

## DIGITAL ACCESS AND SERVICES FOR LIBRARY MANAGEMENT

**Pooja Devi\***

\*Research Scholar,

INDIA

Email id: poojash208@gmail.com

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### ABSTRACT

*Today, we live in an era of instantaneous worldwide communication. ' Everyone is well-versed in the lightning-fast pace of technological change. There has been a proliferation of new methods for capturing and transferring text, voice, and visual pictures. We now have unprecedented capacity for archiving and retrieving information, thanks to advances in digital technology. As a result of the advancement of this technology, individuals from all over the globe will be able to communicate with one other, build cultural industries, and profit from the effort of others. It's safe to say that electronic resources are likely to be an important part of any library's collection in the near future. The Internet Archive or Digital Library. With this shift in the sphere of information storage and transmission, digital library services have emerged as a new option for patrons. Encyclopaedias and other reference works are increasingly being made available online in electronic format. Chemical Abstracts Service; Index Medicus; and Engineering Index are just a few examples of abstracting and indexing services that are available online.*

**KEYWORDS:** *Digital Services for Libraries, Library Management, Digital Access of Libraries*

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### INTRODUCTION

Currently, the majority of digital libraries are focused on giving access to a wide range of digital material. In addition, it opens up new avenues for the advancement of library and information science theory and practise to a wider range of consumers. Information gateways have been considered to be successful because of their ability to pick high-quality, relevant material. Selection criteria, technical and policy concerns, administration, suggested standards and conventions, metadata development, and availability of browsing and searching are all included in this document [1]. It not uncommon to see libraries establish freely available online exhibits, searchable databases of collection objects, and even user-generated digital material.

Collection administration, preservation efforts, exhibition planning, and record keeping for incoming and departing loans are just a few of the tasks made easier by digital technology. Conventional Library Services Made Easier by the Use of Information Technology (ICT). Most libraries now offer online public access catalogues (OPACs) to help people discover their resources. Members of the library may use an OPAC to search the catalogue database and find out whether the library has a certain work on a specific topic and where it is located [2].

### International Compliance and Standards

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One of the most essential features of the Library's catalogue is the ability to search it for specific items. In the past its worth was limited by its physical form, which was usually a big card catalogue or a series of printed books. OPAC has now brought the library to the client, wherever he or she may be, thanks to computers' capacity to handle enormous volumes of information and output in a number of forms. Using a computer terminal, OPAC enables access to the library catalogue. It is possible to search the full catalogue using one or more search parameters using OPAC [3], which is very handy and fast. For example, you may do a search based on the author, title, keywords, class number, or any combination of these.

Even the present state of a book may be seen in the OPAC, such as whether it has been checked out, is on the shelf, or is laying somewhere else. AACR2, MARC, and a slew of other catalogue records types may be presented in OPAC, and the records can be sorted in whatever order you choose. Displaying entries ordered by author, title, or call number, for example, is an option. In most library management systems, bibliographies from the OPAC may be printed out or saved to a file, depending on the library's needs. Search software, such as those found in library management systems like LibSys, EasyLib, SOUL, and Sanjay, should be installed on an OPAC terminal. Using OPAC from outside the library using a computer linked to the library's Local Area Network is another convenience (LAN). It is also feasible to enable access from anywhere in the world over the Internet using contemporary library systems that provide an interface to OPAC. It is Web OPAC, or Internet-enabled OPAC, that is available. Internet Explorer and Netscape Navigator are the two most widely used browsers for accessing the Web OPAC. Along with the ability to browse the OPAC, several libraries also provide their distant customers the ability to utilise online services such as book reservations and requests for postal lending requests as well as loan renewals [4].

Lankes describes digital reference as an Internet-based question and answer service that connects customers with experts in a certain topic or skill area. Reference services in an online/networked environment refer to a network of experts, intermediaries, and resources at the disposal of a user looking for answers. Interactive technologies like chat rooms and virtual reference desks, as well as asynchronous tools like e-mail, topic gateways and FAQs have supplanted traditional methods of post, phone or in-person reference inquiries. In order to ask a librarian a question, a user may click on the ask-a-librarian link. A topic expert, a citation to more resources, or a response are all options for the reference librarian. A reference interview may now be conducted online using interactive technologies.

## **Digital Access and Services**

One of the most significant components of LIS work, especially in research and academic libraries, is the compilation of bibliographies, reading lists, and current reports. Manual indexing and abstract searching is a time-consuming and laborious process that may not necessarily provide the most current results. It is handy, efficient, and cost-effective to have databases available on CD-ROM or online services. Additionally, electronic databases provide unique search options such as searching on numerous parameters (keyword, topic, author, source, categorization code, year of publication, Language, etc.), and various display formats and styles. Many databases also provide more advanced functions, such as natural language querying and rating the results of a search. Using web-based services, you may do full-text searches and get

direct access to full-text content. Database firms like as Dialog, STN, and Silver Platter provide CD-ROM and internet access to bibliographic and reference databases.

