

## Awareness and Usage of Digital Resources Available at Cyber Library, Banaras Hindu University, Varanasi: A Case Study

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### Abstract

*The present research highlights the awareness and usage of digital resources available at Cyber Library, Banaras Hindu University, Varanasi. The prime objective of this research is to find out the awareness, usage and satisfaction of digital resources provided by the Cyber Library. The structured questionnaire was adopted for the research. The census sampling technique was adopted for this research. Thus, the five hundred (500) research scholars of Banaras Hindu University, Varanasi were used as the sample for this research. The research tried to meet up all the objectives laid down. The results obtained revealed that PDF is most preferable format among users of the Cyber Library and all the respondent (450) are quite aware and making maximum use of digital resources. At the end the paper provides some constructive suggestions derived from the analysis of data which would be helpful to authorities of the Cyber Library, Banaras Hindu University, Varanasi for enhance the maximum use of digital resources.*

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**Keywords:** E-Journals, E-books, Usage, Awareness, Digital resources, Cyber Library, Banaras Hindu University.

### 1. Introduction

Over the last several years, digital recourses have gained acceptance rapidly among not only academic and research community, but even every part of life. It is estimated that approximately more than 50,000 e-journals and lacs of e-books in the form of digital resources are being published both by commercial publishers, professional societies. University Libraries have transformed his reading materials from print to digital form where books, journals, magazines, newspaper and thesis have changed into e-books, e-journals, e-magazines e-newspaper and e-thesis. This has increased the global dissemination of information<sup>1</sup>.

Johnson, Evensen, Gelfand, Lammers, Sipe & Zilper<sup>2</sup> have defined about digital resources as the electronic representation of information which can be accessed via electronic system and computer network. Digital resources such as e-journals, e-books, e-databases, web resources, e-serials amongst others are easily accessible in remote areas. Jone<sup>3</sup> opined that electronic resources solve storage problems and control the flood of information, that is, print sources is being digitized. The rapid growth of new technologies has changed the communication process and reduced the cost of communication for individuals. Digital resources are becoming more and more important for the academic community<sup>4</sup>.

In India, many efforts have done by the different agencies regarding digital resources. The UGC-INFLIBNET one of them has made available about 7000 full text e-journals of well-

known publishers and few bibliographic databases. The N-LIST (National Library and Information Services infrastructure for Scholarly Content), an initiative of Ministry of Human Resource Development (MHRD) under the National Mission on Education through ICT, has made available about 6000 e-journals and 97,000+ e-books for the benefit of degree colleges, both aided and un-aided colleges<sup>5</sup>.

Therefore, awareness of these digital resources is of paramount importance to the University Libraries development in the 21st century. Awareness is knowledge about something that exists or understanding of a situation or subject at the present time based on information or experience.<sup>6</sup> This research is one of way to know awareness and usage of digital resources provided by the Cyber Library.

## 2. Review of the Literature

A large number of studies had already been done on the use of digital resources in the libraries. Some of the findings are as follows:

