

# USE OF INTERNET AND WEB TECHNOLOGY IN LIBRARY AND INFORMATION SERVICES IN DIGITAL ENVIRONMENT

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## ABSTRACT

The development of communication technology is playing a vital role in the field of society. In earlier days vocal and pectoral methods were mainly used for communication. But now days these primitive methods have given way to electronic pulses. Information of communication technologies has brought changes in the modes and method of information storage, retrieval and transmission. The digital environment fosters collaboration among libraries and information centers through shared databases, ILL, CAS, SDI references services and cooperative digital repositories. Libraries use web technologies to deliver educational content and training on information literacy. Online tutorials, webinars, and digital guides help users develop critical skills for navigating and evaluating information in the digital age. This paper discusses the importance of the Internet in Library functions and services provided by Library and Information centers. Web offers significant advantages by integrating different Library and Information services with a common user interface offered by web browsers. With the demand of adopting this new age of technology, metropolitan network have to become more efficient to train the Library and Information professionals, researchers and students.

**Key Words:** Internet use, Internet resources, Internet access, Information Retrieval- search engines, Internet based Library and Information services.

## INTRODUCTION

We are living in digital world. Today digital world is concerned with creation, sharing and using Information in digital form. The right information available to the right person at the right time is the aim of any modern library. Development in computer, Communication and Information access technologies are bringing revolutionary changes in the modes and methods of information storage, retrieval and transmission. In old days the functions of the Libraries were merely the collection and preservation of the documents, but in the 21<sup>st</sup> century the books are not our means of preservation but also for dissemination of the information contained in them. In today's digital landscape, libraries leverage web technologies to offer a range of services that were previously unimaginable. Online database and digital repositories provide users with instant access to a vast array of information, while web-based interfaces improve the ease of searching and retrieving resources. Additionally, libraries utilize social media, virtual reference services, and other digital tools to engage with users, offer support and foster communicate interaction. As libraries navigate this digital transformation, they are also embracing new technologies for information management, such as cloud computing and data analytics. These innovations enable libraries to manage large volumes of digital content, analyze user behavior and tailor services to meet evolving needs.

## ***Internet Services***

The emergency of the internet has changed the role of the libraries radically. Internet is a worldwide network of networks. It reduces the task of the library in retrieving and disseminating the information; it has a paradigm shift from local access to the global access of information. It is the substitute for large number of reference tools, like books, journals, encyclopedias, dictionaries, directories and year books etc. the entire information available in the library can be located through web page. Internet is providing a variety of services to the different types of users. Some of the popular internet services are:

- World wide web
- E-mail
- Social media
- Search engines
- Streaming services
- Cloud storage
- Instant messaging and VoIP

## ***Internet resources- Search Techniques***

Internet is the richest source of information for students, researchers and professionals and is very useful in doing literature searches in all educational activities. As information is being updated regularly from device fields, the volume of information on the internet is growing at a high rate and it has become the largest resources of global information in diverse fields. Some of the very relevant sources of information available on the internet are;

- Google Scholar
- Pub Med
- JSTOR
- Wikipedia
- Internet archive
- Google Books
- Research gate
- Academia.edu
- Project MUSE
- Directory of Open access Journals (DOAJ)

## ***Searching of Information on the Internet***

There are some tools and techniques that makes resource discovery much easier. There are two main techniques used in the search of information, they are:

## ***Searching***

Searching involves choosing some 'words' or 'phrases' that indicate the information required by the researchers. This is entered in the search box and the computer retrieves the items that contain words or phrase.

## ***Browsing***

Browsing involves hyperlinks to move from page with aim of getting the information by chance. Any page on the web can be browsed at random. But some sites permit easy browsing via structured trial of links organized under subject headings. Browsing is preferred to other means:

- To get an idea of what is available on the internet in a subject area.
- When one fails to identify a suitable search term/terms or are getting inappropriate search results from a search on giving a chosen search terms.

In the field of digital libraries, searching and browsing often involve several techniques and tools:

- Search engines and Indexing
- Metadata
- Controlled Vocabularies and Thesauri
- Boolean Operators and Advanced Search
- Faceted Search and Browsing
- Cataloging and Indexing Software
- Advanced search Features
- Academic Databases
- Web directories
- Libraries and Repositories
- Subject gateways
- Government and Educational websites

Using these tools and techniques can help us efficiently find and evaluate information on the internet.

