

# **Role of Web-Based Library Resources and Services in BMSCE Engineering Colleges Library**

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## **ABSTRACT**

With the recent advancements in technology like the web, library and information services have seen a significant transition in the twenty-first century. In the age of the Internet revolution, everyone has access to the information they need right at their fingertips thanks to the Internet. By implementing these Web technologies, libraries can offer their patrons 24/7 access to online library and information services. Web-based library services are now replacing the more established library services. Currently, libraries are user-centered in a technological environment and by offering them value-added services. E-learning is now a new paradigm that fosters fresh setting for learning the primary goal of this what the online libraries are is described in the study. Services offered to library patrons at BMS College of Engineering

**Keywords; Web based Library services, User studies, Information Technology**

## **INTRODUCTION**

As a result of technical improvements in the creation, marketing, diffusion, and storage of information, libraries now face both new opportunities and concerns. One of the numerous institutions

changing as a result of technology improvements is the library. New library services and products have been created as a result, along with a shift from face-to-face communication to human-computer interaction, from paper to electronic delivery, from text-centered mode to multimedia, and from actual presence to virtual presence. The internet has spread around the world, acting as a natural complement to traditional library services and creating new avenues for satisfying customers' informational needs. Traditional online services have transformed into web-based services using web technology. New web-based library services are being spurred on by the primary point of access to library websites.

### **Web based Library services**

Web-based library services are those that are provided through an online portal provided by a library website and a library management system. Online textbooks, databases, tutorials, and virtual libraries with links to other useful resources are all examples of web-based library services. It provides a one-of-a-kind service that incorporates staff lists, cleaning procedures, library regulations, connections to full-text publications, and other features for speedy assistance.

The goal is to meet the demand for convenient, round-the-clock access to electronic reference materials from PCs. Among the web-based reference services they provide to their clients are electronic document delivery services, electronic current awareness services, electronic SDI services, web-based reference tools, electronic research guides, and virtual reference desk/ask a librarian.

### **Informational resources for online library services**

Users can now access a wide range of text-based information sources. Various web-based reference tools and services are available for obtaining information from libraries, including:

- ❖ OPAC
- ❖ News Letter
- ❖ Institutional Repository
- ❖ Bulletin boards
- ❖ Gateways
- ❖ Portals
- ❖ subject portals
- ❖ e-resources
- ❖ online databases
- ❖ Subject directories
- ❖ Blogs
- ❖ Virtual Library Tours
- ❖ Ask-A-Librarian
- ❖ Real Time Services
- ❖ bulletin boards and users ' online training

Purpose of this study: This study's purpose was to "Use of Web-Based Library Services."

Objective of the study:

- ❖ To learn more about the BMS College of Technology's online library offerings.
- ❖ To determine the search strategies used by users to find information using web-based services.
- ❖ To learn about the difficulties customers have using online library services.

- ❖ To ascertain whether the BMS College of Engineering conducts any user awareness activities or training program.
- ❖ To determine how often people visit libraries
- ❖ To assess the frequency of using Webased resources and facilities
- ❖ To investigate the motivation behind using Webased resources and facilities
- ❖ To learn about the challenges users face

### Methodology

The "Survey Method" is the fundamental research methodology used for this study. The sample is chosen using a straightforward random sampling procedure as part of an exploratory assessment of the Web-based library services offered by the BMS College of engineering. The faculty members, research scholars, and P G students of the College of Technology are given standardized questionnaires as part of the data collection process.

