Usage of E-resources by Faculty, Research Scholars and PG Students of Bharathidasan University: A Study

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Abstract

Today E-resources became essence of every intellectual activity of higher education. Realizing the Importance of the E-resources most of the universities in India liberally investing to provide access to these resources to support learning, teaching and research. In this way Bharatidhasan University gained a prominent place by providing huge number of valuable and quality E-resources to the university user community with a more advanced infrastructure. The present paper examines the existence of various E-resources, awareness about E-resources, preference to E-resources, Assess Points of E-resources problems faced while accessing the E-resources and purpose of E-resources usage in Bharatidhasan University by teachers, students and research scholars.

Keywords

E-resources, Online databases, Bibliographic databases, E-magazines, E-books, Bharatidhasan University, UGC-INFONET

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Introduction

Impact of Information and Communication Technology Applications during the past few decades have brought radical and constructive changes in every aspects of human life. Today the novel application of ICT in knowledge generation and communication have brought the users and knowledge more closer, the way information is gathered, stored, organized, accessed, retrieved and consumed are really productive and more user friendly. The application of computers in information processing has brought several products and services to the users and that made libraries more competitive to meet the complex and ever changing needs of user community with most effectively and economically. Universities are the highest learning centres and intellectual hubs of every nation and university libraries are the driving force behind all the intellectual activities of universities. Universities libraries are today moving towards having access to more and more E-resources in their collection as they form major intellectual research output of the world. To support teaching, learning and research activities of the academic community of the university Bharatidhasan University having access to huge number of E-resources and this study is to realize its usage pattern and Impact to further enhance the utilization of E-resources at the University.

Need for the Study

Universities are the higher Intellectual hubs to transmit knowledge and understanding of ideas and values to students and research community through various intellectual means and library is an important agent in this process. University libraries are the heart of every university as it supports every teaching, learning and research activity. Libraries are now moved from traditional resources to more dynamic and flexible E-resources, Bharatidhasan University Library is ahead of many other libraries in this way as it have the access to huge and valuable E-resources. Understanding the constructive impact and cost effectiveness of any new service is the intelligent strategy of every manager to know how well their initiations influenced the targeted group and purpose. With this concern to measure the impact of E-resources the present study has been taken up to know the current state of the use of E-resources and its impact on the teachers, students and research scholars of the Bharatidhasan University to further enhance the Utility of E-resources.

Electronic Resources in Bharathidasan University

The Bharathidasan University Library established in February 1982. From the date of its establishment university library supporting academic and learning activities of university in all the way. Library is always opened and adopted the new products and services with new technology to satisfy the needs of university user community. Realizing the importance of E-resources library have made and making effort to all types of E-resources for the benefit of users. With its continuous effort library have a rich E-resource collection which consists E- Resources like Springer E-Books, EBSCO Database, LISTA Database, Sage Publications, NISCAIR Journals, IAS Journals, UGC INFONET, Science Direct and Web of Science, E-resources in institutional Repository consists BDU Journal, BDU Newsletter, BDU ETD, Question Bank, Photo Gallery, CD/DVD Collections, News Clippings, VC Speeches with these BDU library consists rich open access E-resources which consists DOAJ, IAS, NISCAIR, NDLTD, OAISTER, DLS/IRS, Educational Resources, Theses, NLM Databases.

BDU is a model University in collection and utilization of E-resources to other universities of the nation as it was mentioned in the prominent English News Daily The Hindu (Dec 20, 2010) as "The Bharathidasan University, Tiruchi, with its first ranking in Tamil Nadu and fifth in the country for utilization of e-resources of UGC INFONET, is showing the way for other universities of its ilk to expand the reach of learning resources through the online platform."

Objectives

The main purpose of this study was to explore the awareness pattern of usage awareness, impact and problems of E-resources to further Enhance the Utility and Impact of E-resources in the University. The other objectives of the study were to:

- Examine the awareness about the E-resources
- Analyze the dependency of teachers and research scholars on e-resources
- Determine the perceived impact of the resources on their academic efficiency.
- Assess the benefits of e-resources over conventional sources of information.
- Study the purpose and frequency of using the electronic resources and services available in the library.