## ***Advantages of Internet and Web Technologies:***

Internet is a boon for information professionals whose main aim is to provide information to their clientele. It is the most useful tool to obtain latest as well as retrospective information. Access to Internet changed the scenario of Librarianship. Internet and web technology plays a vital role in Library related activities in the following areas:

- **Acquisition:** The Libraries can make use of Internet sources for acquiring various types of reading materials in the Libraries. Correspondence with Book Seller & Publisher, Reminders, Price verification, Bibliographic details and downloading of bibliographic records etc.
- **Classification:** Network resources available on the net, subscribed or free or trial basis; Dewey online (<http://ivory.lm.com/~mundie/DDHC/CyberDewey.html>), Internet public library and Gateways users' classification system.
- **Cataloging:** Cataloging of network resources; Online catalogues; web OPAC MARC Metadata standards-Dublin Core.
- **Serial collection:** Acquisition process, E- journals, Different models, Web access etc.
- **Collection Development:** Subscribe in print or e-form; subscribe in print as well as in e-form; pay per use; Consortia approach.

- **Circulation:** Remote login; Status check; OPAC access; Reminder to user requests; Direct Borrowing; ILL.
- **Resource Sharing:** Union catalogue-access, adding, downloading; Access to data bases over networks, full text journals access etc.

### ***Internet based Library and Information Services:***

With the advent of Internet, the electronic era started Libraries, information and documentation centers, academic institutions, government bodies, R & D institutions and individuals also generate information in digital form and are providing the services in a network environment. Information services are to provide required information to the user on demand or in anticipation and keep the user well informed and up-to-date in their field of specialization and in the related fields. Web offers significant advantages by integrating different library and information services.

Internet created profound impact on Library and Information Services by offering new modes of information delivery and a vast information source. The services include web access to catalogues, e-mail delivery of Current Awareness and SDI bulletins, local web access to extremely purchased databases, CD-Rom data bases, remote information services etc. Some of the information services provided through Internet are discussed below.

#### ***OPAC:***

OPAC is an important service available in the net. Using this service many of the library catalogues can be searched online. About 500 online public access catalogues are available on the internet. Example: NCSI Library Catalogue, University of Hyderabad, IIT, Madras, Central Library

#### ***Current Awareness Services:***

The current awareness services are meant for alerting the users with the latest information. By using the Internet resources one can provide CAS in the Libraries by creating various types CAS Bulletins or making online access to the readers with various databases. The CAS delivers regular updates on newly available information according to interest profiles specified by the user, either through electronically or through the Internet which has added to the importance of current awareness, the meaning of the concept of CAS and the purposes served by CAS.

#### ***SDI:***

SDI is a method of producing personal current awareness information to individuals and groups. It can be provided through Internet.

- From library collection (library catalogues-OPACs)
- Informatics India (<http://www.infomi/india.co.in>)

#### ***Document Delivery Services:***

In regard to document delivery service the library will request another library for copy of a document, to be transmitted via E-mail or Fax. The role of INFLIBNET here is mainly to act as a catalyst in promoting this service to the academic and research community in India.

#### ***ILL:***

It is concerned with lending of a document to the user over a specified period of time a library.

- OCLC (<http://www.oclc.com>)
- LC (<http://www.loc.gov>)

***Indexing service:***

An indexing system facilitates the literature searching activity and informs about the existence or non-existence of documents in response to the requests of the users. It acts as an effective communication link between the source of information and the user of information.

- COMPENDEX-engineering index(<http://www.COXWeb.ei.org>)

***Abstracting service:***

An abstracting service presents the summary of a publication or an articles accompanied by an adequate bibliographical description to enable the publication or article to be traced.

- <http://www.lib.umi.com>)
- <http://ufn.loc.ac.m/ufn.html/>)

***Catalogues and search Engines:***

Online catalogues for finding books and resources in libraries and search engines for general information retrieval.

***Database Access:***

There are various types of databases, which are exceedingly useful. Most of the commercial databases like Dialog, STN, etc., can be accessed through net. Several databases are also available for free access. Bibliographic databases service would enable a library to search bibliographic databases developed at national sectoral and other information centers to disseminate current information and retrieve retrospective information.

- OCLC (<http://www.oclc.com>)
- LC (<http://www.loc.gov>)

These services are designed to make information more accessible and to support various research and learning needs.

**CONCLUSION:**

The present Era of 21<sup>st</sup> century is the days of Electronic Era. Information is moving in the air around us. We have to catch it and make available to our uses. It can only be through Internet. Every library of information center in our country should be attached with Internet and should create a home page. Innovative uses of Internet technologies enable library and information professionals to reach both local and distant users much more easily and effectively. The ever ending search process on Internet will provide maximum access to the various sources to provide right information to the right reader at the right time. The use of Internet in library in India has become a must with the rising standard of education. With the emergence of World Wide Web, Internet has become an inseparable part of the modern library and Librarian can only exist in the coming century if he becomes a net librarian or a web librarian.

Government should make attempts to provide the necessary infrastructure facilities such as high speed networks connection to access the e-resources and to conduct some training programmes for the library professionals and user orientation programmes for students to better services and also to conduct seminars and conferences on latest trends in library and information science.

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