### Use of webased library resources

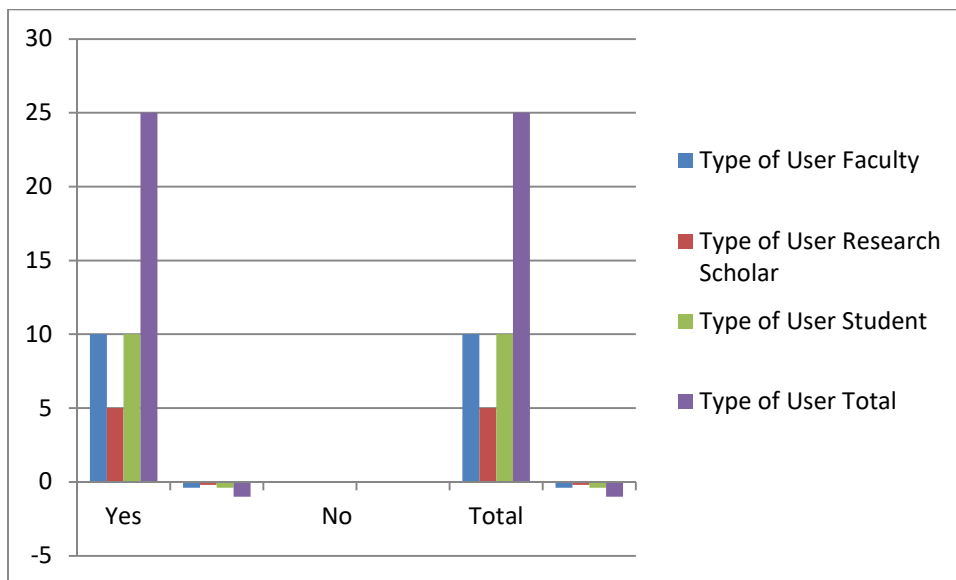
Table 1: Web browsing there at library

**Table 1: Browsing of Library Website**

	Type of User			Total
	Faculty	Research Scholar	Student	
Yes	10 (40.0%)	5 (20.0%)	10 (40.0%)	25 (100.0%)
No	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	10 (40.0%)	5 (20.0%)	10 (40.0%)	25 (100.0%)

The above table -1 describes the total percentage of faculty, Research scholar and students browsing the library website. 10 %percent of faculty members browsing the Library website and research scholars 5% and the students browsing the library website 10% out of the 100 users

**Figure-1 Browsing of Library Website**



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**Table-2: Library Provide Web-based services**

Use of Library Services	Response	Percentage
Online database/journals	64	57.14
Indexing Services	14	12.5
Newspaper Clipping Services	80	71.42

Scanning pages of the reference books/Text book	64	57.14
Old question papers	86	76.78
Syllabus	72	64.28
Current Awareness Service	74	66.07
Reference Service	74	66.07
Updated General Knowledge	50	44.64
Support for research work	48	42.85
User orientation	56	50
Announcements	74	66.07
Inter-library loan service	10	8.92
Document Reservation:	12	10.71
Others	0	0

Table No.2 of the table. The majority of responders (76.78%) said they offered their clients a scanned copy of old test questions in the form of an image or PDF file via Web based service, followed by a newspaper clipping service (71.42%). A ratio of 66.07% responses is shared by CAS, Reference service, and announcements. Web based service is used to exchange syllabus with users, according to 64.28% of respondents. Giving user's information on online journals for their benefit during the pandemic and scanning and distributing the information they need has gotten 57.14% each, respectively. Only a small percentage of LIS professionals use Web based service to provide indexing services (12.5%), inter library loans (8.92%), and document reservations (10.71%). About 44.64% share current events information to keep patrons' general knowledge current. About 42.85% help users by providing services via Web based service for research work. About 50% prefer it for user orientation. One responder from the others category indicated that links to online resources are shared using Web based service.