- *Thanuskodi, S. and Ravi, S.*<sup>7</sup> in their paper titled “Use of Digital Resources by Faculty and Research Scholars of Manonmaniam Sundaranar University, Tirunelveli” discusses utilisation of digital resources by faculty and research scholars of Manonmaniam Sundaranar University, Tirunelveli. Results show that 67.14% of the faculty is familiar with the use of digital resources, and majority of these members are using digital resources for research purpose. Study also reveals that majority of the faculty members are learning the required skills for the usage of digital resources through self-study. Majority of the faculty members and research scholars (55.71 %) felt that the information available in the digital resources is always “adequate”.
- *Madhusudan*<sup>8</sup> in his article titled “Use of electronic resources by Research scholars of Kurukshetra University” concluded that electronic resources had become an integral part of information needs of research scholars there. Further, he found that e-resources can be good substitute for conventional resources, if the access is fast, and more computer terminals are installed to provide fast access to e-resources.
- *Verma*<sup>9</sup> in their study on “Use & impact of electronic journals in the Indian Institute of Technology, Delhi” found that the usage of e-journals is increasing; this is due to awareness among the users about the library e-resources and services. Owing to an easy access available at various places in the institute, users are accessing these resources at hostels and departments more as compared to the library. The users coming to library decreased.
- *Doraswamy*<sup>10</sup> (“Familiarity and Use of the Available Electronic Information Resources by the Students in U.R Siddhartha Engineering College Library, Vijay Wada: A Survey”) studied the use and familiarity of electronic information resources. The study was conducted by using questionnaire method. The findings show that 61.25 per cent students are familiar with electronic information resources, 27.50 per cent of the students use the computer daily and 5.63 per cent have never used it. A small percentage of students, i.e., 2.5 per cent of students used CD-ROM, 33.13 per cent internet, 38.13 per cent e-mail, 36.87 per cent search engines, and 21.25 per cent use VRSECE website “daily” respectively. Online databases are used by 25 per cent and VRSECE catalogue “once a month”. 18.75 per cent of students use online journals rarely. 42.50 per cent of the students use electronic information resources for communication purposes. The main problems faced while using electronic information resources were lack of training and time.

### 3. Scope and Coverage

The scope of this research is limited to research scholars of the Cyber Library at the Sayaji Rao Gaekwad Library (Central Library) , Banaras Hindu University, Varanasi is regarded as one of the largest Library in Asia with more than 11 lakh books and bound journals, 52,560 e-books, 14,748 Ph.D. thesis, 7233 manuscripts, 11,272 online journals and 10 database. The foundation of the library was laid in 1917 and the present building of the library was built in 1941 on pattern of [British Museum](#), at the suggestion of Pandit [Madan Mohan Malaviya](#) which is the founder of university, after his return from the [Round Table Conference](#), London in 1931, with a donation from the [Sayajirao Gaekwad III](#), [Maharaja](#) of [Baroda State](#). Digital resources on diverse subjects are made accessible through The Cyber Library since 2012.<sup>11</sup>

### 4. Objectives

The present study was carried out to fulfill the following objectives:

- To know the awareness and extent of use of digital resources by research scholars of Banaras Hindu University;
- To ascertain various types of digital resources used by the research scholars of Banaras Hindu University;
- To know the frequency of usage of digital resources by them;
- To explore the purpose of using digital resources;
- To examine the preferred format of using these resources;
- To find out the factors that hinders the usage of digital resources;
- To provide suggestive measures base on the inference drawn from the research.

### 5. Methodology

The study was confined to the research scholars of Banaras Hindu University, Varanasi. All digital resources were available at Cyber Library. Primary data is collected from research scholars of the Banaras Hindu University. The structured questionnaire was adopted for the research. Every question as explained to the research scholars for their better understanding and the research scholars were asked to fill up their questionnaire on the spot. . In total 500 questionnaires were distributed among research scholars of Banaras Hindu University in The Cyber Library during survey period from 1<sup>st</sup> to 31<sup>st</sup> May 2017 to collect the primary data, out of which 450 questionnaires were found worth usable for analysis. The collected data was presented in the tabular form and analyzed by using a simple method of calculation.

### 6. Digital resources available at cyber library

The Sayaji Rao Gaekwad Library (Central Library) subscribes/purchase the following digital resources. These resources are made accessible through the Cyber Library. List of digital resources available for users is given in table & fig. no. 1.

Table no. 1: Digital resources available at cyber library

S.No.	Type of digital resources	Numbers
1.	Database	10
2.	e-journals	11,272
3.	e-books	52,560

Fig. no. 1: List of digital resources available at cyber library



## 7. Data analysis and interpretation

### 7.1 Awareness of digital resources

The digital resources are becoming very useful for research scholars. So a question has been asked to know awareness of digital resources.

