



## RESOURCES AND SERVICES BY USERS IN THE LIBRARIES OF TECHNOLOGY COLLEGES

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### Abstract

*For consumers who believe themselves to be technologically competent and are engaging with information resources digitally, the internet and related technologies, particularly WWW, have opened up new vistas for offering information resources and services. The implications of this new online environment for the design and delivery of user services are enormous. The goal of the research was to learn more about the awareness, usage, attitudes, and difficulties IIT users had while trying to use web-based information and services. The majority of IIT library users, according to the report, are aware of the web-based materials and services already available, but they are not fully using them.*

**Keywords:** E-resources, Web services, Web Technology, IIT, India.

### Introduction:

A new generation of technologically proficient online users that choose to use online resources and services over conventional printed materials and services is a challenge for libraries (Thomas and McDonald, 2005). After using technology-based services like online banking, reservations, and other things, users now expect to have access to library services on their desktop and mobile devices 365 days a year, wherever they are.

Because they may access these materials and services from their desktops at their leisure and thereby save significant time, library patrons appreciate these services. The creation of the web interface or library websites was required due to the consumers' increasing expectations. They have begun comparing the existence of websites to the existence of physical libraries. With desktop access to practically accessible library materials and services online, library websites have completely transformed the idea of "time-honored" and academic trips to physical libraries.

Thousands of institutions, including academic libraries, are using these cutting-edge technologies "to create home pages, as starting points or gateways for information" (Arora, 2001). The promotion of "the image of the librarians as the Internet expert" is done through offering helpful, cutting-edge, and interactive resources and services to fulfill the research and instructional requirements of students, professors, and staff. (2012) Madhusudan. A home page allows the library the chance to explain its own goals and guiding principles.

Academic libraries' websites provide access to "online catalogs, electronic databases, subject resources, library instruction/tutorial, and digital collections," as well as information on libraries and their services. (Liu, 2008). As a result, an academic librarian's job is no longer only about keeping information safe; they are now also guides to information. In order to meet the demands of tech-savvy consumers, libraries must incorporate the newest online technologies and provide web-based library materials and services. The goal of the research was to learn more about the users' knowledge, use, opinions, and challenges while trying to

access web-based information and services.

### Review of Literature:

According to Moyo (2004), libraries are offering services in electronic libraries to fulfill the evolving demands of their users, which has led to a rise in the usage of electronic information resources (Bhatnagar, 2005). Users expected better presentation and organization of information so that it can best capture user attention and satisfy their information needs, according to Ganesan and Pandian (2004), who advise that simply offering web-based resources and services to users is not a complete solution to their needs. Libraries should create their websites using a methodical user-centric approach (McGillis and Toms, 2001). In order to establish a favorable environment for change (Ahmed, 2002), the library should provide training and marketing to inform users about the availability of online databases and the variety of services offered by the library. Websites are not adequately leveraged for promoting library resources and services, according to Islam and Hossain (2013).

In order to improve the use of web services, Madhusudhan and Nagabhushanam (2012) noted that the majority of the surveyed university libraries are still unable to fully utilize web-forms. They should place more emphasis on web-based information literacy programs. According to Balaji and Kumar (2011), there has been a relatively slow pace of diffusion of online information services, and the majority of technical university libraries are still operating in the traditional library setup. Anaraki and Babalhavaeji (2013) helped university library directors have a deeper grasp of students' demands for electronic information and potential obstacles to its best utilization. It was recommended by Vijayakumar M., Kannappanavar, and Mestri (2009) to establish a dedicated educational network among the IIT libraries.

### Objectives of the Study:

- The current research looked at how Indian Institutes of Technology (IITs) in India used web-based resources and services. The study's goals were to research the following:
- To research how IIT library users are aware of and utilize web-based library materials and services;
- To research users' perceptions of online library materials, services, and issues they encounter

### Methodology:

The research was carried out using the survey methodology. A questionnaire was used as a method for gathering data. The work of Madhusudan (2012) and Borasky (1999) contributed to the questionnaire's design and content. The study's stated goals, which are connected to different elements of web-based library resources and services, were taken into consideration while creating the questionnaires. For the purpose of choosing responders, a random sample was taken from each of the seven IITs. To choose a representative sample of users for each IIT, a random sample was chosen. Six hundred fifty user surveys were returned and examined out of a total distribution of seven hundred questionnaires to users.

