USE OF E-RESOURCES BY THE FACULTY MEMBERS AND STUDENTS IN SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT AT BANTAKAL: A STUDY

KN SHIVAKUMARASWMAY[*], USHA[**]

ABSTRACT

The study focuses on the use of e-resources by the research scholars, faculty members and undergraduate students in Shri Madhwa Vadiraja Institute of Technology & Management, Bantakal. Investigator has adopted survey method for collecting data through well-structured questionnaires. The questions were randomly distributed among 200 users (research scholars, students), and 175 (125 from research scholars, 50 from students) valid samples were collected. The analysis of the collected data declares the use of electronic resources and how the electronic resources are enlightening the research work, academic carriers of the faculty members and students, and also what problems are being faced at the time of using the electronic resources.

KEYWORDS: Faculty Members, Undergraduate Students, Engineering College, Electronic Resources, Academic Carriers.

INTRODUCTION

Information is a fundamental resource and also support for the continuous growth of any organization. Without proper information and knowledge infrastructure, no education system can stand and achieve its setup goals and objectives. For fulfilling the information needs of users, electronic resources are playing a very important role. Now-a-days information is spread all over the world through electronic media like e-resources. Due to multiple advantages of e-resources, it has now taken a dominant position in the information field. Librarians are trying to satisfy the user's needs by preparing a low budget and taking appropriate purchase decisions balancing both individual and institutional needs. The user's attitude towards information is progressively shifting from the printed documents to electronic resources. There are many reasons for this change. Due to its associated advantages, library users demand the resources in an electronic format. In the digital era, library staff is expert with ITC and is also happy with the functionalities of the software and hardware by fulfilling the library user's needs.

[*]Chief Librarian, B G S Institute of Technology, B G Nagara, Nagamangala (Tq), Mandya (Dist)-571448.

[**]Librarian, Shri Madhwa Vadiraja Institute of Technology and Management,Vishwothama Nagar, Bantakal, Udupi-574115.

Correspondence E-mail Id: editor@eurekajournals.com

Publishers, vendors and agents have great responsibilities to develop the e-resource market and are eager to supply electronic resources/ services along with print based materials. Further, the World Wide Web (www) is an important resourceful platform for the supply of required information to the users and provides a basis for the shift from ownership of physical collections to access on demand. Web being a real time information delivery channel has made CD–ROM based delivery a reality. To fulfill the demands of users, libraries are shifting towards new media – like electronic resources for their collection development. A huge amount of money is spent on electronic resources for their collection development.

SHRI MADHWA VADIRAJA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Shri Madhwa Vadiraja Institute of Technology and Management (SMVITM) is one of the prestigious engineering colleges established in the year 2010, located in a village called Bantakal near the world famous temple town of Udupi, a relatively small but culturally vibrant and intellectually enlightened town in the region with the goal of the upliftment of the underprivileged sections of society by providing them with quality and affordable technical education. The institute firmly believes that the essence of imparting quality education is to create a hunger for knowledge among the students and to make them not only improve their subject knowledge, but also help them achieve their goals and also total personality development. The institute strives to provide students with worldwide education that encourages them to apply their minds and think 'out of the box' to get solutions to real time technological problems. The institute has 4 undergraduate programs in engineering i.e. Computer Science & Engineering, Electronics & Communication Engineering, Mechanical Engineering, and Civil Engineering. Research activities are also undertaken in all the branches of this institution.