Table 2: Awareness about digital resources

Awareness about digital resources	No. of Respondents (No.=450)	Total (%)
Yes	450	100
No	0	0

Table-2 depicts responses of the research scholars of Banaras Hindu University, Varanasi regarding the awareness of digital resources. It is clear from the table that 450 research scholars are aware of digital resources available on the website of cyber library, Central Library.BHU. Here, the digital resources include open access and subscription based e-journals and purchased e-books and databases. Therefore, it can be inferred that a large majority of research scholars are aware of digital resources available at cyber library. The percentage of research scholars who are aware of digital resources is 100%.

### 7.2 Frequency of digital resources use

The digital resources are becoming an indispensable part of the academic world; there are various available features which attract research scholars to use it frequently. This question is being asked to know the view of research scholars regarding the frequency of using the digital resources.

Table No. 3: Frequency of digital resources use

Frequency	No. of Respondents (No.=450)	Total (%)
Daily	200	44.44
Weekly	127	28.22
Fortnightly	34	07.55
Monthly	49	10.88
Occasionally	40	08.88

Table No. 3 shows that the majority of 200 research scholars (44.44%) are using digital resources for their research, whereas (127),28.22 % of research scholars are using weekly followed by monthly 49, (10.88%).Occasionally users of digital resources are very few i.e. 40,08.80% .

### 7.3 Type of digital resources used

Digital resources have been categorized into various types such as e-journals, e-books, e-magazine, e-database, e-newspapers, e-thesis/dissertations and e-reports etc. This question is being asked to ascertain various types of digital resources used by research scholars.

Table No. 4: Type of E-resources used

<b>E-resources</b>	<b>No. of Respondents (No.=450)</b>	<b>Total (%)</b>
E-Books	54	12.00
E-Magazine	19	04.22
E-Journals	172	38.22
E-Database	27	06.00
E-Newspaper	42	09.33
E-Thesis/Dissertation	101	22.44
E-Reports	25	05.55

Table no. 4 shows that the majority of research scholars 172, (38.22%) prefer to use e-journals. Second highest preference is e-thesis/dissertations with 101, (22.44%). 54, 12% of research scholars make the use of e-books. 42, 9.33% research scholars like e-newspaper. It is very clear from the table 4 that the research scholars are preferably used digital resources i.e. e-journals, e-newspaper and e-thesis/dissertation.

### 7.4 Purpose of digital resources use

The digital resources are used for variety of reasons. Five reasons were listed against which respondents were allowed to choose more than one reason for using digital resources. This question helps to identify the purpose of digital resources use.

Table no. 5: Purpose of using digital resources

<b>Purpose</b>	<b>No. of Respondents (No.=450)</b>	<b>Total (%)</b>
To expedite research	209	46.44
To consult journals	157	34.88
To find out specific literature	33	07.33
To use web resources	39	08.66
e-mail	12	02.66

As indicated in table no. 5, 209, 46.44% research scholars used digital resources to expedite their research work, 157, 34.88% research scholars used digital resources to consult journals, 08.66%, 39, 08.66% research scholars used for finding out specific information in the area of interest, whereas only 12, 2.66% used for e-mail & document exchange.

The analysis established the fact that digital resources are basically used by the research scholars to carry out their real time research work.

### 7.5 Preferred file format for using

Digital resources are being uploaded on the website in different formats. This question helps to observe the preference towards file format accessed by the research scholar of BHU.

Table No. 6: Preferred File Format

<b>Format</b>	<b>No. of Respondents (No.=450)</b>	<b>Total (%)</b>
PDF	259	57.55
HTML	37	08.22
DOC	51	11.33
PPT	89	19.77
Any other	24	05.33

Table no. 6 show that majority of 259 research scholars (57.55%) prefer PDF format searching the required article followed by 89,19.77% research scholars prefer PPT format where as DOC format is opted by 51,11.33% of respondents, 08.22 % (37)of research scholars follows HTML file format.

### 7.6 Problems in accessing digital resources

Although digital resources have proved much importance to research community and become an integral part of their research, there are variant factors that limit their use. Here; an attempt is made to find these obstacles. Research Scholars views relating to such problems are presented in table 6 for analysis.