### Data Analysis and Interpretation:

**Table 5.1: Awareness**

Awareness	Total (N=650)
Yes, use them regularly	122(18.8)

Yes, use them sometime	379(58.3)
Yes, use online journals only	37(5.7)
Yes, but never used	69(10.6)
Never heard	43(6.6)

**Note: Figures in parenthesis indicate percentage**

The information in table 5.1 demonstrates how people are generally aware of the resources and services that are offered via websites. It is obvious that the majority of users said that they do use websites sometimes (58.3); yet, only a tiny percentage of users (6.6) had never heard about the availability of information and services on websites. The majority of users are aware of web-based tools and services, according to the survey.

Regularity of Website Visits to Libraries: Web technology has altered not just how libraries operate but also how their patrons see the services they provide. The websites for libraries have evolved into portals to their services and resources. Therefore, it is important to understand how often people visit library websites. Data on how often people visit library websites was gathered and shown in the table.

**Table 5.2: Frequency of Visit to Library Websites**

Frequency of visit to library	Total (N=650)
Daily	234(36.0)
Weekly	213(32.8)
Fortnightly	57(8.8)
Monthly	60(9.2)
Occasionally	86(13.2)

The total frequency of user visits to library websites is shown in Table 5.2. The low number of users who visit the library website every day indicated that this was likely due to either a lack of user awareness of the various web resources and services that the libraries provide, a lack of knowledge of the advantages of these resources and services, or a lack of dynamic content on the website. Kanamadi and Kumbar (2006)<sup>17</sup> and Madhusudan and Nagabhushanam (2012)<sup>18</sup> both emphasize essentially the same result. This research emphasizes the significance of web-based literacy initiatives for efficient use of online tools and services.

Use of online tools and services (5.3) Internet and online technologies have transformed the way that libraries traditionally provide materials and services. Users' needs and expectations are modified in line with this. Libraries are investigating and providing online resources and services in light of the altered environment. Information about using resources and services from websites was requested in this area.

**Table 5.3: Use of Web-resources**

Web-resources	Total (N=650)
E-books	334(51.3)
E-Theses/dissertations	101(15.5)
Open Access Journals	166(25.5)
CD-ROM Databases	31(4.7)

Institutional Repository	80(12.3)
Online Subject Gateway	32(4.9)
E- Journals	363(55.8)
E- Databases	145(22.3)
Video Library	50(7.6)
E-Newspaper Clipping	15(2.3)
Patents/Standards	52(8.0)

**Note: Multiple answers permitted and Figures in parenthesis indicate percentage**

The aggregate web resource use by IIT library patrons is shown in Table 5.3. It can be deduced that users prefer e-books (51.3) and e-journals (55.8) over e-newspaper clipping services (2.3), which are the least popular resources. The high utilization rates of e-books and e-journals demonstrate how valuable these materials are to consumers.

**: Web-based services:**

**Table 5.4: Use of Web-based services**

<b>Web Services</b>	<b>Total(N=650)</b>
Document Delivery Service	122(18.7)
Web-based Reference Tools	203(31.2)
Ask a Librarian	80(12.3)
Online Current Awareness Bulletin	74(11.3)
Real time Digital Reference Service /Online Chat	20(3.0)
Inter-Library Loan based Services	29(4.5)
List of New Arrivals	340(52.3)
Status of User Account	153(23.5)
Access to Web-OPAC	310(47.7)
Access to Subscribed E-journals	103(15.8)
Access to E-journals through Consortium	113(17.3)
Access to Institutional Repository	31(4.7)
Access to Online Databases	130(20)
Access to Union Catalogue	15(1.7)
Access to Electronic Indexes	61(9.3)
Federated Search	9(1.0)
Link to External Resources	67(10.3)
Article Alert Service	51(7.8)
Change Password Online	233(35.8)
Staff List	121(18.6)
Map of the Library/Site Map	123(18.9)
E-mail based Services	165(25.4)
Feedback Form	62(9.5)
Contact /Address	100(15.4)
Library Holidays List	119(18.3)
FAQ	79(12.5)
General Library Policies	69(10.6)