Information, education, and pleasure may all be gained via using audio-visual resources. Large academic and public libraries, especially media libraries, have a wide variety of audio-visual materials, including music and movies. Audio and video tapes have long supplanted LPs and tape slides. They offer a greater storage capacity and random access than audio and video tapes and cassettes, as well as a longer lifespan. These may be borrowed by library members in many cases [5]. It is now possible to view and listen to multimedia files on conventional PCs, whether they are connected to a local network or not.

It is now feasible to store vast amounts of multimedia documents on a hard drive and distribute them through the Internet thanks to advances in storage media, compression and encryption technologies. These documents may now be viewed or played in a browser using free software such as Quick Time Player or Microsoft Media Player. More information about digital multimedia document formats and technology, software, and document formats will be covered later in this course.

New library services based on ICT: Information and communication technologies (ICT) have fundamentally altered how libraries and information centres acquire, process, store, retrieve, and communicate information. The Internet, in particular, has revolutionised the way information is collected and communicated. It has become the most effective medium for the storing, retrieval, and transmission of information. Every university and research institution must have Internet connectivity because of the rapid expansion of information and the ease with which it can be accessed.

The Internet's fastest-growing component is the World Wide Web (www), thanks to its support for multimedia and advanced programming languages. In today's rapidly changing technical and informational landscape, it is imperative that users have both fundamental and sophisticated information-gathering abilities. Libraries, community resources, special interest groups, media, and, above all, the Internet and the WWW are all places where people can get information these days, and an increasing amount of it is available in unfiltered formats, raising concerns about the validity, authenticity, and dependability of that information. Individuals have additional obstacles in analysing and comprehending information since it is accessible in a variety of formats, including visual, auditory, and written. There is a new manner of demonstrating services as a consequence of using new technology. In order to provide access to web-enabled services, libraries build websites [6]. Library website users may take use of a wide range of services. As simple as a library web page listing services with some links to the catalogue or subscribed resources, or as complex as interactive help features and value added services like subject gateways, ejournal service, ebooks and frequently asked questions and information about the library such as hours, calendar, rules etc. New and creative services are being offered by libraries that are taking use of the power of the Internet and computer resources. Due to the widespread availability of the internet, web-based services have become more popular. A web-enabled environment allows the new LIS services to be divided into the following three categories:

The LIS Services provide users access to the following resources:

- Key service that relies on the Internet

- Online resources;
- Digital copies of local or internal information sources.

## **Internet and Digital Access**

The Internet is the world's greatest collection of knowledge as well as a digital communication platform. Many books and magazines are now being published solely over the internet, making the internet the publishing agency of today. However, a nation like India's underdeveloped Internet infrastructure is a severe obstacle to the expansion of ICT-enabled services. Internet access is still restricted to a small percentage of the population. As a result, public libraries provide free internet access and e-mail. Users might be granted time periods to utilise the Internet facility based on the availability. The library usually has a few Internet-enabled terminals that may be used by the public to access the Internet.

## **Web-Based Resources**

Online libraries currently provide a variety of library items in electronic or digital form such as journal articles and books; patents; newspapers; standards; images; motion pictures; and music. There are several benefits to digital resources from the user's perspective, such as the ability to search directly on text (rather than catalogue entries), the ability to connect to further reading material and exchange knowledge, as well as time and location ease. It is the library's perspective that digital format provides advantages such as ease of storage and maintenance and cost advantages, as well as the potential to reach a worldwide audience, among other advantages. There are a number of issues with digital resources, such as a lack of internet connection, a lack of skills to utilise the digital resources, and a shift in people's perceptions due to their right to use rather than their ownership [7].

It's an online journal if it's published in digital format and delivered through the Internet. Peer-reviewed material is optional in online journals, which are basically serial publications that make their final outputs accessible in digital format. The majority of online journals are disseminated over the Internet. More than one person may utilise it at the same time. It's convenient, and you can go to it right away. Online journals provide for a variety of search options and reduce the need for physical storage space. Libraries are looking for ways to deal with the ever-increasing costs of journals, the need for more space, and a decrease in utilisation as the journals become older. In spite of this, libraries are obligated to save bound back issues of the publications they have. With the aid of an electronic journal, libraries may solve these issues to an enormous amount without having to dramatically alter the quality of their services. Anyone with an Internet connection may access e-journals [8].