LITERATURE REVIEW

Baldwin (2000) focuses on the changes occurring in collection development of libraries, due to the increasing number of electronic resources, and also discusses the schemes developed by the librarians, to organize various types and formats of electronic resources on the Internet. Zia (2011) conducted a project on information behavior of National Science and Technology Library (NSTL). Non-print material pattern in China has not been researched extensively. Such studies help the producers and providers in collecting information on pattern behavior and in developing more non-print materials. Non-print materials' producers should offer more foreign literature and the providers should improve the quality of services. Author provides suggestions for further improvement of the NSTL to fulfill the information needs and requirements of users. Mulla (2011) presents a study done in 2011 at the HKBK College of Engineering, Bangalore, India which looks at how faculty members at the college use non-print materials, as reported by results. Topics include impediments to accessing or using services that faculty members encounter, the impact of non-print materials on the use of traditional resources, and recommendations for improving non-print materials' services for faculties in HKBK College of Engineering. It also says that library staffs are usually the people to provide faculty members with non-print materials' skills training. Maan (2012) highlighted that the non-print materials are gaining more and more attention of library patrons and are becoming an integral part of every library collection. Study is an effort to know the patrons and enquire whether use of non-print materials has impacted the performance of their academic work. Mansur (2012) describes that the libraries are the repositories of the intellect of ages stored in the form of recorded information

for use of present and future generations. Digital technology has made it more easy, speedy and comfortable to apply the stored intellect. Collected information through the ages has to be used for further research, betterment and overall development of the society. The various changes that have occurred in acquisition, retrieval and storage of information processes due to technological developments have been discussed. Limitations, issues, challenges restrictions and problems being faced by library managers and clientele due to the same have also been highlighted. The way these developments have affected the academic environment in general and engineering college libraries in particular and the way they have changed the role of librarians has also been focused.

Kumar (2014) describes the initiatives on electronic collection and development in engineering college libraries in the Rayalaseema region of Andhra Pradesh. Author opines on librarians, on the most preferred electronic materials and on the various electronic resources acquainted with their library. The electronic library initiatives cover a variety of activities starting from the electronic collection building, digitization, digital collection, maintenance, and digital preservation. 34.57% of libraries are in the process of building digital collections.

RESEARCH OBJECTIVES

The present study has the following as its main objectives:

1. To know the availability of e-resources.
2. To find out the purpose and utilization of e-resources.
3. To examine the user's frequencies.
4. To study the satisfaction level of users.
5. To know the preferred format for using e-resources.
6. To find out the problems in the use of e-resources.

SCOPE AND LIMITATIONS

The study covered the faculty and undergraduate students of Shri Madhwa Vadiraja Institute of Technology & Management. The students and faculty members are drawn from four departments i.e. Computer Science & Engineering, Electronics and Communication Engineering, Mechanical Engineering, and Civil Engineering.

METHODOLOGY AND SURVEY DESIGN

The present study started with literature search from LISA (Library and Information Science Abstract) database and Library and Information Science and Technology Abstract (LISTA), Google Scholar, and Emerald Insight. Some important ALA books were also consulted to design the questionnaire for engineering college students and faculties. A well designed questionnaire was used to collect the data in Shri Madhwa Vadiraja Institute of Technology & Management. The questionnaire covered various questions relating to the responsiveness and use of e-resources. For this reason, a total of 200 questionnaires were distributed among undergraduate students and faculty members. Out of 200 questionnaires, 175 valid questionnaires were collected from undergraduate students (125) and from faculty members (50). Then data was analyzed. The response rate was 87.5%.

RESULTS AND DISCUSSIONS

The results and discussion of the present study are given in the following paragraphs in a systematic manner.

GENDER

The gender wise status of Shri Madhwa Vadiraja Institute of Technology & Management Library users is shown in Table 1. It may be seen from the table that majority of the respondents (109(62.29%)) are male and the remaining (66(37.1%)) are female respondents.