- Know the different types of electronic resources and services available in Bharatidhasan University
- Study the impact of electronic resources and services on the academic work of teachers and research scholars and PG Students
- Know the E-resources retrieved for various academic activities.
- To realize the constraints faced by the Users while accessing the E-resources at University

Methodology

The study has been carried out by survey strategy using separate questionnaires for students, research scholar and faculty. Only 160 questionnaires were distributed among the teachers, research scholars and PG students of the university. Out of the total respondents only 142 were returned the questionnaire. Few questionnaires were incomplete and which were supplemented by personal interview. The findings of the present study are thus based purely on the responses made in the questionnaire returned by the respondents and the interviews conducted informally.

Statement of the Problem

The present study has been undertaken to answer what is the impact of E-resources, what are the problems in accessing E-resources and to identify the solutions for the problems identified through study to enhance the usage and impact of E-resources available at Bharatidhasan University.

Limitation of the Study

Every University has the E-resource collection in their libraries but the present study is confined to the use and impact of E-Resources by the users of Bharatidhasan University of Trichy Tamil Nadu.
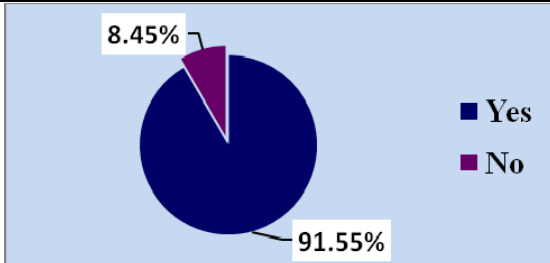
Significance of the Study

So far, University have invested a lot on providing infrastructure for E-resources as of now there are no attempts made to realize the impact and utility of E-resources. In this context we felt it is essential to have a study of usage and impact of E-resources in the university. This study would help to assess the impact of these E-resources on university users and also this study will help improve the collection and utility of E-resources.

Analysis and Discussion

Table: 1 Awareness of E-Resources

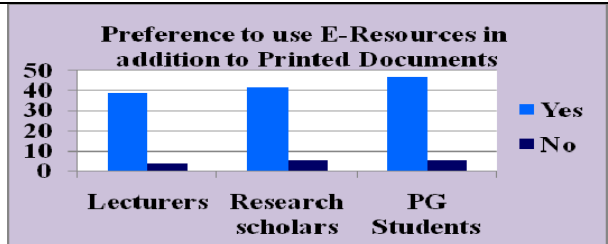| Respondents	Total	Yes	No
Faculties	43	43	-
Research scholars	47	42	5
PG Students	52	45	7
Total	142	130(91.55%)	12(8.45%)

Above table shows the level of awareness about E-resources among the faculties, research scholar and the PG students. As we discussed in the methodology we have distributed 160 questionnaires we received 142 filled in questionnaires which is 88.75 % of the totally distributed questionnaire. Out of these 142 respondents 130 which are 91.55% of the total respondents participated are aware of E-resources and 12 members which are 8.45% of the respondents are not aware of E-Resources. It is good to know that more than 91 percentage of respondents are aware of E-resource but there is also a concern about the people who are not aware of E-resources because they should not miss the advantages of E-resources so library should try to bring them with the people who are using E-resources.

Table: 2 Preference to use E-Resources in addition to Printed Documents

Respondents	Total	Yes	No
Faculties	43	39	4
Research scholars	47	42	5
PG Students	52	47	5
Total	142	128(90.14%)	14(9.86%)

Introduction of Information and Communication technology opened the new ways to communicate information and knowledge for the convenience of user community. That can be realized by above table 2. Table 2 shows the interest of users in E-resource in addition to print journals. Flexibility, speed of access way of distribution and utilization by multiple users of E-resources has attracted most of the user community. Out of 142 respondents 128 which are 90.14 % given preference for E-resources in addition to print resources which clearly indicates the strong need for E-resources with existing print resources.

