

## Web-Based Library Services in Selected Central University Libraries of India: A Study

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### Abstract

*World Wide Web (WWW) and Internet becomes a new media of libraries for information storage and information providing with greater speed and economy. This paper discusses on the use of web-based library services available in some selected central University Library in India and examines how central university libraries provides web-based access to its collections and user support for that access and the problems faced by the users in accessing web-based library services. This paper will also find out some recommendations for increasing the effective use of web-based library services.*

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**Keywords:** Web; Library services; Library portal, University libraries.

Fourth law of Library Science" *Save the time of the reader*" (Dr. S. R. Ranganathan)

### 1. Background of the Study

Due to the development of web technology, the role of university libraries and library professionals have changed from giving traditional sources of information to web based information. The responsibilities of modern university libraries are to provide right information to right users at right time on his/her desktop. Now-a-days, the demand and expectations of users have changed. Now they are happy with online approach. University libraries are introducing more resources and services in personalized and interactive manner such as, Web OPAC, Discovery Services, Mobile Libraries, Online Feedback, Virtual Reference, Online Chat and Remote Access Resources.

Library resources, whether print or online are disseminated for the need and requirement of users. The existing library services are lending service, library OPAC, Inter Library Loan, current awareness service, new arrivals, current content services, selective dissemination of information, indexing and abstracting, reference service, document delivery services, CD-ROM databases, access online databases, institutional newsletters and user orientation program.

Due to information explosion users' search behavior has changed. They expect to get information online and from one platform by their library. In this scenario web based library services help users to access all resources which are subscribed by the library by means of E-Journals, E-books, Web OPAC, Current Awareness Service, Online Delivery Services, Document Delivery Services, Indexing and Abstracting Database, Library Portal or Website Service, Federated Search, Alert Service, Digital Library Service and Virtual Library Service. On the other hand libraries are becoming less important for the materials they collect or

house, and are becoming more focused on the kind of services they provide to the users. The latest example of the advancement of the libraries can be understood by the following technologies.

- ✓ **Online Research Services** allow patrons to pose questions and get answers from librarians.
- ✓ **Apps-based Access to Library Materials:** a cell phone app that allows users to access and use library services from their phone and sees what programs the library offers.
- ✓ **Web-Scale Discovery Services:** This enables users to simultaneously search information in real time from multiple resources in a single time, which helps users to get closer to their subject from diverse information sources.

## **2. Web-Based Library Services**

Dissemination of information or communicating information is mainly an important function of any library. It takes place through the library using internet as a medium and library website as a gateway. Web-based library services are E-Journals, E-books, E-database, Digital library and Web OPAC, which assist users to find information. Web-based reference services owe their increasing popularity amongst users to extend the reference desk beyond the library's walls. The goal is to meet the demand for easy twenty four hour access to electronic reference sources from their desktops (Madhusudhan).

## **3. Review of literature**

The Review of literature is a systematic and exhaustive search for published materials related to a specific topic or subject. Review of literature plays an essential role in research activities as it is considered as a first step of research pursuit. It is an attempt to identify, locate and synthesize complete research reports, articles, and other material about the specific problems of a research topic. Peoples consult different sources of information and information channels to fulfill or satisfy their information needs, this kind of behavior is called information seeking behavior. In the past century, a few studies in this area have been conducted on different segments of peoples to understand and determine the rapidly use of different means of information.

A lot of studies had conducted on web-based library services, challenges and opportunities in all over the world specially in UK, USA, Nigeria, Ghana, Korea, Pakistan, India, Malaysia, Sri Lanka and Bangladesh also. Here, an overview of these studies is endorsed to understand the present situation of web-based information services in libraries of different countries and also to identify the scope of this study.

For the present study entitled “Web-based Library Services in Selected Central University libraries of India: A Study”, researcher has reviewed the various National & International journal articles, research papers, case studies, reports and online contents & databases related to the concerned area of research.

Review of literature is carried out to understand the recent developments of web-based library and information environment, services quality and its measurements in library services. The literature is divided in the following aspects. This study shall explain the review of related literature on the web-based library services in academic libraries in different

environment which have been published in journals, books, theses and other research publication. The investigator presents the important studies carried out on the following areas of the topic under investigation:

M. Madhusudhan and V. Nagabhushanam conducted a survey of some selected university libraries of India on web based library services in different section of the library. A well-structured questionnaire distributed among librarians. It is observed that many of the university libraries have not explored the effective use of library website. It is found that some improvements are needed in the libraries like dynamic library websites, Web 2.0 based services, next-generation internet and multi-language support content etc.