Table No. 6: Problems in accessing digital resources

<b>Problems</b>	<b>No. of Respondents (No.=450)</b>	<b>Total (%)</b>
Slow Speed/Downloading	26	05.77
Information less useful	59	13.11
To much information retrieved	137	30.44
Long time to view	30	06.66
Difficult in finding relevant information	198	44.00

It is revealed from the views of majority of respondents i.e.198,44% found difficult in finding relevant information the most common problem which hampers the use of digital resources. The next problem 137, 30.44 % research scholars are faced too much information retrieved problem.

### 7.7 Infrastructural Problems faced by research scholars

There may be various problems faced by research scholars while accessing digital resources, sometimes these are infrastructural problems like connectivity systems, networking etc. This question helps us to know the kind of infrastructural problems faced by research scholars in cyber library.

Table No. 7: Infrastructural Problems faced by research scholars

<b>Options</b>	<b>No. of Respondents (No.=450)</b>	<b>Total (%)</b>
Low internet connectivity	36	08.00
Problems in Networking	329	73.11
Compatibility of system	56	12.44
Insufficient Workstation	29	06.44

Table No. 7 shows that majority of research scholars 329, 73% feel that the networking is main problem which creates barrier in accessing digital resources. However 56, 12.44% of research scholars shows problem of compatibility issues of system followed by 29, 6.44% of respondents with insufficient workstation. Very few research scholars 36, 8% opined that there is low internet connectivity in cyber library.

### 7.8 Opinion towards advantages of digital resources

Digital resources are very much useful for academic development of research scholars. Its feature like multimedia, easy to access quality and sharing make it very favorite to research scholars. The purpose of this question is to observe the views of respondents towards the advantages regarding the available digital resources in the academy.

Table No. 7: Opinion towards advantages of digital resources

Options	No. of Respondents (No.=450)	Total (%)
Excellent	20	04.44
Good	219	48.66
Limited	156	34.66
Average	55	12.22

Table No. 7 depicts that 219,48.66 % of the research scholars find beneficial for their study purpose, followed by 20,04.44 % of the research scholars believe that these resources are excellent, while 55, 12.22% found it average. There may be some kind of problems with particular research scholars while accessing digital resources but the analysis reveals that 53% research scholars are found the digital resources good and excellent, which shows a positive approach of the research scholars.

### 7.9 Satisfaction with digital resources

The Cyber Library is offering large numbers of faculties for accessing digital resources like 500 computers and timing (24X7). The Central Library is subscribing number of digital resources for fulfilling the information needs of the research scholars and users. With the help of this question we tried to know the satisfaction level of research scholar of BHU regarding the digital resources of the Central Library.

Table No. 8: Satisfaction with digital resources

Frequency	No. of Respondents (No.=450)	Total (%)
Not satisfied	223	51.77
Partially satisfied	148	32.88
Satisfied	59	13.11
Very much satisfied	20	04.44

Table no. 8 represents that 223, 51.77% of the research scholars are not satisfied with digital resources facility provided by the Cyber Library. There may be some reasons behind the dissatisfaction which may be pointed out and reduced .However 59,13.11% of the research scholars are and satisfied and 148,32.88% are partially satisfied whereas 20, 04.44% research scholars are very much satisfied with the digital available to them.

## 8. Findings

The major finding of this research as follows:

- All respondents (450) are well aware of digital resources.
- Majority of research scholars (44.44%) are using the Cyber Library for various academic needs.
- The majority of research scholars 172 (38.22%) prefer to using e-journals
- 46.44% research scholars used digital resources to expedite their research work and only 34 % used digital resources to consult journals.
- The majority of research scholars (57.55%) prefer PDF format searching the required article followed by 19.77% research scholars prefer PPT format.
- 44% found difficult in finding relevant information the most common problem which hampers the use of digital resources
- majority of research scholars (73%) feel that the networking is main problem which creates barrier in accessing digital resources
- 48.66 % of the research scholars find beneficial for their study purpose, followed by 04.44 % of the research scholars believe that these resources are excellent, while 12.22% found it average.
- 51.77 of the research scholars are not satisfied with digital resources facility provided by the Cyber Library.