Table: 3 Purpose of Accessing E-Resources

S.No	Purpose to read and search E-Resources	Lecturers	Research scholars	PG Students	Total
1	For completion of Assignments and Seminar presentations	-	5	6	11(7.75%)
2	For Research purpose (Thesis/Dissertations/Project works)	18	21	21	60(42.25%)
3	To find relevant information in the area of your specialization	7	9	8	24(16.90%)
4	For Career Development	9	3	4	16(11.27%)
5	To keep yourself up-to-date on the		6	6	12(8.45%)

	subject				
6	For Routine study	4	2	2	8(5.63%)
7	Any Others	5	1	5	11(7.75%)
	Total	43	47	52	142(100%)

University is a hub various intellectual activities E-resources are the intellectual infrastructure to support these intellectual activities in the university. There are different user communities in the university set up they use the E-resources for different reasons. The table 3 shows the purpose of accessing E-resources by faculties, research scholars and the PG students. Out of 142 respondents 60 respondents accessing E-.

resource for research purpose 24 and 16 respondents accessing for finding information in their concerned area and for career development programmes respectively. Also it shown that very less number of that is 8 respondents accessing the E-resources for routine study which need to be improved to improve the quality of routine study

Table: 4 Types of E-Resources most frequently used

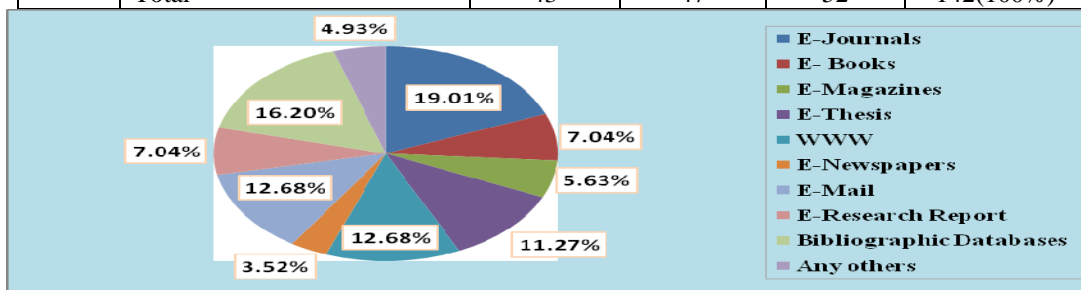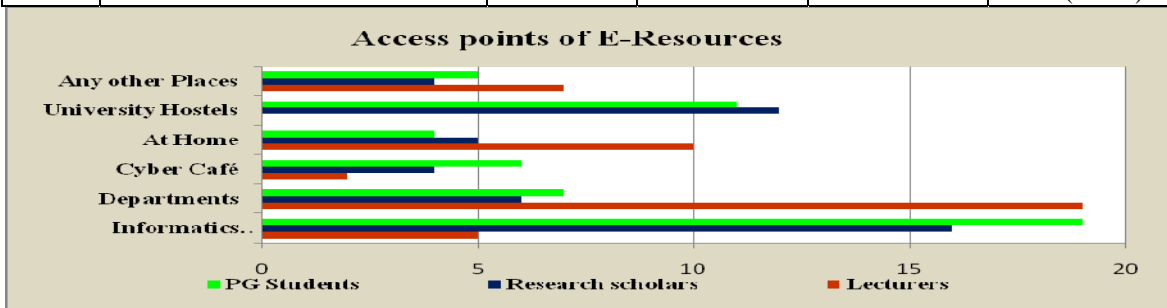| S.No	Types of E-Resources	Lecturers	Research scholars	PG Students	Total
1	E-Journals	9	13	5	27(19.01%)
2	E- Books	4	2	4	10(7.04%)
3	E-Magazines	-	2	6	8(5.63%)
4	E-Thesis	5	9	2	16(11.27%)
5	WWW	6	5	7	18(12.68%)
6	E-Newspapers	-	1	4	5(3.52%)
7	E-Mail	4	3	11	18(12.68%)
8	E-Research Report	2	4	4	10(7.04%)
9	Bibliographic Databases	12	6	5	23(16.20%)
10	Any others	1	2	4	7(4.93%)
	Total	43	47	52	142(100%)

Table 4 reflects the types of E-resources most frequently used by the respondents. E-journals dominates the list in frequency of usage followed by Bibliographic databases, World Wide Web, E-mail, E-thesis, E-research report, E-books and E-magazines. This indicates that majority of the people are focused much of on E-journals and bibliographic databases for their relevant information. Though other source are used there is a need to promote the utilization of other E-resources as they are equally important and they are easily accessible than Journals and bibliographic databases but there should be proper orientation towards fruitful use of all these resources.