Table 1.Gender of the Users

S. No.	Gender	No. of Responses	Percentage
1	Male	109	62.29
2	Female	66	37.71
Total		175	100.00

Figure 1.Gender of the Users

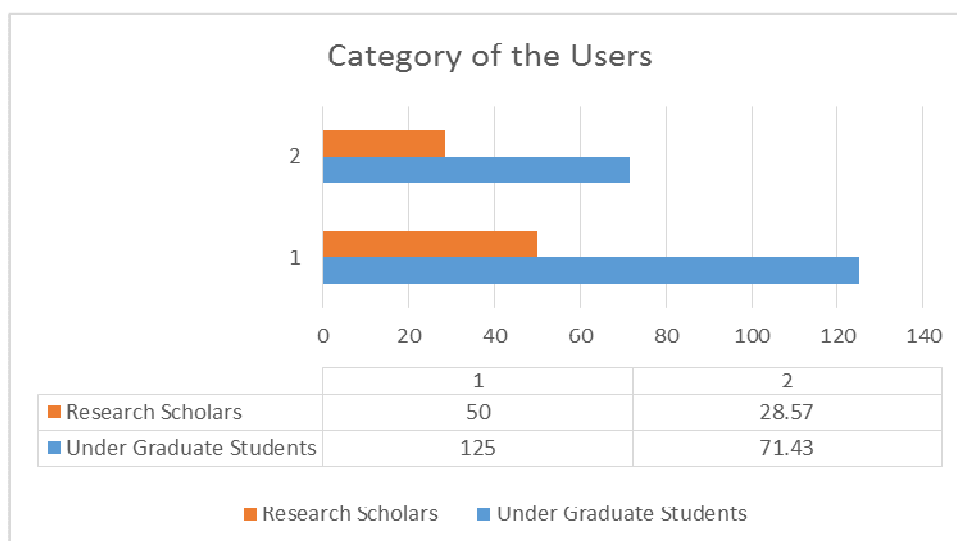## ACADEMIC STATUS OF THE USERS

The category wise distribution of engineering college respondents is shown in Table 2, which reveals that 125(71.43%) of respondents are undergraduate students and 50(28.57%) are research scholars.

Table 2.Academic Status of the Users

S. No.	Academic Status	No. of Responses	Percentage
1	Under Graduate Students	125	71.43
2	Research Scholars	50	28.57
Total		175	100.00

Figure 2.Academic Status of the Users

AWARENESS ABOUT E-RESOURCES

Table 3 shows that the awareness of e-resources among the respondents available through the library. 84.40% of the male users were aware about the e-resources and 78.79% of female respondents were aware about the availability of e-resources. It can be shown that male respondents are more aware about the availability of e-resources than females.

Table 3.Awareness about E-Resources

| S. No.	Academic Status	No. of Responses (%)	Percentage (%)
1	Male	92 (84.40)	17 (15.60)
2	Female	52 (78.79)	14 (21.21)
Total		144 (82.29)	31 (17.71)

PREFERENCE LEVEL OF USING E-RESOURCES

Table 4 shows that majority (48%) of the respondents wanted to access information through electronic version only, 32% users wanted to access information through print version, and 20% of the users wanted to use information on both electronic and print version.

Table 4.Preference of Respondents about using E-resources

S. No.	Resources	No. of Responses	Percentage
1	Electronic	84	48.00
2	Print	56	32.00
3	Both	35	20.00
Total		175	100.00
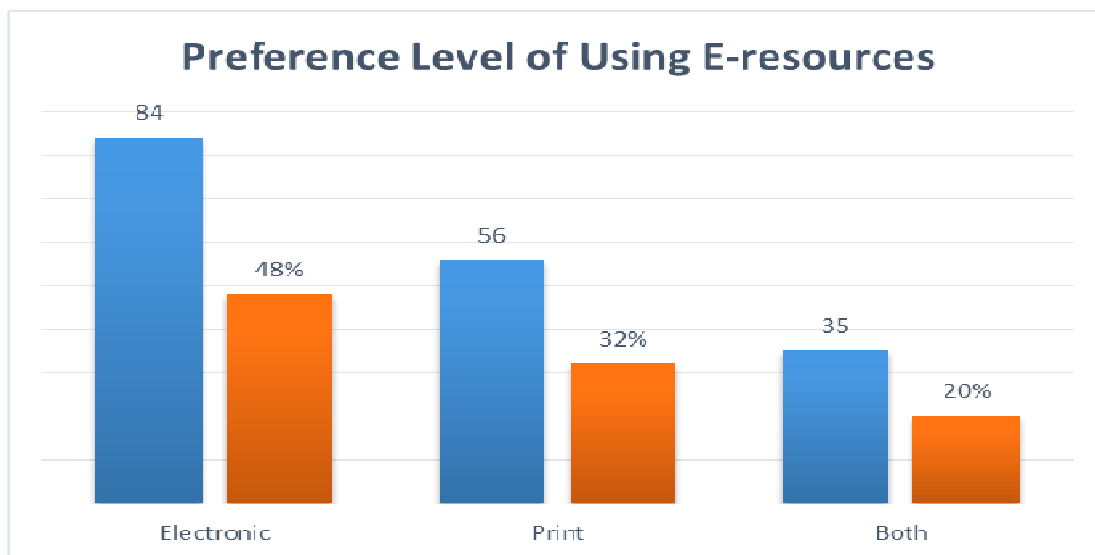
Figure 3.Preference of Respondents about using E-resources