Web-based User Education/Library Tutorials	36(5.5)
Suggestions Box	62(9.5)
Library Advisory Committee	28(4.3)
Photo Gallery	70(10.8)
Information about Special Exhibition/Seminars	58(8.9)
Virtual Library Tour	26(4.0)

**Note: Multiple answers permitted and Figures in parenthesis indicate percentage**

According to the largest percentage of users (52.3), list of new arrivals is the web service they use the most, followed by web-OPAC (47.7) and online password change (35.6). The information above clearly shows that federated search was the least popular option among users. Federated search is just a single window search for all of the library's resources. There is no need to go over each resource separately. These platforms include Jgate, EBSCO Discovery, and others. The poor use of this might be explained by users' preferences for alternative resource discovery methods, such as Google, etc., while looking for library materials and services, or by a lack of knowledge of the value of these tools. Real-time Digital Reference Service/Online Chat (3.0) and the suggestion box (9.5) come after it.

**: Availability of Training Programme:**

**Table 5.5: Training**

Yes	No
22.6	77.4

Only 22.6% of users said that training is offered by libraries, as seen in table 5.5 above. Despite the library's training program, patrons were unaware of these tools. The most likely explanation is that users did not attend orientation or training.

**Problems Faced**

Accessing web-based information and services may be challenging for users, which might lead to underuse of resources. It's crucial to identify the issues they experience in order to guarantee that online resources and services are used to the fullest extent possible. To achieve the aforementioned, users were questioned about any difficulties or restrictions they may encounter while using and accessing resources and services. Data was gathered in this situation and is shown the same way in Table 5.6.

**Table 5.6: Problems Faced**

Problems Faced	Total 650
Lack of Awareness	238(36.7)
Late Response	38(5.8)
No Response	44(6.7)
Lack of Promotion	104(16)
Slow Internet Connectivity	79(3.1)
Lack of Updateness	97(14.9)
Navigation/Interface	74(11.3)
Lack of Training/Orientation program	415(63.8)

**Note: Multiple answers permitted and Figures in parenthesis indicate percentage**

The general perception of users about accessing issues with web-based library materials and services is shown in Table 5.6. From the aforementioned, it can be concluded that the main challenge consumers experience while accessing web-based resources and services is a lack of training or orientation programs. This suggests that they are not fully aware of the advantages of online-based services and are also unaware of the many web resources and services that libraries make available to them. This is clear from the fact that consumers have described a lack of training or orientation as the main barrier to making effective and efficient use of these services.

**Opinion:** It is important to solicit user feedback in order to strengthen the current web-based resources and services provided by libraries. In this context, respondents were asked to score web-based resources and services on the basis of customer satisfaction, and the results are shown in Table 5.7 below.

**Table 5.7: Opinion**

Opinion	Total 650
Excellent	76(11.7)
Very Good	77(11.8)
Good	287(44.2)
Satisfactory	186(28.6)
Un-Satisfactory	24(3.7)

The general perception of users about accessing issues with web-based library materials and services is shown in Table 5.7. From the aforementioned, it can be concluded that consumers' inability to utilize web-based resources and services is mostly due to their lack of training or orientation programs and their lack of awareness.

### **Suggestions**

The following recommendations are offered for enhancing and successfully using the web-based resources and services in the libraries of the Indian Institutes of Technology of India based on the study's results.

It has been shown that while IIT library patrons are aware of the availability of web-based library materials and services, they are not completely using them. This is also shown by how often people visit the library website.

Library users need both information literacy abilities and technological literacy skills in order to fully take use of the variety of web-based resources and services that libraries provide in the electronic world. For them, the library should provide an orientation program, training, or workshop.

The IIT community as a whole may benefit from libraries' mutual integration of online resources and services. IIT users also suggested doing this.

### **Conclusion:**

The need for online-based library materials and services from users has increased with the development of the Internet and web technologies. It is necessary to enhance the present library infrastructure facilities in order to convert traditional library resources and services to online information resources and services for better service to library patrons in order to meet this rising demand. High quality web-based library materials and services must be designed,



developed, and provided by libraries. The results of the surveys demonstrate that while consumers are aware of the resources and services offered by the library, they are not fully using those services. The libraries should place a strong focus on user training and orientation programs in order to optimize their utilization.

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