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USE OF E- RESOURCES AND ITS IMPACT: A CASE STUDY OF KPR INSTITUTE OF ENGINEERING AND TECHNOLOGY, COIMBATORE

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Abstract

Information Technology is essential to the economic and social development of the region. The widespread use of IT, the tools and techniques for gathering, manipulating, analyzing and disseminating information which was made possible because of improvements in computer and telecommunication technology. This paper sets out to investigate the use of e-resources by students at KPR Institute of Engineering and technology in Coimbatore. The purpose of the study is to determine the knowledge and use of e-resources; frequency of using E-resources; purpose of using e-resources; frequency of use of various types of E-resources; opinion on impact of electronic resources on academic careers; suggestions for make easier to use of E-resources and satisfaction about the E – resources provided by KPR Institute of Engineering and technology.

Keywords*: IT, Digital library, E – Resources, Internet*

Introduction

Electronic resources are the electronic representation of information. There are available in various forms like e-books, digital libraries, online journal magazine, e-learning tutors and on line test. Because of the effective presentation with multimedia tools, these e-resources have become the source of information. Electronic resources delivers the collection of information as full text databases, e-journals, image collections, multimedia in the form of CD, tape, internet, web technology etc. E-resources may include e-journals, e-discussions, e-news, data archives, e-mail online chatting, etc can be called as an e-resources. Electronic information source are a wide range of products going from electronic periodicals to CD-ROMs, from mailing list to databases, all of them having a common feature of being used and some time modified by a computer.

Objectives of the Study

The main objective of the present study is as follows:

1. To find out the awareness of E – resources by the students of KPR Institute of Engineering and Technology, Coimbatore.
2. To study the frequency and purpose of e-resources
3. To study the students' opinion on impact of electronic resources.
4. To study the level of satisfaction of users about availability and coverage of e-resources.
5. To offer suggestions to make easier to use of E-resources.
6. To study the satisfaction level of users about infrastructure to support the access of e-resources.

Methodology

The present study is a survey method using a questionnaire for collecting primary data from students. A total number of 200 Questionnaires were randomly distributed to the students of KPR Institute of Engineering and technology in Coimbatore, Tamil nadu, India and 192 filled questionnaires were received back by the researchers. However, 5 questionnaires were rejected due to incompleteness of answers. Hence selected 187 questionnaires are used for data analysis and interpretation. The geographical area of this study is confined to KPR Institute of Engineering and technology in Coimbatore. Secondary data are collected from various books, journals, theses. Primary data have been collected on February 2016.

Profile of the Study Area

KPR Institute of Engineering and Technology (KPRIET) is a new generation engineering college established in the year 2009 by KPR Charities. KPRIET approved by AICTE, New Delhi and affiliated to Anna University, Chennai, is dedicated for an unparalleled learning experience. This commitment is best reflected in its vision to become a globally recognized institute of engineering and technology by the year 2020. KPRIET is located on sprawling150 acres of lush green campus with 5.7 lakh sq ft state-of-the-art buildings in Coimbatore, Tamilnadu, India. Students and staff at KPRIET take great pride in the main features of the institute such as world-class infrastructure, top-flight faculty, well stocked library, high pass percentage, excellent placement record, unique student projects etc. This commitment to excellence is supported by a strong team of experienced professionals. In short, KPRIET stands tall as one of the best destinations for world class education.

Data Analysis and Interpretation

Table 1: Gender and age – wise distribution of respondents

Particulars		No. of Respondents	Percentage
Gender	Male	123	65.8
	Female	64	34.2
Total		**187**	**100**
Age	Below 20	67	35.8
	21-25	48	25.7
	26-30	31	16.6
	31-35	22	11.8
	36-40	10	5.3
	41 and above	9	4.8
Total		**187**	**100**

Source: Primary data

Table 1 presents the gender and age-wise distribution of respondents. In this study, 123 (65.8%) respondents are male whereas 64 (34.2%) of the respondents are female. Hence

more than three fifths of the respondents belong to the category of male who use the E-resources.

Among the overall 187 respondents, 67 (35.8%) respondents belong to the category of age below 20 and it is followed by, 48 (25.7%) respondents between 21-25, 31 (16.6%) respondents between 26-30, 22 (11.8%) respondents between 31-35, 10 (5.3%) respondents between 36 – 40 and 9 (4.8 %) respondents 41 and above age group . Hence more than one third of the respondents belong to the category of age group below 20.