FREQUENCY OF USING E-RESOURCES

The frequency of using e-resources by the Shri Madhwa Vadiraja Institute of Technology & Management library users is given in Table 5. The table reveals that majority (64(36.60%)) of the respondents used e-resources weekly, nearly 52 (29.70%) of the respondents used the e-resources daily, 38(21.70%) respondents replayed weekly twice and 21 respondents, scoring 12 percent used e-resources monthly.

Table 5.Frequency of Using E-Resources

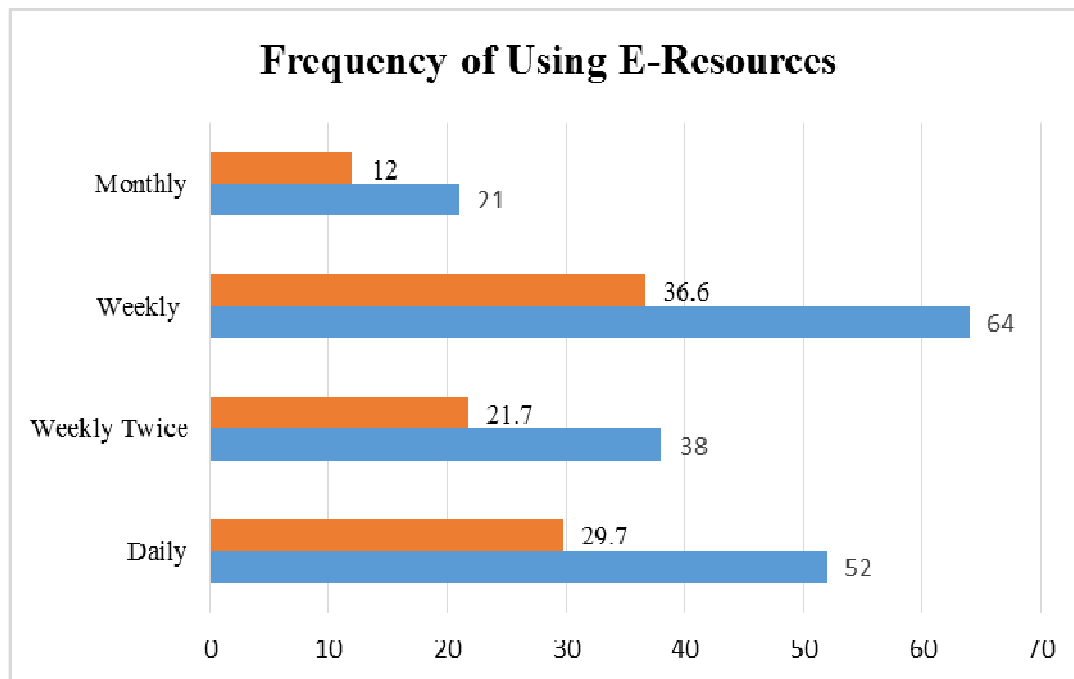| S. No.	Frequency	No. of Responses	Percentage
1	Daily	52	29.70
2	Weekly Twice	38	21.70
3	Weekly	64	36.60
4	Monthly	21	12.00
Total		175	100.00

