Availability Of Electronic Resources In Central Universities Of Bihar: A Study

Khurshid Anwar*1 Dr. Raghubansh Prasad Bajpai**2

1.*Research Scholar, Department of Library and Information Science,
Mahatma Gandhi Chitrakoot Gramodaya Vishwavidyalaya,Chitrakoot,Satna (M.P.),INDIA

2.**Associate Professor, Department of Library and Information Science,
Mahatma Gandhi Chitrakoot Gramodaya Vishwavidyalaya,Chitrakoot,Satna (M.P.),INDIA

ABSTRACT

The importance of the academic libraries lies in the fact that they satisfy the user needs in the best possible ways. In the ICT era the web has revolutionized every aspect of information dissemination and retrieval, information is significantly being accessed by using modern technologies and e-resource has always been an ideal choice due to their multifold benefits. It is therefore important to understand where a library stands in the technological era. Their relevancy is hugely dependent upon the resources and the maximum use of the resources. The present study explores the availability of electronic resources in the three central universities of Bihar. Moreover, it tries to ascertain the various facets of electronic resources and the user preferences. The findings of the study suggest that libraries need to understand the growing competencies of the web and electronic resources and leverage the modern ICT in the libraries, help users to access information with easy search and retrieval system, thereby saving time of users and to stay relevant in the web era.

Keywords: e-resources, university libraries, users, ICT.

1.1 Introduction

Academic libraries have a key role in shaping the modern societies by creating state of art services to their users. With new and compelling technologies in market, libraries have slowly moved from traditional library services to electronic services and this shift has made libraries more effective and dynamic. Over the past decade academic libraries have undergone a sea change, user reliance on the electronic devices has been found rising and students bring their own devices to access subscribed electronic resources at their comfortable zones. BYOD; the technology model where students bring a personally owned device with various apps and embedded features to use anywhere, anytime for the purpose of learning [1]. One more benefit that merits mention here is that electronic resources are generally embraced by the user community largely because of their multifold benefits over traditional resources. Their ease of

use, affordability and accessibility, moreover, their interface for quick search and retrieval has made them an ideal part of the information services.

Now the question that looms large is that are Indian academic libraries abreast with the latest trends in the electronic resources management and does users benefit with the subscribed e-resources. To answer such questions a study was conducted to critically explore the electronic resources and their management in central University Libraries in Bihar

1.2 LITERATURE REVIEW

An academic library no matter how small it is, manages the intellectual property of institutions and are demanded to take major risks in raising the level of education in society [2]. Academic libraries should also must satisfy the users [3]. To do the job properly it is the technology that if properly utilized can make a sea change in information dissemination process. The revolution that technology brought has showered the rain equally on every area of human society. The revolution not only shaped the societies, their way of life and their perception of things but equally helped them to excel and prosper. One of the benefit that ICT brought to libraries was to disseminate information in the form of e-resources; electronic resources used commonly in the libraries include "databases, books, journals, newspapers, magazines, archives, theses, conference papers, examination papers, government papers, research reports, scripts and monographs in an electronic form"[4]. There are numerous studies that discuss about the use of e-resources by different categories of users. The present study though reviews the literature only on academic settings. A study conducted by Zhang focuses on how scholars "use, cite and evaluate e-resources during their research process". Moreover, the study also highlights the problems scholars face and impediments they face while using e-resources for their research. The study suggests that there are many impediments users face while accessing e-resources. Further the study suggests that scholars while accessing e-sources, they consider some aspects that are unique, in addition to the factors they consider for print sources [5]. An important study conducted by Kelly and Orr to obtain the detailed account of information on student's usage patterns for e-resources and services. The study concludes that part-time students' usage patterns of accessing resources have changed and now they seem to be more interested in using electronic resources and also mirror trends observed in traditional student behavior toward libraries and library resources in many important respects"[6]. A qualitative study of the influence of electronic journals on scholarly information behavior' by Olle and Borrego, explains the qualitative study of the impact of electronic journals on the information behavior of academic researchers at Catalan universities show a significant increase in e-resource usage. However,

