup, storage devices and software which includes Dspace, Greenstone, Fedora, E-Print and so forth, are required to integrate for deployment to get admission to extensive numbers of series in digital form. The technical issue has turn out to be greater essential and incredibly vital as complete digital library get constructed upon software that fulfilled all objectives of digital library undertaking.

The following technological challenges faced by digital libraries are :

### **Information retrieval:**

For the library to be successful information retrieval (IR) is the core challenge. Therefore, evaluation of any digital library with respect to its utilization from the side of users must be regularly done.

### **Planning:**

The Digital Library involves a huge investment for digitization of their existing collection and acquisition of Digital resources. There are many challenges that need to be addressed while developing any digital library. Some of them are:

- (i) Knowledge and Resource Management
- (ii) Intellectual Property Rights
- (iii) Technological Aspects
- (iv) Service Oriented
- (v) Preservation
- (vi) Lack of Expertise
- (vii) Security
- (viii) Inadequate Finance and Infrastructure

### **Accessibility:**

Users may additionally face many hindrances even as having access to digital library. Those stumbling blocks will be due to records overload, poorly designed interface, deceptive statistics supplied through the virtual library or inability to get right of entry to the digital assets. Due to explosive increase of data the collection of digital libraries is developing in every passing minute. It is more confusing to retrieve, relevant piece of data from this huge information storage, and the other hand no search engine can index whole information of the web to retrieve particular data. It has become a hard mission to user to retrieve his/her wished records or document. Maximum of the publishers are providing their contents on-line and user may have choice to get entry to the whole-textual content they want by paying some amount. At this level, user needs librarian's help to obtain the required information. Due to existing

budgetary constraints in the libraries, it's far very tough to access on line fee-based repository information. Specially, in developing countries, libraries are discouraged to access those information due to the high cost involved on that.

### **Preservation and conversion of information:**

There also are a few demanding situations being confronted as growing virtual libraries. A number of these challenges are conversion from tradition to digital, maintenance of tools involved in digitization process, use of standards, cods and information exchange related protocols, content written in local language or other than English may also place a challenge, prevention of unauthorized use and up-gradation of new technology. Digital preservation offered new set of demanding situations to the libraries and archives. Without requirements the virtual renovation has to face diverse constraints. Therefore, codes and standards are important to include before making plans any digital library project. Another challenge is of identifying content that need to convert into digital format. Another key venture became use of requirements and protocols with respect to digital library architectures, collections, metadata codecs, interoperability, indexing and many others which might be required to create a digital library.

### **Conclusion :**

To satisfy the need of the today's user library is getting ready with current generation technology and improving website site content material for attracting now a day's user. Designing product and promotional method for mobile gadgets is an crucial issue. Digital libraries can save the time of users and provide facility to get his/her needed information from anywhere anytime round the clock. Consequently, it will become critical to plan carefully while developing any digital library. Nowadays we do remember digital library as a component of traditional library but in due course of time traditional libraries would be considered as a component of digital library. Traditional libraries put prominence on user's expectations similarity digital libraries do extend services by which are required by the end user. Earlier users were visiting to the libraries but now time has come that libraries need to reach to the end user. Collaborating with others and using influencers in publicizing library services will enhance the usage. Ways of making the virtual library visible is the challenge and today's libraries must accept this challenge to survive in the library information service changing era.

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