## 9. Suggestions

On the basis of findings of the study, the following suggestions are put forwarded to improve the use of digital resources available at the Cyber Library, Banaras Hindu University, Varanasi.

- User studies should be conducted to know about digital information needs of the research scholars as well as problems they are facing while searching information through e-journals, e-books and some orientation programs may be organized to the beginning of academic session.
- Networking problem of the Cyber Library should be sort out by the Central Library authority.
- The central Library should continue to provide printed editions in addition to online access to journals, book and other reading materials.
- There is a need for the skilled library professional to manage the digital resources.
- The study indicate that usefulness of digital resources but the author suggest to the Central Library should continue to manage digital resources with printed materials.

## 10. Conclusions

A digital resource has become popular among the information users at the University level. Publishers have come out with electronic version of books and journals in large number day by day users are becoming familiar in accessing e-books and e-journals on the web. They have also started placing demand on the library for subscription to e-journals, databases and e-books. Of late, University libraries have purchased e-books and subscribed to e-journals under consortia approach. This trend of resource sharing will increase in future. Even digital resources are provided at large under open access platform. Hence it can be concluded that research scholars in the universities are aware of the availability of the e-resources and also familiar in accessing them for their academic and research endeavor.



## References

1. Abinew, A.A. & Vuda, S. A (2013). Case study of acceptance and use of electronic library services in universities based on SO-UTAUT model. *International Journal of Innovative Research in Computer and Communication Engineering*, 1(4), 903-910.
2. Johnson S, Evensen O. G, Gelfand J, Lammers G, Sipe, L. & Zilper, N (2012). Key issues for e-resource collection development; A guide for libraries. *International Federation of Library Associations and Institutions*.  
[Accessed on [http://www.ifla.org/files/assets/acquisitioncollectiondevelopment/publications/IFLA\\_ELECTRONIC\\_RESOURCE\\_GUIDE\\_DRAFT%20FOR%20COMMENT.pdf](http://www.ifla.org/files/assets/acquisitioncollectiondevelopment/publications/IFLA_ELECTRONIC_RESOURCE_GUIDE_DRAFT%20FOR%20COMMENT.pdf).]
3. Jones, P. H. (2008). Turning the page: Learning about the future of electronic books from students today. Toronto: *University of Toronto Libraries*, 38.
4. Egberongbe, H.S. (2011). The use and impact of electronic resources at the University of Lagos. *Library Philosophy and Practice*.  
<http://www.webpages.uidaho.edu/~mbolin/egberongbe.htm> [Accessed on May 2016]
5. [www.inflibnet.ac.in](http://www.inflibnet.ac.in) [Accessed on September 2016]
6. Ani, O. E. & Ahiauzu, B. (2008). Towards effective development of electronic information resources in Nigerian University Libraries. *Library Management*, 29(6/7), 504 – 514.
7. Thanuskodi, S. and Ravi, S. (2011). Use of Digital Resources by Faculty and Research Scholars of Manonmaniam Sundaranar University, Tirunelveli. *DESIDOC Journal of Library & Information Technology*, 31(1), 25-30.
8. Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. *The Electronic Library*, 28(4), 592-506.
9. Verma, R. and Baljindra Kaur. Use and impact of electronic resources on Indian Institute of technology in India: A case study. In EMPI, Digital Library National Convention, 18-20 March 2007, 26-33.
10. Doraswamy, M. “Familiarity and Use of the Available Electronic Information Resources by the Students in U.R Siddhartha Engineering College Library, Vijay Wada: A Survey”. *NACLIN*, 2005, 234–244.
11. [www.bhu.ac.in/central](http://www.bhu.ac.in/central) library [accessed on September 2016].