Table: 5 Access points of E-Resources

S.No	Access Points	Lecturers	Research scholars	PG Students	Total
1	Informatics Centre (Computer	5	16	19	40(28.17%)

	Lab)				
2	Departments	19	6	7	32(22.54%)
3	Cyber Café	2	4	6	12(8.45%)
4	At Home	10	5	4	19(13.37%)
5	University Hostels	-	12	11	23(16.20%)
6	Any other Places	7	4	5	16(11.27%)
	Total	43	47	52	142(100%)

Above table replicates the Access points from where the respondents are accessing the E-resources. Information Centre, departments, university hostels, home and cyber café are the major accessing points for E-resources. Information centre dominates the list as more than 40 respondents of 142 respondents accessing through information centres followed by departments and university hostels. Majority of the students and research scholars are accessing the E-resources at university information centre and university hostels. The faculty members are accessing from the departments and at home as they are provided with well facilities at department and at home. It is found that though the internet facility is provided at the hostels of Bharatidhasan university majority of the scholar and students are accessing much from information centre it demands the promotion of constructive use of internet at hostels.

Table: 6 Factors Influence the Usage of Electronic Resources for Study & Research

S.No	Factors	Lecturers	Research scholars	PG Students	Total
1	Easier access to information	-	6	8	14(9.86%)
2	Improve professional competence	14	11	5	30(21.13%)
3	Access to a wider range of information	7	8	16	31(21.83%)
4	Provides instant access to current up-to-date information	9	4	7	20(14.08%)
5	Easier access to information than printed equivalent	3	2	4	9(6.34%)
6	Expedited the research process	9	14	4	27(19.01%)
7	Any others	1	2	8	11(7.75%)
	Total	43	47	52	142(100%)

In today's scholarly and intellectual world many factors are influencing faculty, research scholars and the students to use dynamic E-resources. The above table 6 attributes the factors influencing the users to use E-resources for their teaching, learning and research activities. Easy access to information, improvements in competency, expedited research project and access to wider range of information are the major factors which are forcing the users to go for the E-resources. Out all factors Access to wider range of information dominates the list followed by to improve the professional competency and expedited research process.

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Table: 7 Frequency of Use of e-resources

S.No	Frequency	Lecturers	Research scholars	PG Students	Total
1	Daily	24	29	9	62(43.66%)
2	2-3 times in a week	16	13	21	50(35.21%)
3	Occasionally	3	4	12	19(13.38%)
4	Once a week	-	1	8	9(6.34%)
5	2-3 times a month	-	-	2	2(1.41%)
	Total	43	47	52	142(100%)

Table 7 shows the frequency of usage of E-resources. As E-resources became common source for every teaching, learning and research activities in universities frequency of is generally more. Out of 142 respondents 62 respondents access E-resources every day with the greater share of research scholar. 50 respondents' access E-resources at least 2-3 time a week. 19 members access the E-resources occasionally. Daily and 2-3 times a week together consists of 78.87 % of total respondents which is a positive sign of utility of E-resources. PG students are behind of other two categories in frequency of access so there is a need to promote the use of E-resource by the PG students.

Table: 8 Employment of Search Strategy by the Respondents

S.No	Strategy	Lecturers	Research scholars	PG Students	Total
1	Keywords	5	14	19	38
2	Field Search	12	10	8	30
3	Phrase	9	8	4	21
4	Boolean Operator	6	5	11	22
5	Wildcard	2	3	4	9
6	Truncation	9	7	6	22
	Total	43	47	52	142(100%)

Table 8 shows the search strategy employed in searching the E-resources. Key word search, field search, phrase search, search with Boolean operators, wild cards and truncations are commonly known search strategies. Key word search dominates the list followed by field and phrase search as they are very easy and simple to use most of the respondents preferring this strategy and it shows little hesitation in searching with Boolean operators, truncation and wild cards. But in reality these Boolean search, truncation search and search with wild card have more precision than other searches as they retrieve most relevant records without wasting much time. To improve the efficiency of search and accuracy there is a need of orientation to educate the users to use Boolean search, truncation search and search with wild card than simple field and keyword search

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Table: 9 most preferred format for Reading Full-Text Articles

S.No	Formats	Lecturers	Research scholars	PG Students	Total
1	PDF	27	22	18	67(47.18%)
2	HTML	4	6	5	15(10.57%)
3	Hard copy	12	19	29	60(42.25%)
	Total	43	47	52	142(100%)

The above table 9 reflects the formats which users want to refer for reading full text articles. PDF and HTML are the most common E-resource used to present the full text articles with this these are substituted with hard copies as many E-Journals are coming with hard copies. PDF format dominates the list as 47.18 % of the total respondents preferred this format to read the full text articles it is the best format to download, organize and study followed by hard copies which are preferred by 42.25 % of the total respondents. With this 10.57 % of the total respondents expressed their interest in HTML format of full text articles.