**Figure-2: Library Provide Web-based services**

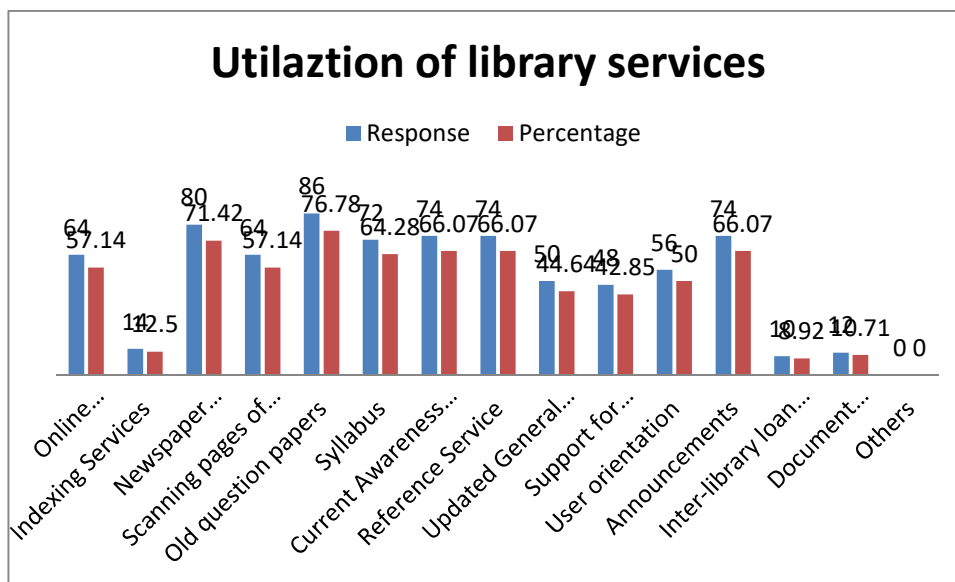


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**Table- 3 list of the e-resources and databases that are available at the library.**

Sl.No	Facilities & Services	Type of user			Total
		Faculty	Research Scholar	Student	

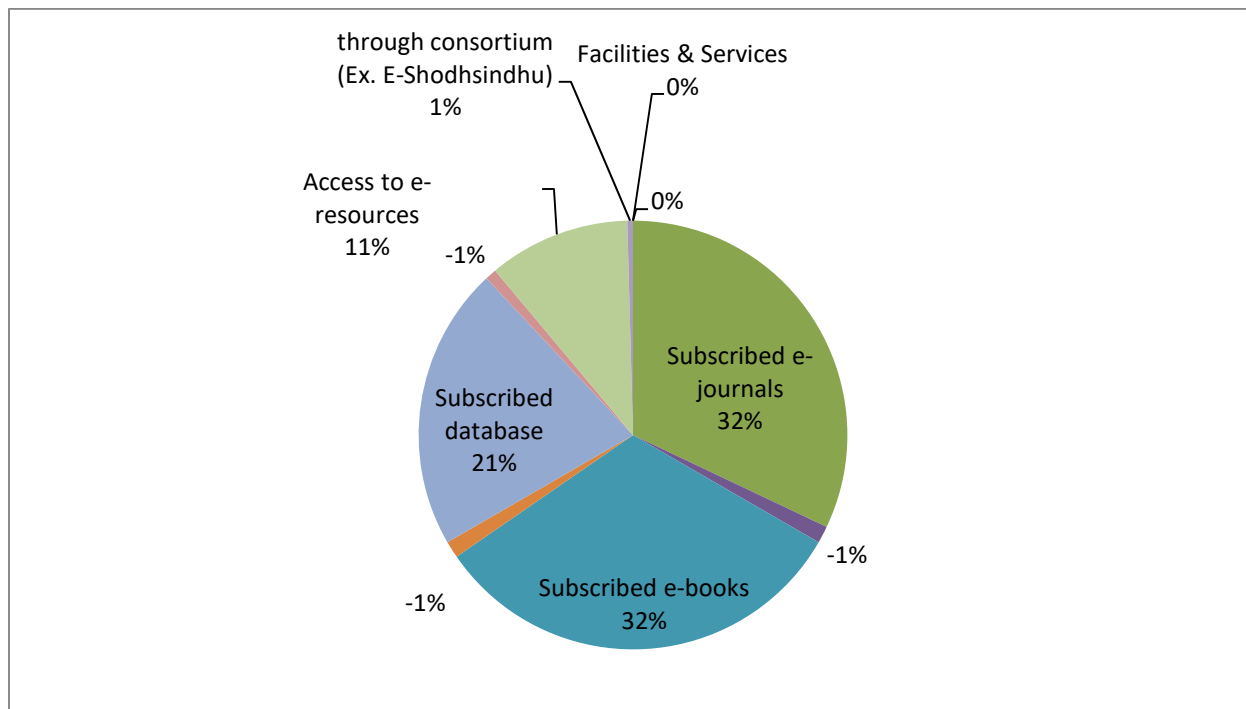
		Yes	No	Yes	No	Yes	No	Yes	No
1	Subscribed e-journals	9 (36.0%)	1 (04.0%)	4 (16.0%)	1 (04.0%)	10 (40.0%)	0 (0.0%)	23 (92.0%)	2 (8.0%)
2	Subscribed e-books	9 (36.0%)	1 (04.0%)	3 (12.0%)	2 (08.0%)	3 (12.0%)	7 (28.0%)	15 (60.0%)	10 (40.0%)
3	Subscribed database	6 (24.0%)	4 (16.0%)	0 (0.0%)	5 (20.0%)	4 (16.0%)	6 (24.0%)	10 (40.0%)	15 (60.0%)
4	Access to e-resources through consortium (Ex. E-Shodhsindhu)	3 (12.0%)	7 (28.0%)	1 (04.0%)	4 (16.0%)	5 (20.0%)	5 (20.0%)	9 (36.0%)	16 (64.0%)