In certain cases, many users may access the service at the same time, either from a single web-enabled PC or via a proxy server on the same network (IP addresses based access). The ability to browse and download papers in their entirety is another perk of using electronic journals. Many electronic journal publishers provide their publications to libraries in consortia at significantly reduced fees. INDEST (Indian Digital Library of Engineering, Science, and Technology) and INFLIBNET's INFONET are two examples of such consortia functioning in the country of India, respectively. Electronic journal articles may also be accessed via aggregator services, such as Emerald, OCLC, and J-Gate, which provide searchable databases of the contents of e-journals

from several publishers and connections to the journal's site for full-text. There is a major drawback to electronic journals, which are not physically accessible to libraries.

It has been said that an electronic book is a kind of printed book that can be read in digital form on a computer screen. A specialised E-book reader such as Gem Star eBook may be used to read e-books, or they can be viewed on a computer screen after downloading them. Newer technologies are also being developed, such as electronic paper, which is similar to paper but allows for text to be updated, and MP3-formatted talking books. Portableness, 24-hour access, search and annotated text, and multimedia and self-publishing options are only some of the benefits of an e-book. Before eBooks can be adopted on a broad basis on compatibility, e-book readers, availability and intellectual property rights difficulties must be solved.

There are a growing number of libraries that give its users with online access to university theses and dissertations, which are vital sources of information and knowledge for future study. Universities all across the world have begun digitising their vast collections of theses and dissertations and making them freely accessible through the Internet. Electronic Theses and Dissertations (ETD) programmes have also been adopted by a number of colleges. The Networked Digital Library of Dissertations and Theses (NDLTD) is an example of an effort to create a web-based union catalogue for ETDs submitted to more than 100 libraries throughout the globe.

An "internet gateway" is a facility that facilitates the use of network resources in a certain subject area. Through a web-based interface, gateways offer a basic search capability and a much-enhanced service by providing a resource database and indexes. Hand cataloguing is used to organise the data supplied by gateways. A broad variety of topics are addressed by gateways. Reference librarians' intellectual pursuits have long included the creation of topic guides and pathfinders. Topic librarians or subject specialists often work together to create these guides, which are then assembled after a thorough review of the available materials. A common activity of browsing the Internet may be a waste of bandwidth and time, yet it is a popular leisure. The usage of subject-based Services Internet gateways and directories is an excellent approach to find high-quality resources in a certain field. As a result, a topic gateway is a tool that makes it simpler to go to web-based resources within a certain subject area. Basically, they are dynamic catalogues of mostly online materials, although some libraries also include print resources in their catalogues. Subject portals are often accessed through a library's website and are intended to make it easier for patrons to find high-quality online resources quickly and easily. To make it easier for users to find relevant material, a topic portal may include links to the websites of the resources, as well as information on what the resources are about and how they can be accessed [9]. Advanced topic gateways include a searchable catalogue or even full-text search of the listed resources.

There are a number of ways in which libraries have historically served as archives of local knowledge as well as cultural artefacts. An important element of LIS is managing records, especially in commercial or research institutions. In other instances, such as university libraries, the intellectual power of the institution is represented through materials produced in-house, such as dissertations and theses, research reports, etc. Libraries are creating digital archives of these materials and making them available through the Internet or Intranet. Additionally, large public and university libraries provide up-to-date local information through the Internet. Electronic

document sharing paves the way for the emergence of digital libraries. The fundamental advantage of a digital library is that it can give many users with simultaneous access to high-demand or restricted content 24 hours a day, seven days a week, from a distance. In-house system development utilising open archives software or "off-the-the-shelf" digital library solutions [10], document management products or library management products, may be used to set up a digital library.

In recent years, institutional repositories have become more popular as a means of disseminating and publicising the results of cyber infrastructure research. Managing and distributing electronic resources generated by university members is a helpful academic tool for enhancing both institutional and worldwide access to these materials. Digital content developed by the university and its community may be managed and disseminated via an institutional repository housed inside a university." (Wikipedia) Essentially, it is an organization's commitment to the long-term preservation of these digital data, as well as the arrangement and dissemination of these information.

## CONCLUSION

Digital repositories, especially those that house locally generated digital material such as new digital objects or digitised copies of locally owned works, are benefiting from libraries' broad contributions. Some libraries are running their own repositories on their own, but in most cases, they collaborate closely with other stakeholders at their institutions to create and implement repository services in a collaborative manner. Authors, contributors, and consumers of university-generated material may all benefit from repository services. The librarian's role in the Digital Knowledge Centre's Institutional Repository is critical. Archiving articles, papers, theses and other documents in digital form is a benefit. The IR system is open to contributions from both teachers and students. Institutions will find this service very useful in their research endeavours. Both traditional and non-traditional libraries have played a vital role in delivering the necessary library services to its customers. It is essential that these services remain unrestricted, since service is the primary aim and goal of any library. Copyright in libraries has necessitated a closer look at how it affects the delivery of public services in these institutions.

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