their reading is becoming more apparant; "they are compelled to improve their discrimination skills in order to decide what to read in more depth"[7]. An important study that seeks to examine how academicians"locate, obtain, read, and use scholarly articles and how this has changed with the widespread availability of electronic journals and journal alternatives. The study finds that the average number of readings per year per science faculty member continues to increase, while the average time spent per reading is decreasing"[8]. Electronic articles now account for the majority of readings, though most readings are still printed on paper for final reading. Madhusudhan in his study focuses on the "use of e-resources by research scholars of Kurukshetra University, Kurukshetra (India). The main aim is to determine the use of e-resources, users' skills in handling e-resources, and the purpose of their use. The paper concludes that electronic resources have become an integral part of the information needs of research scholars at Kurukshetra University"[9]. An empirical analysis' tries to highlight the pattern and trends of accessing and exploting electronic resources in a university library for helping university libraries manage their resources better. "The study aims to identify the critical factors for the effective and efficient use of electronic resources. The findings shed light on the use of electronic resources and help university libraries to understand better the perception and experience of users in using electronic resources, leading to more effective and efficient use of electronic resources"[10]. Sharma and Sharma are of the opinion that "e-resources are the essential part of any university and research library in the era of e-learning". Electronic resources are the latest means of teaching, learning and sharing [11]. Another study "examined the perception and use of e-resources and the internet by the engineering, medical and management. The study finds that majority of the academic community use electronic information resources for their academic-related work and most of them prefer print to electronic information sources"[12]. "Use of electronic information resources and facilities by humanities scholars at the University of the Punjab, they found that a considerable number of users still stick to the printed information sources but they pay good attention to electronic resources"[13]. To understand if actually the "number of users accessing the e-resources is up-to-the mark. The results show that the usage of e-journals is increasing; this is due to awareness among the users about the library e-resources and services"[14].

1.3 STATEMENT OF THE PROBLEM

Electronic resources allow users to freely access the information of their use anytime, anywhere and enable the students and research scholars to work without wasting much of their valuable

time. With the advent of ICT the access to electronic resources is met to the user in authoritative, accurate and timely manner. The study is to attempt to check the availability of electronic resources and their use by the diverse group of users including students and faculty members in the three Central Universities of Bihar. Further, the study will explore the use of subscribed resources in relation to the user needs.

OBJECTIVES OF THE STUDY

i) To explore the provision and use of electronic resources in the select libraries;
ii) to highlight the criteria of subscribing electronic databases and the format of the resources;
iii) to ascertain the availability of e-resources, their use and their preservation formats.

1.4 RESEARCH METHODOLOGY

Method proposed for this study was Survey Method with the help of structured Questionnaire for collection of data. The questionnaire was designed keeping in view of the stated objectives and consisting of open ended and closed ended questions. Due care was taken while designing questionnaire; to make it comprehensive by including all essential aspects without sacrificing its simplicity and objectivity, keeping in view of objectives and scope of the study, relevant points needed for the study were covered for getting quick responses. The study was conducted in the three central Universities of Bihar.The questionnaire was designed in a way keeping in mind of achieving high response rate. Moreover, to achieve a wider understanding of the e-resource availability and the user access.

1.5 RESULTS AND DISCUSSION

The results of the study were obtained through analysis of data gathered from three central University libraries of Bihar, The results are presented in tables according to the research objectives.

1.5.1 Central Universities of Bihar

The three Central Universities of Bihar have a well-establishedlibrary system to cater to the information requirements of students and faculty for their academic accomplishments. Although all universities are new in their origin, it is commendable to mention that all the three libraries are supporting the academiain the best possible way. The availability of the e-resources is not up

to the mark but still they do support in scholarly communication, research support and students their diverse needs. All the three libraries have integrated library management software's.

Table 1: Central Universities of Bihar

Name of the University	Year of Establishment	URL
Central University of South Bihar	2009	*www.cusb.ac.in*
Mahatma Gandhi Central University	2016	*mgcub.ac.in*
Nalanda University	2010	*nalandauniv.edu.in*

1.5.2 Different types of Electronic Services Available in the Libraries

Here the respondent (Librarian) was asked to report the different type of information services available and used by the different category of users. Table 2 highlights the services available in all the select libraries.

Table 2: Electronic Services Available in the Libraries

Electronic Services	Central University of South Bihar Library	Mahatma Gandhi Central University Library	Nalanda University Library
Internet Connectivity	1	1	1
Computer Servers	1	1	1
Work Stations (PC)	1	1	1
Laptops	1	1	1
Printers	1	1	1
Facsimile	2	0	0
Copiers	1	2	2
Intercom	1	1	1
Electronic Databases	1	1	1
CD-ROM Resources	1	1	2

Note: 0 represent Not Available, 1 represents Available and Functional, 2 represents Available but not Functional

Table 2 represents the availability and functionality of various types of ElectronicServices in the selected libraries like internet connectivity, Computer servers, and Work station (PC) resources are available and functional in all the three University Libraries.All the three universities though new in nature have managed to keep all services for their users. Fax, copiers and CD-ROM are not available or not functional isn't an issue as in the era of changing face of digital world to

keep pace with digital technology is very difficult for such nascent libraries. The threat of obsolescence is one such factor that libraries can't manage to do well as there is always budgetary constraints to deal with.