The facilities and services of e-resources and databases are shown in Table- 3 for BMSCE. The respondents reported the availability of facilities like e-journals 23 (90.0%), e-books 15 (60.0%), and subscribed databases 10 (40.0%) and 9 (36.0%).



**Figure -3**

**List of the e-resources and databases that are available at the library.**



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**Table 4: Access of Engineering Databases at the college Library**

SL. No.	Engineering Databases for Access	Type of user						Total	
		Faculty		Research Scholar		Student			
		Yes	No	Yes	No	Yes	No	Yes	No
1	Elsevier	8 (32.0%)	2 (08.0%)	2 (8.0%)	3 (12.0%)	0 (00.0%)	10 (40.0%)	10 (40.0%)	15(60.0%)

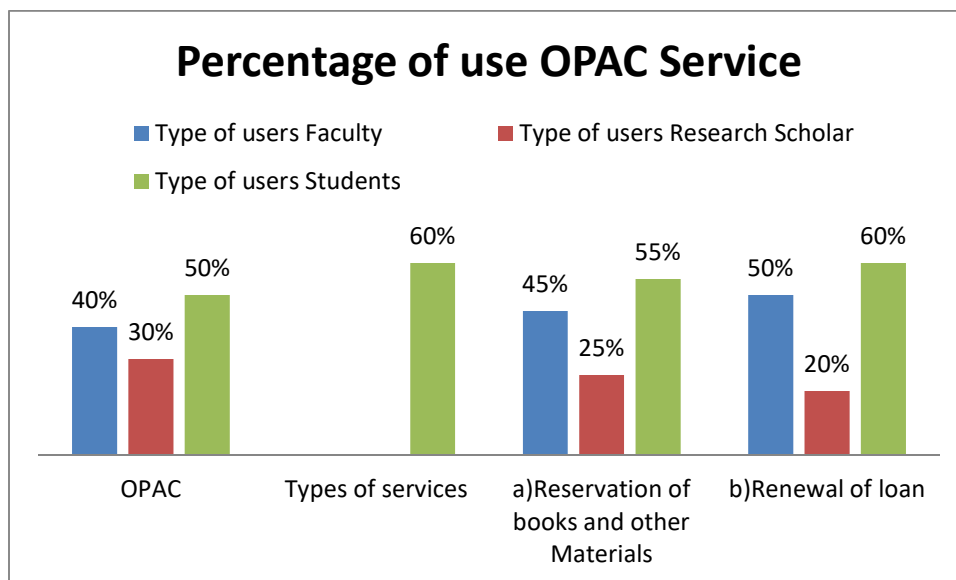
		%)							
2	IEEE Xplore Digital Library	6 (24.0%)	4 (16.0%)	4 (16.0%)	1 (04.0%)	7 (28.0%)	3 (12.0%)	17 (68.0%)	8 (32.0%)
3	ASCE Digital library	2 (08.0%)	8 (32.0%)	2 (08.0%)	3 (12.0%)	7 (28.0%)	3 (12.0%)	11 (44.0%)	14 (56.0%)
4	ASME Digital Library	2 (08.0%)	8 (32.0%)	3 (12.0%)	2 (08.0%)	8 (32.0%)	2 (08.0%)	13 (52.0%)	12 (48.0%)
5	Springer link	5 (20.0%)	5 (20.0%)	2 (08.0%)	3 (12.0%)	0 (00.0%)	10 (40.0%)	7 (28.0%)	18 (72.0%)
6	J-Gate Engineering & Technology	5 (20.0%)	5 (20.0%)	0 (0.0%)	5 (20.0%)	0 (0.0%)	10 (40.0%)	5 (20.0%)	20 (80.0%)