LiLi Li explored the key issues in his article on “Leveraging quality web-based library user services in the digital age” involved with opportunity, challenges and future development of dynamic and distributed web-based library sources, services and instructions for library users in the digital age. It is observed some important key issues that how to leverage quality library user services in the digital age like information services, information resources, information access, impacts of cutting-edge technologies, funding support, roles of academic libraries, emerging technologies, knowledge base assessment and next generation web based library services.

Hajar Zarei and Zahra Abazari conducted a survey on web-based services offered by Asian national libraries. The survey attempts to find out the Singapore national library has got first rank in position providing its services via websites for users and this is the only one library in Asia that provides more than half of its services 52.29% via website. It is observed that the national libraries of Asian counties like China, Japan, Sri Lanka, Malaysia, Iran, Israel, and Kyrgyzstan only provides 25-50% web-based library services. It is suggested that Asian national libraries should make high use of both traditional library tools and web-based library services including web forms, chat, videoconferences, and meet their goals.

Sari Feldman and Tracy Strobe highlight the importance of developing web-based services, as well as of having the goal of replicating and enhancing traditional library services in an online environment at the core of planning for web-based services. They discuss online circulation services, web catalog, online self-help services, and e-mail notification' services. They covered live web reference services, focusing on KnowItNow24X7, online services for young people, including the Homework Now reference service, Tutor.com (a commercial Web-based tutoring service) and Yread?. They define the tips for advancing web-based services: commit to 24x7 accesses to library services, take risks and move quickly, utilize all library resources as well as the Internet; find information partners that complement library service; and use targeted marketing techniques to reach new audiences.

Kanamadi, Satish, and B. D. Kumbar have conducted a survey about web-based services at management institute in Mumbai. The study explores the availability of institute website, importance and extent of the library details hosted on the institute website. They found that the lack of interest of users in library website is because of the inadequate and static information being made available on it. They suggested that how to make a library portal more informative to attract more and more users.

Sajid and Khalid have conducted survey on library websites of Pakistani University Libraries. They described that libraries use their websites to provide services to users without their physical presence. After survey they found that some libraries provide only minimal

information about their collections and services, while many offer Web Online Public Access Catalogue, online databases, e-books, virtual reference service, electronic reserves, web-based user education tools and virtual tours.

Raj Kumar Bhardwaj and Parmjeet K. Walia conducted a case studied at St. Stephen's College, University of Delhi, they found that due to emergence of web-based information and communication technologies (ICT) and globalization of networks and exponential rise of new information and the use of traditional tools in information management have been reduced and automation of information services of library and information Centre.

Madhusudhan, Margam, and Shalini Aggarwal founded in their study that university libraries are lagging in effective use of library website and web based resources. They say that only few librarians offer innovative web-based library services in different section. In the study, they identify that there should be specific ways in which the web helps university libraries to improve and develop innovative and advanced web based library services. "There is need to develop dynamic library websites and incorporate with Web 2.0 based services including web-based library service; apply semantic technologies and ontologies; adopt next-Generation internet.

Muhammad Sajid Mirza and Khalid Mahmood said the libraries use their websites to provide services to users without their physical presence. They observed that websites initiatives have helped university libraries to be in a better position to provide state-of-the-art resources through traditional and modern systems. Many university libraries have developed their websites or are in the process of development.

#### **4. Statement of the Problem**

The present study under investigation shall analyze and describe the status of web based resources of selected central university libraries of India.

#### **5. Objectives of the Study**

The main aim of this study would to investigate and examine the web-based library user services offered by some selected university libraries of India. The following are the objectives:

- To know the hardware and software and network infrastructure of the libraries.
- To find out the new web-based technology adopted by the libraries.
- To find out the web-based library services application in the library websites.
- To analyze the existing web-based library services.
- To know the problems in using web-based library information services.
- To offer suggestions for effective use of web-based library services.

#### **6. Research Questions**

The investigator raises the following questions:

1. What are current web-based quality services provided by the central university libraries?
2. How can web-scale discovery services help in searching information for users?

3. What are the changing needs of the users and expectations from the Library?
4. Why University library websites are not fully utilized for marketing library resources and services?
5. Are users satisfied with current library resources and services?
6. Does library website or library portal of university libraries help in accessing of web based resources?