1.5.3 Types of E- Resources Subscribing for E-Resources Section

In this section the respondent was asked to report the types of the E-Resources that users find easy to access and use. Significant users demand full text of the subscribed resources as numerous studies suggest. Here in Table 3 different types of e-resources and their availability is highlighted.

Table 3: Type of electronic resources available in the Libraries

Type of E-Resources	Central University of South Bihar Library	Mahatma Gandhi Central University Library	Nalanda University Library
Full Text	1	1	1
Abstract	1	1	1
Bibliographic	1	1	1
Numeric	1	1	1
Graphic	1	1	1

Note: 1 stands for yes, 0 stands for No

Table 3 indicates that all the Institutional libraries subscribe Electronic Resources which are available in the form of Full Text, Abstract Level similarly databases that are in Bibliographic, Numeric and Graphic form are also being subscribed by the libraries for their users. However, the resources subscribed or purchased by the libraries are not sufficient as observed from the study.

1.5.4 Preferred Databases

The libraries of the select institutions subscribe different type of databases in every discipline that is being taught in the respective Universities. Some preferred databases that are very useful for the Students, Research Scholars and Faculty Members are enlisted in the table 4.

Table 4: Preferred Databases

Databases	Central University of South Bihar	Mahatma Gandhi Central University	Nalanda University Library

	Library	**Library**	
Springer Link	0	1	1
Emerald	1	1	1
Sage	0	1	1
Taylor and Francis	1	1	1
Oxford University Press	1	1	1
Elsevier	0	1	1

Note: 1 stands for yes, 0 stands for No

Table4 represents the list of databases subscribed by the libraries. Almost all the Libraries subscribe Emerald, Taylor and Francis and Oxford University Press databases. The other less significant for this study were also found in these libraries. The reason for the fewer database subscription is again the budgetary issues. Now academic libraries do best by subscribing the resources through consortia and that has been successful in developing countries to make e-resources available at minimum costs. Nalanda University a premier institute has a good number of subscriptions and usage as well.

1.5.5 Criteria for Selection of Electronic Resources by Librarians

All the select libraries have a well-defined selection policy for selecting the Electronic Resources. Table 5 enumerates Selection Criteria of Electronic Resources.

Table 5: Criteria for Selection of Electronic Resources.

Criteria for Selection of Electronic Resources	**Central University of South Bihar Library**	**Mahatma Gandhi Central University Library**	**Nalanda University Library**
User Recommendation	1	1	1
Scanning Catalogue	1	1	1
Surfing Information Research Website	1	1	1
List Services	0	0	0
Consulting other Librarians	1	1	1
News Group	0	0	1

Free Online Trial Access	1	1	1
Recommendation of Specific Users.	1	1	1
Evaluation of Contents Performing Under Existing Environments	1	1	1
User Statistics	1	1	1

Note: 1 stand for yes, 0 stands for No

Of all the criteria given in the Table 5most of the criterion are applied for selection of electronic resources. The value of electronic resources depends upon their use. Keeping in view the escalating prices and budgetary constraints librarians and other policy makers take utmost care while selecting e-resources for their libraries. All the three libraries reported using best criteria given in the Table for selection of resources. List services were reported No by all the three libraries and News group was reported Yes by Nalanda University. The important criterion of all the listed criteria was User Statistics generated by the publishers or e-aggregators and that in fact is the best tool to select e-resources.

1.5.6 Preservation formats of E-Resources

Academic libraries are important in the sense that they not only acquire the resources but play a key role in preserving them for future use. Many institutional repositories are created to save the resources for future use with an easy retrieval system. The formats for preserving the resources are also important. Table 6 highlights few important formats and the libraries responses.

Table 6: Preservation formats of E-Resources

Preservation format of e-resources	Central University of South Bihar Library	Mahatma Gandhi Central University Library	Nalanda University Library
PDF Format	1	1	1
HTML Format	1	1	0
Word Format & etc.	1	1	1

Note: 1 stand for yes, 0 stands for No

The Technical staff updates the Resources and saves them from digital obsolescence. From the analysis all the libraries reported preserving their resources in PDF Format, HTML Format and Word Format etc.However, no library is implementing the modern digital preservation strategies to preserve their resources. Moreover, no library has any functional repository of their institutional resources. There is immediate need to save the fragile resources from digital disasters.