The database that College of BMSCE makes available for access is described in Table 4. The statistics show that out of 25 respondents, the majority of 17 (68.0%) use the information. Fewer number of responders access ASCE Digital Library (11/44%), Elsevier (10%), and IEEE Explore Digital Library (13/52.0%) Springer Link 7 (28.0%), J-Gate (40.0%), and Technology and Engineering 5 (20.0%).

**TABLE-4****OPAC at engineering college library**

OPAC services	Type of users		
	Faculty	Research Scholar	Students
OPAC	40%	30%	Students
Types of services			60%
a)Reservation of books and other Materials	45%	25%	55%
b)Renewal of loan	50%	20%	60%

The above table-4 shows the total percentage of students, faculty members, and research scholars who use OPAC services. Faculty and research scholars use 40% and 30% of the services, respectively, while students use 60%. The final majority of those using OPAC services are students

**Figure-4**

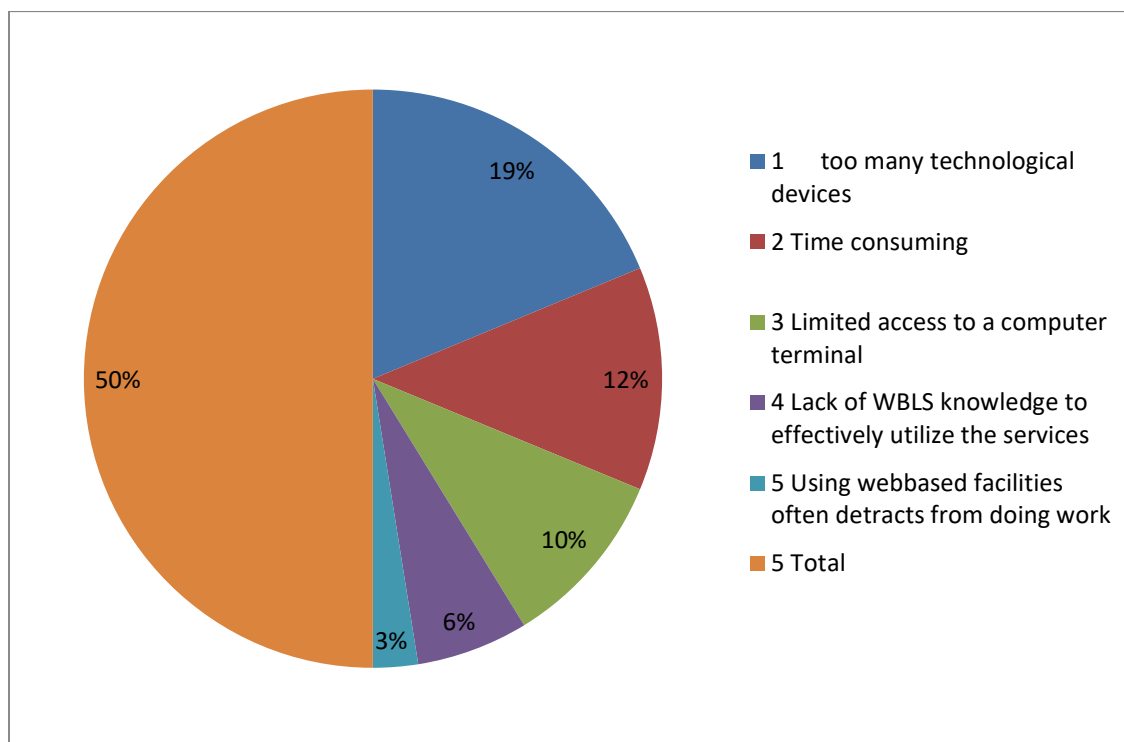
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**Figure- 5 Obstacle of access ICT facilities and services**