Figure 4.Frequency of Using E-Resources

PURPOSE OF USING E-RESOURCES

The purpose of using e-resources by the users is presented in Table 6. The users used the e-resources for various purposes like for studying course work, to update their subject knowledge, for teaching, for seminars, for research work, project and for writing papers. Majority of the respondents (43(24.57%)) used the e-resources for writing papers. Nearly 33(18.86%) respondents used the e-resources for their research/project work, only 35(20.00%) used them for studying course work, 30(17.14%) for teaching/seminars, 28(16.00%) to update their subject knowledge and the remaining (6(3.43%)) for other works i.e. exam etc.

Table 6.Purpose of Using E-Resources

S. No.	Purposes	No. of Responses	Percentage
1	For Studying Course Work	35	20.00
2	To Update Subject Knowledge	28	16.00
3	For Teaching/Seminars	30	17.14
4	For Research Work/Project	33	18.86
5	For Writing Papers	43	24.57
6	Any other work	6	3.43
Total		175	100.00

METHODS OF LEARNING E-RESOURCES

Table 7 reveals that majority (74(42.29%)) of the respondents acquired their e-resources usage skill through training by the library staff, nearly 49(28.00%) by self-study, only 38(21.71%) by their friends and the remaining 14(8.00%) learned by external sources.

Table 7.E-Resources Learning Methods

S. No.	Methods	No. of Responses	Percentage
1	Training by the library staff	74	42.29
2	Self-study/Instruction	49	28.00
3	From Friends	38	21.71
4	External Sources	14	8.00
Total		**175**	**100.00**

LOCATION FOR ACCESSING E-RESOURCES

It is clear from Table 8 that majority of the respondents (87(49.71)) accessed e-resources from central library, 34(19.43%) from department library, nearly31 (17.72%) from computer lab and the remaining 23(13.14%) from other places.

Table 8.Location for Accessing E-Resources

S. No.	Location	No. of Responses	Percentage
1	Central Library	87	49.71
2	Department Library	34	19.43
3	Computer Lab	31	17.72
4	Other Places	23	13.14
Total		175	100.00

LINKING PATTERN OF E-RESOURCES

Table 9 shows how respondents searched e-resources available on various websites. Majority of the respondents i.e. 71(40.58%) searched e-resources through linking facility available on the library website, 58(33.14%) respondents searched e-resources through websites, 29(16.57%) searched through search engines and remaining 17(9.71%) respondents searched through publisher's website.

Table 9.Linking Pattern of E-Resources

S. No.	Linking	No. of Responses	Percentage
1	Links through Library Website	71	40.58
2	Links through Publisher's Website	17	9.71
3	Links through Search Engines	29	16.57
4	Links through E-resources Website	58	33.14
Total		175	100.00

PATTERN OF USAGE OF E-RESOURCES

The pattern of usage of e-resources in the Shri Madhwa Vadiraja Institute of Technology & Management library users is given in Table 10.

The table reveals that 98(56.00%) downloaded the content in storage devices. Nearly 46(26.29%) of the respondents took printout of the information and remaining 31(17.71%) respondents used it on the computer screen.

Table 10.Usage Pattern of E-Resources

S. No.	Use of E-Resources	No. of Responses	Percentage
1	Computer Screen	31	17.71
2	Download in storage devices	98	56.00
3	Printout	46	26.29
Total		175	100.00

FORMATS OF E-RESOURCES

E-resources are available in two major formats - PDF and HTML. It was observed from the analysis that 115(65.71%) respondents preferred PDF format for using e-resources, whereas 41(23.43%) respondents preferred HTML format, and 19(10.86%) had no preference.