## 7. Methodology Used in the Study

This study was qualitative research approach. In this regard, nine central universities library services were studied to establish the Internet and Web-based library services they offer to their users. Data for this study was collected from library websites. The research shall evaluate only the selected leading central universities libraries of India listed in table - 1, to understand and evaluate the web based libraries services:

Table - 1: List of University Libraries

Name of the Central University	URL
Banaras Hindu University	<a href="http://www.bhu.ac.in/bhulibrary/">http://www.bhu.ac.in/bhulibrary/</a>
Aligarh Muslim University	<a href="https://www.amu.ac.in/malibrary/">https://www.amu.ac.in/malibrary/</a>
Visva-Bharati University	<a href="http://www.visvabharati.ac.in/Library.html">http://www.visvabharati.ac.in/Library.html</a>
Tezpur University	<a href="http://www.tezu.ernet.in/Library/">http://www.tezu.ernet.in/Library/</a>
Jamia Millia Islamia	<a href="https://jmi.ac.in/zhlibrary">https://jmi.ac.in/zhlibrary</a>
Jawaharlal Nehru University	<a href="http://lib.jnu.ac.in/">http://lib.jnu.ac.in/</a>
University of Delhi	<a href="http://crl.du.ac.in/">http://crl.du.ac.in/</a>
University of Hyderabad	<a href="http://igmlnet.uohyd.ac.in:8000/">http://igmlnet.uohyd.ac.in:8000/</a>
Pondicherry University	<a href="http://lib.pondiuni.edu.in/">http://lib.pondiuni.edu.in/</a>

## 8. Significance of the Study

Due to emergence of information communication technology (ICT), the web based information services have put wide impact on library and information services. The present study shall aim to investigate the web-based library user services of some selected central university libraries of India and also assess its convenience of use among the users. Online library services are helpful for the large growing academic community, and it calls for transformation from conventional library services to online information services. This study shall help users to get quality of information, and suggest new approach for effective use of web-based library services.

## 9. Scope and Limitations of Study

The scope of the study is limited to the above four well known central university libraries out of forty-three central universities in India, further this study shall exclude undergraduates and postgraduate students for purpose of users' survey. This study covers only web-based library services.

## 10. Analysis of Web-Based Library Services

It has been identified university library websites through web search. Whether library has separate or linked with university website. The library services through internet and intranet has been studied in the selected central universities libraries of India.

Table - 2: Library Web sites and internet facilities

Name of the Central University	URL	Internet
Banaras Hindu University	<a href="http://www.bhu.ac.in/bhulibrary/">http://www.bhu.ac.in/bhulibrary/</a>	Yes
Aligarh Muslim University	<a href="https://www.amu.ac.in/malibrary/">https://www.amu.ac.in/malibrary/</a>	Yes
Visva-Bharati University	<a href="http://www.visvabharati.ac.in/Library.html">http://www.visvabharati.ac.in/Library.html</a>	Yes
Tezpur University	<a href="http://www.tezu.ernet.in/Library/">http://www.tezu.ernet.in/Library/</a>	Yes
Jamia Millia Islamia	<a href="https://jmi.ac.in/zhlibrary">https://jmi.ac.in/zhlibrary</a>	Yes
Jawaharlal Nehru University	<a href="http://lib.jnu.ac.in/">http://lib.jnu.ac.in/</a>	Yes
University of Delhi	<a href="http://crl.du.ac.in/">http://crl.du.ac.in/</a>	Yes
University of Hyderabad	<a href="http://igmlnet.uohyd.ac.in:8000/">http://igmlnet.uohyd.ac.in:8000/</a>	Yes
Pondicherry University	<a href="http://lib.pondiuni.edu.in/">http://lib.pondiuni.edu.in/</a>	Yes

Table 2 shows that all nine selected central university libraries got the internet facilities for the library services

Table - 3: Library Websites

Name of the Central University	URL	Sub-domain/Link with University website
Banaras Hindu University	<a href="http://www.bhu.ac.in/bhulibrary/">http://www.bhu.ac.in/bhulibrary/</a>	Linked with University
Aligarh Muslim University	<a href="https://www.amu.ac.in/malibrary/">https://www.amu.ac.in/malibrary/</a>	Linked with University
Visva-Bharati University	<a href="http://www.visvabharati.ac.in/Library.html">http://www.visvabharati.ac.in/Library.html</a>	Linked with University
Tezpur University	<a href="http://www.tezu.ernet.in/Library/">http://www.tezu.ernet.in/Library/</a>	Linked with University
Jamia Millia Islamia	<a href="https://jmi.ac.in/zhlibrary">https://jmi.ac.in/zhlibrary</a>	Linked with University
Jawaharlal Nehru University	<a href="http://lib.jnu.ac.in/">http://lib.jnu.ac.in/</a>	Sub-domain
University of Delhi	<a href="http://crl.du.ac.in/">http://crl.du.ac.in/</a>	Sub-domain
University of Hyderabad	<a href="http://igmlnet.uohyd.ac.in:8000/">http://igmlnet.uohyd.ac.in:8000/</a>	Sub-domain
Pondicherry University	<a href="http://lib.pondiuni.edu.in/">http://lib.pondiuni.edu.in/</a>	Sub-domain

In Table 3 shows that the out of nine only four universities libraries got the separate website for the library to provide effective services to the users, rest of the libraries linked with university main website.