Sl.No	Description	No. of respondents	Percentage
1.	too many technological devices	15	37.5
2.	Time consuming	10	25.0
3.	Limited access to a computer terminal	08	20.0
4.	Lack of web based knowledge to effectively utilize the services	05	12.5
5.	Using web based facilities often detracts from doing work	02	05.0
	Total	40	100

Table 5 lists the challenges that users encountered when trying to access online resources and services. The majority of respondents (37.5%) said that using too many technical devices was the biggest obstacle to using web-based services. This was followed by time consumption (25%) and access to computer terminals (20%), as well as a lack of IT expertise (12.5%).

**Table: 5 Obstacle of access web based facilities and services**



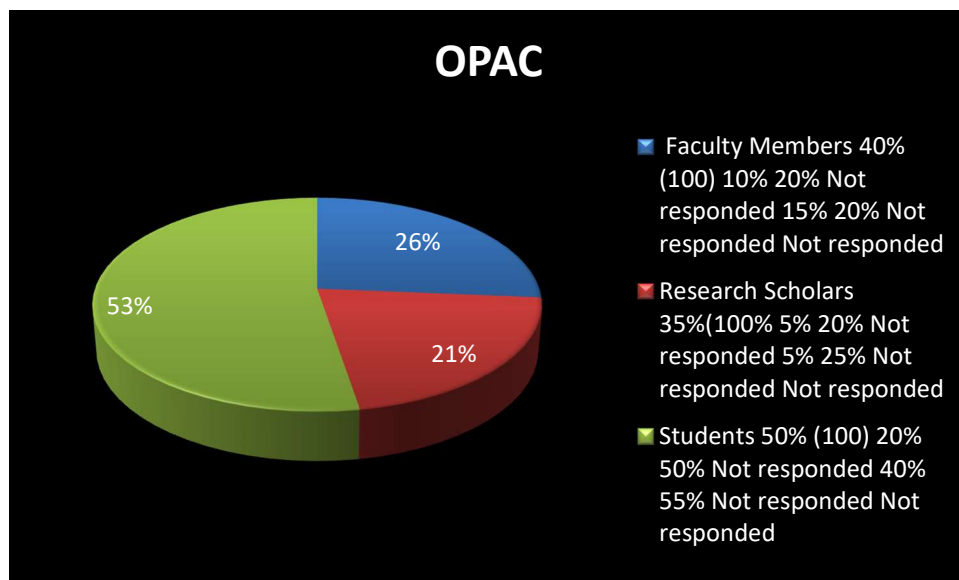
**Table -6 Respondents awareness new Information Technology**

Information Technology	Faculty Members	Research Scholars	Students
Databases	40% (100)	35%(100%	50% (100)

SMS	10%	5%	20%
Multimedia	20%	20%	50%
Scanner	Not responded	Not responded	Not responded
Facebooks	15%	5%	40%
Photocopy	20%	25%	55%
Internet	Not responded	Not responded	Not responded
Chat	Not responded	Not responded	Not responded
OPAC	25%	20%	50%
Email	30%	30%	60

The above table-5 describes the user awareness programs required for the use of library resources and services. 40% of faculty members require user awareness to access electronic resources. 35% of research scholars need for user awareness to access databases, 50% of students requires a user awareness program for database use, and the majority of users require a user awareness program for new information technology.