1.6 CONCLUSION

The results from the survey demonstrate that the diverse category of users is using electronic resources to satiate their information needs. Due to many benefits of electronic resources, their versatile nature and their ubiquity, their easy access due to user friendly interface has made them an attractive choice for users in any library. Even though the considerable number of users are accessing electronic resources but the demand of print resources is also significant, which indicates that print resources have not lost their value and are still relevant in information dissemination and access. But there are some impediments that stop the users to access electronic resources in the academic libraries; inadequacy of e-content, difficulties in locating the resources, incompetent staff. Among the barriers inadequate resources might be keeping users away from using the electronic resources. Unfortunately, libraries have failed to facilitate the users to access the electronic resources in effective ways.

It is incumbent upon the universities and the policy makers to proactively to start orientation programmes for academia to train them how to access the resources, their location and search strategies. Moreover, libraries need to subscribe more information resources for the larger benefit of the user community. It is also important to do user surveys to ascertain the compelling demands of the users and understand their challenges or impediments they face in accessing the electronic resources. Concluding, libraries need to leverage the modern ICT for easy access of the e-resources and must train users as well about the benefits of using electronic resources.

The findings of the study also suggest that there are meager databases subscribed by the select libraries and there isn't proper library website to help the users to find the resources available in the library. Further, huge challenges of ICT use, professional employees in the library and proper infrastructure has substantial effect on the access and use of electronic resources.

Though there are good criteria to select the resources but the libraries need to step ahead to give much focus on leveraging modern technologies and stay relevant in the information era. Library

preservation strategies and ubiquitous access must be promoted for the maximum use of the resources. The study therefore, recommends that libraries should make best use of technologies and disseminate resources users utilizing the modern devices, giving users freedom to access anytime, anywhere.

REFERENCES

1. Song, Y. (2014). "Bring Your Own Device (BYOD)" for seamless science inquiry in a primary school. *Computers & Education*, *74*, 50-60.

2. Candan B. (2015). Institution of Library in the Cultural Life of Turkey and its Effect on Educational Life: Republic Period. Journal of Library and Information Sciences. Published by American Research Institute for Policy Development, Vol. 3(2), pp. 11-31.

3. Chinnaraj, A. and Tamilselvan, N. (2016). Information Search Pattern of Medical Professionals in Digital Environment: A Survey of Selected Colleges in Coimbatore. International Journal of Library & Information Science (IJLIS). Vol. 5(3). 85–90,

4. Wu, M. D., & Chen, S. C. (2012, November). How graduate students perceive, use, and manage electronic resources. In *Aslib Proceedings* (Vol. 64, No. 6, pp. 641-652). Emerald Group Publishing Limited.

5. Gonçalves, M. A., Moreira, B. L., Fox, E. A., & Watson, L. T. (2007). "What is a good digital library?"–A quality model for digital libraries. *Information processing & management*, *43*(5), 1416-1437.

6. Zhang, Y. (2001). Scholarly use of internet-based electronic resources. *Journal of the American society for information science and technology*, *52*(8), 628-654.

7. Kelley, Kimberly B., and Gloria J. Orr. "Trends in distant student use of electronic resources: A survey." *College & Research Libraries* 64.3 (2003): 176-191

8. Ollé, Candela, and Ángel Borrego. "A qualitative study of the impact of electronic journals on scholarly information behavior." *Library & Information Science Research* 32.3 (2010): 221-228.

9. Tenopir, C., King, D. W., Edwards, S., & Wu, L. (2009, January). Electronic journals and changes in scholarly article seeking and reading patterns. In *Aslib proceedings* (Vol. 61, No. 1, pp. 5-32). Emerald Group Publishing Limited.

10. Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. *The electronic library*, *28*(4), 492-506.

11. Deng, H. (2010). Emerging patterns and trends in utilizing electronic resources in a higher education environment: An empirical analysis. *New Library World*, *111*(3/4), 87-103.

12. Sharma, C., Singh, L., & Sharma, R. (2011). Usage and acceptability of e-resources in National Dairy Research Institute (NDRI) and National Bureau of animal genetic resources (NBAGR), India. *The Electronic Library*, *29*(6), 803-816.

13. Sampath Kumar, B. T., & Kumar, G. T. (2010). Perception and usage of e-resources and the internet by Indian academics. *The electronic library*, *28*(1), 137-156.

14. Tahir, Muhammad, Khalid Mahmood, and FarzanaShafique. "Use of electronic information resources and facilities by humanities scholars." *The Electronic Library* 28.1 (2010): 122-136.

15. Kaur, B., &Verma, R. (2009). Use and impact of electronic journals in the Indian Institute of Technology, Delhi, India. *The Electronic Library*, *27*(4), 611-622.

16. Babbie, E., & Mouton, J. (2001). The practice of social science research. *Belmont, CA: Wadsworth*