Table 11.File Formats of E-Resources

S. No.	File Formats	No. of Responses	Percentage
1	HTML	41	23.43
2	PDF	115	65.71
3	No Preference	19	10.86
Total		**175**	**100.00**

SATISFACTION LEVEL OF RESPONDENTS REGARDING ACCESS OF E-RESOURCES

The analysis of satisfaction level of accessing e-resources by the respondents is presented in Table 12. A question was asked to know the users' satisfaction level by accessing e-resources. It was observed that majority of the respondents (86(49.14%)) were highly satisfied with the infrastructure provided by the library for accessing e-resources at different levels, nearly 43(24.57%) respondents reported to be satisfied, 27 reported it to be average, and only 19(10.86%) respondents were not satisfied with the same.

Table 12.Satisfaction Level of Respondents regarding Access of E-resources

S. No.	Satisfaction	No. of Responses	Percentage
1	Highly Satisfied	86	49.14
2	Satisfied	43	24.57
3	Average	27	15.43
4	Not Satisfied	19	10.86
Total		**175**	**100.00**

Table 13.Difficulties faced by the Respondents while Accessing E-Resources

S. No.	File Formats	No. of Responses	Percentage
1	Not many E-resources being available in my subject	63	36.00
2	Coverage on E-Resources not being Suitable to my Research Area	41	23.43
3	No assistance being provided by the information professionals	34	19.43
4	Lack of Training	26	14.86
5	Time Consuming	11	6.28
Total		175	100.00

DIFFICULTIES FACED BY THE RESPONDENTS WHILE ACCESSING E-RESOURCES

Though e-resources have become a common source among the academic and research groups, a majority of users indicated that they faced problems while using e-resources. The specific problems faced by the users are given in Table 13.

It clearly shows that the majority of respondents were not satisfied with quantity of available e-resources. The other problems faced were the content not being suited to their research area, the process being time consuming, no assistance being provided by the information professionals, and lack of training.

CONCLUSION

E-resource usage is one of the most important concepts in engineering college libraries now days. Most of the engineering colleges are using e-resources on a large scale. The traditional methods of research, storage, retrieval and communication of scholarly information have changed by the fast growth of information and communication technologies and particularly internet and electronic resources. For storage and retrieval of information, internet has emerged as the most powerful medium. In order to retrieve relevant information, users have to make use of different types of electronic and web resources. The study showed that the use of electronic resources has created a great impact upon users of Shri Madhwa Vadiraja Institute of Technology & Management central library in their research and progress of works. The rapid progress in information & communication technology has facilitated the emergence of new electronic procedures and formats. Information has been embedded in a variety of ways and forms in various kinds of electronic resources. It is clear from the study that the younger generation generally prefers the usage of electronic resources. Many of the respondents are aware of e-resources but have not used online thesis/ dissertations, abstracts/ indices, OPAC, and online databases, which are very relevant for their study and research. So the library should take initiatives to organize orientation programs and user awareness programs in this area.

REFERENCES

[1]. Baldwin V. Collection Development in the New Millennium- Evaluating, Selecting, Annotating, Organizing for Ease of Access, Re-evaluating, and Updating Electronic Resources. *Collection Management* 2000; 25(1/2): 67-97.

[2]. Kumar K. Digital Collection and Development Initiatives in Engineering College Libraries: An Analytical Survey. *International Journal of Knowledge Content Development & Technology* 2014; 4(1): 5-21.

[3]. Maan I. Use of Electronic Information Resources: A study of Adesh Institute of Engineering and Technology, Faridkot, Punjab, India. *SRELS Journal of Information Management* 2012; 49(5): 561-68.

[4]. Mansur S. E-Resources Collection Development in Engineering College Libraries: A Challenge for Knowledge Centre Managers. *International Journal of Digital Library Services* 2012; 2(1): 166-77.

[5]. Mulla KR. Use of Electronic Resources by Faculty Members in HKBK College of Engineering: A Survey. *Library Philosophy & Practice* 2011: 50-56.

[6]. Thanuskodi S. Use of E-resources by the Students and Researchers of Faculty of Arts, Annamalai University. *International Journal of Library Science* 2012; 1(1): 1-7.

[7]. Zia LL. The NSF National Science, Technology, Engineering, and Mathematics Education Digital Library (NSDL) Program. *D-Lib Magazine* 2004; 10(3): 1.