**Figure-5 Respondents awareness new Information Technology**



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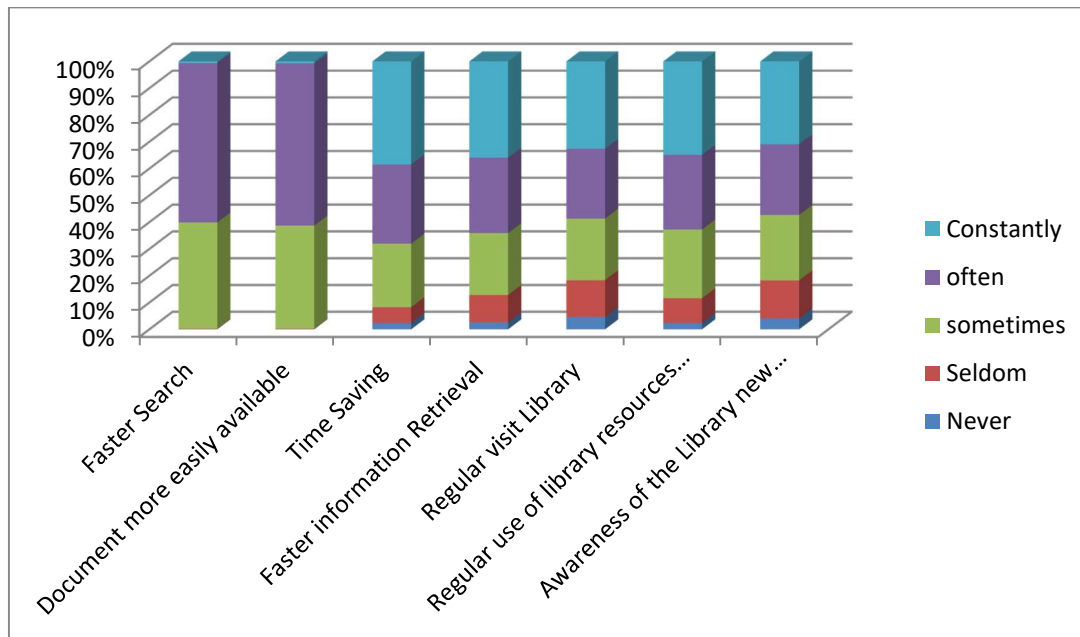
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### Impact of formal Training/orientation on the Library usage

**Table-7**

<b>Impact</b>	<b>Never</b>	<b>Seldom</b>	<b>sometimes</b>	<b>often</b>	<b>Constantly</b>
Faster Search	4.7%	20%	40%	60%	65%
Document more easily available	5%	15%	35%	55%	70%
Time Saving	4%	10%	40%	50%	65%
Faster information Retrieval	5%	20%	45%	55%	70%
Regular visit Library	10%	30%	50%	57%	71%
Regular use of library resources / services	5%	20%	55%	60%	75%
Awareness of the Library new resources and services	10%	35%	60%	65%	76%

The above table-6 describes that after the conduction of the orientation and user awareness program, the percentage of usage of library resources increased,

**Figure-6****Impact of formal Training/orientation on the Library usage**

The above figure - 6 show that after the user awareness program was implemented, the percentage of web-based service usage increased, as shown in the table and figure.

**Importance of web based library resources**

- ❖ quickly Access
- ❖ Time saving
- ❖ Space saving
- ❖ Users get required information
- ❖ To create multiple copies easily
- ❖ To provide information multiple users at a time

**Conclusion**

Utilizing web based services will accelerate development since information will flow freely. Faculty members rely extensively on web based services resources and facilities to get the information they need and to stay current in their field. Many universities now recognise the value of web based services and the need for students to acquire its fundamental concepts and abilities as part of their core education. In this study, an effort has been made to ascertain the level of web based services resources



use for teaching, research, and communication in engineering college, as well as its benefits and drawbacks. According to the survey mentioned above, the majority of respondents use web based services resources for their research and education. The major obstacle to accessing electronic resources is the excessive amount of information that is returned. Participating faculty members in this poll said that user orientation programmes and formal training are the two most important actions that can promote efficient use of web based services and resources in libraries. The study's conclusions have given BMSCE engineering college library important information about how to develop sensible, methodical methods for boosting the use of web based resources and services.

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