Table - 4: Bibliographical Databases

<b>Name of the Central University</b>	<b>Bibliographical Databases</b>	<b>No. of Databases</b>
Banaras Hindu University	Yes	10
Aligarh Muslim University	Yes	20
Visva-Bharati University	Yes	11
Tezpur University	Yes	6
Jamia Millia Islamia	Yes	49
Jawaharlal Nehru University	Yes	83
University of Delhi	Yes	140
University of Hyderabad	Yes	44
Pondicherry University	Yes	37

Table 4 shows that the details of bibliographic databases and number of database they are having, Maximum number of bibliographical database provided at University of Delhi, Jawaharlal Nehru University.

Table - 5: Availability of web-OPAC services among the sample universities

<b>Name of the Central University</b>	<b>Web-OPAC</b>	<b>Automation Software</b>	<b>Internet/Intranet</b>
Banaras Hindu University	Yes	SOUL	Intranet and Internet
Aligarh Muslim University	Yes	Libsys	Intranet and Internet
Visva-Bharati University	Yes	Libsys	Intranet and Internet
Tezpur University	Yes	Libsys	Intranet and Internet
Jamia Millia Islamia	Yes	Libsys	Internet
Jawaharlal Nehru University, Delhi	Yes	VTLS	Internet
University of Delhi	Yes	Libsys	Internet
University of Hyderabad	Yes	VTLS	Internet
Pondicherry University	Yes	-	Intranet

Table 5 shows that four central university libraries provide web-OPAC on Internet as well as intranet, only one library has intranet facility.

Table - 6: Chat with Librarian

<b>Name of the Central University</b>	<b>Chat with Librarian</b>
Banaras Hindu University	No
Aligarh Muslim University	No
Visva-Bharati University	No
Tezpur University	No
Jamia Millia Islamia	No
Jawaharlal Nehru University	No
University of Delhi	No
University of Hyderabad	No
Pondicherry University	No

Table 6 show that central university libraries elected for the study are not providing the web services that is chat with librarian.

Table - 7: Online Document Delivery Services

<b>Name of the Central University</b>	<b>Online DDS</b>	<b>From</b>
Banaras Hindu University	Yes	DELNET
Aligarh Muslim University	Yes	DELNET
Visva-Bharati University	Yes	DELNET, JCCC, American Library, British Council Library
Tezpur University	Yes	DELNET
Jamia Millia Islamia	Yes	DELNET
Jawaharlal Nehru University	Yes	DELNET
University of Delhi	Yes	DELNET
University of Hyderabad	Yes	JCCC
Pondicherry University	Yes	JCCC

Table 7 shows that seven central universities libraries are providing document delivery services through DELNET and rest of the providing online document delivery services from JCCC.

Table - 8: Library Virtual Tour

<b>Name of the Central University</b>	<b>LVS</b>	<b>Web Pages/Videos/Flash</b>
Banaras Hindu University	No	-
Aligarh Muslim University	No	-
Visva-Bharati University	No	-
Tezpur University	No	-
Jamia Millia Islamia	Yes	Web-Pages
Jawaharlal Nehru University	Yes	Web Pages
University of Delhi	No	-
University of Hyderabad	No	-
Pondicherry University	Yes	Web Pages

Table 8 shows that which of the central universities of library providing library virtual tour facility. Only three central university libraries are providing Library virtual tour and other seven university libraries not providing library virtual tour.

Table - 9: Institutional Repository

<b>Name of the Central University</b>	<b>IR</b>	<b>Software</b>
Banaras Hindu University	Yes	-
Aligarh Muslim University	Yes	Greenstone
Visva-Bharati University	Yes	-
Tezpur University	Yes	Dspace
Jamia Millia Islamia	Yes	-
Jawaharlal Nehru University	Yes	-
University of Delhi	Yes	-



University of Hyderabad	-	-
Pondicherry University	Yes	Dspace

Table 9 shows that the central universities libraries having their own Institutional Repository. It also shows that the software they are using.

## 11. Findings

- The study finds that most of the central university libraries sites are providing web OPAC services for the user to know the bibliographical details and the Status of the resources.
- None of the central universities libraries are provided online chat facility with librarian.
- Only few the central universities libraries are provided virtual tour services.

## 12. Conclusion

Web-based services are essential especially to those who are doing research in modern age. In terms of traditional services web based library services help the users to search, find, evaluate and use the information effectively. This study will help to understand the advanced web-based services in central university libraries in India, its benefit and problem for the user while accessing resources. The study shall propose suggestions for the improvement of web-based information services in academic libraries in India to play active role in academic life of the universities.

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