Table: 10 Key Constraints that Prevent Effective Use of e-resources

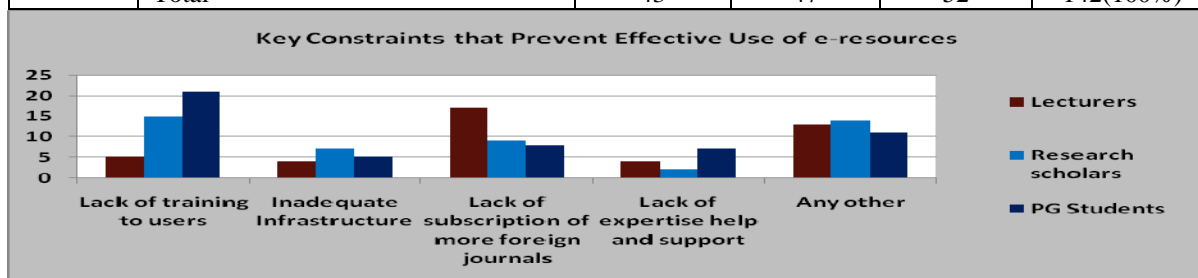| S.No	Key Constraints	Lecturers	Research scholars	PG Students	Total
1	Lack of training to users	5	15	21	41(28.87%)
2	Inadequate Infrastructure	4	7	5	16(11.27%)
3	Lack of subscription of more foreign journals	17	9	8	34(23.94%)
4	Lack of expertise help and support	4	2	7	13(9.15%)
5	Any other	13	14	11	38(26.76%)
	Total	43	47	52	142(100%)

Table 10 shows the key constraints faced by the users in effective use of E-resources. There are many constraints in the way of accessing the E-resources effectively. Among all constraints lack of training to the users stands ahead of all other constraints, followed by the poor of subscription to foreign journals and inadequate infrastructure. Training is the basic requirement to make the usage of E-resource effectively. Here majority of users facing problems due to inadequate training and also users are facing the problems of inadequacy in foreign journal subscription which are must to go with global trends in learning, research and teaching. So university needs to take steps towards training the users and subscribing more numbers of foreign journals to attract more number of users towards E-resources

Findings and Suggestions

With the help of above data analysis and discussion we can determine some important findings and the suggestions which are as follows:

E-resources playing an important role in universities' teaching and research activities as most of the teachers and research scholars are using the facility and there is a need of promoting usage by the PG students.

Teachers and research guides are doing well in creating the awareness about the E-resources and there is a need of further promotion by the library.

Students and research scholars are facing the problems of limited numbers of terminals while accessing the journals through this programme so university need to increase the number of terminals to further enhance the usage.

Users are expecting the print copies of the E-journals need to think over this issue and wherever possible it can provide the print journals with existing facilities.

Major problem with faculty is slow internet connection so this can be addressed by university by increasing the bandwidth of the internet connectivity.

Major portion of the students and research scholars expecting more orientation and training programmes for better usage of the resources so university library need to take some more initiations to enhance the utility by orientation and training programmes.

Conclusion

Today with the introduction of information and communication technology the learning resource environment has changed a lot. Faculty, research scholars and students in university moving towards flexible information resources in this direction E-resources opened a new world for user community. Realizing the needs of users Bharatidhasan University took many initiations to enrich its E-resource collection and now it stands ahead of every university in Tamil Nadu in terms of E-resource collection and usage. E-resources have made productive impact on the university teaching, learning and student community which can be understood by many studies conducted in this direction including this present study. Present study shown the better impact and usage of E-resources in Bharatidhasan University and it found further expectations from user community which can be considered by the executing authority in further enhancement process.

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