Table 2: Frequency of using E-Resources by course-wise students

S. No	Course	Frequency (%)					Total N
		Daily	Once in a week	Twice in a week	Monthly	Rarely	
1.	BE	48 (36.1)	33 (24.8)	20 (15)	20 (15)	12 (9)	133
2.	ME	23 (42.6)	11 (20.4)	9 (16.7)	6 (11.1)	5 (9.3)	54
Total		71	44	29	26	17	187

Source: Primary data

It is inferred from table 2 that among the BE respondents, a majority of 48 (36.1%) respondents use the E-Resources daily and it is followed by, 33 (24.8%) of them use once in a week, 20 (15%) twice in a weak and monthly, 12 (9%) rarely use the E-resources. Among the ME respondents, a majority of 23 (42.6%) respondents use the E-Resources daily and it is followed by, 11 (20.4%) once in a week, 9 (16.7%) twice in a weak, 6 (11.1%) monthly and 5 (9.3%) rarely. It is concluded that more than one third of the respondents use E-Resources daily.

Table 3: Purpose of using E-Resources

S. No	Purpose	No. of Respondents	Percentage
1.	Study	86	46
2.	Research Work	92	49.2
3.	Paper writing for publication	43	23
4.	Seminar / Workshop	27	14.4
5.	Presentation	14	7.5
6.	Others	9	4.8
Total= 187			

Source: Primary data - Multiple Response

It is evident from table 3 that among the overall respondents, a majority of 92 (49.2%) respondents use the E – resources for research work. This is followed by 86 (46%) respondents for study, 43 (23%) paper writing for publication, 27 (14.4%) seminar / workshop and 14 (7.5%) presentation. Besides cited above, there are other purposes also (4.8%). Hence nearly half of the respondents use E – resources for research work.

Table 4: Frequency of use of various types of E-resources

S.No	Name of the E-resources	Frequency (%)			
		A	B	C	D
1	E-Mail	111 (59.4)	51 (27.3)	19 (10.2)	6 (3.2)
2	Search Engines	107 (57.2)	64 (34.2)	11 (5.9)	5 (2.7)
3	E-Journal (IEEE, ACM. Etc.,)	128 (68.4)	43 (23)	9 (4.8)	7 (3.7)
4	E-books	154 (82.4)	21 (11.2)	7 (3.7)	5 (2.7)
5	Bulletin Board Services	146 (78.1)	27 (14.4)	8 (4.3)	6 (3.2)
6	E-News Paper	163 (87.2)	12 (6.4)	7 (3.7)	5 (2.7)
7	Database Service	134 (71.7)	36 (19.3)	11 (5.9)	6 (3.2)
8	Bibliographic databases	152 (81.3)	18 (9.6)	12 (6.4)	5 (2.7)
9	CD-ROM databases	138 (73.8)	32 (17.1)	11 (5.9)	6 (3.2)
10	NPTEL	161 (86.1)	13 (7)	7 (3.7)	6 (3.2)
11	DELNET	165 (88.2)	10 (5.3)	5 (2.7)	7 (3.7)

Source: Primary data

A- Most often B- Often C- Sometimes D- Rarely

Table 4 presents the frequency of use of various types of E – resources. It is getting opinion from the overall respondents regarding the use of E – mail, a majority of 111 (59.4%) respondents use E –mail most often followed by, often (27.3%), sometimes (10.2%) and rarely (3.2%) respectively. It is getting opinion from the overall respondents regarding the use of search engine, a majority of 107 (57.2%) respondents use search engine most often followed by, often (34.2%), sometimes (5.9%) and rarely (2.7%) respectively. It is getting opinion from the overall respondents regarding the use of the E-Journal (IEEE, ACM. Etc.,), a majority of 128 (68.4%) respondents use E-Journal (IEEE, ACM. Etc.,) most often followed by, often (23%), sometimes (4.8%) and rarely (3.7%) respectively. It is getting opinion from the overall respondents regarding the use of E-books, a majority of 154 (82.4%) respondents use E-books most often followed by, often (11.2%), sometimes (3.7%) and rarely (2.7%) respectively. It is getting opinion from the overall respondents regarding the use of Bulletin Board Services, a majority of 146 (78.1%) respondents use Bulletin Board Services most often followed by, often (14.4%) , sometimes (4.3%) and rarely (3.2%) respectively. It is getting opinion from the overall respondents regarding the use of E-News Paper, a majority of 163 (87.2%) respondents use E-News Paper most often followed by, often (6.4%) , sometimes (3.7%) and rarely (2.7%) respectively. It is getting opinion from the overall respondents regarding the use of Database Service, a majority of 134 (71.7%) respondents use Database Service most often followed by, often (19.3%) , sometimes (5.9%) and rarely (3.2%) respectively. It is getting opinion from the overall respondents regarding the use of Bibliographic databases , a majority of 152 (81.3%) respondents use Bibliographic databases most often followed by, often (9.6%), sometimes (6.4%) and rarely (2.7%) respectively. It is getting opinion from the overall respondents regarding the use of CD-ROM

databases, a majority of 138 (73.8%) respondents use CD-ROM databases most often followed by, often (17.1%) , sometimes (5.9%) and rarely (3.2%) respectively. It is getting opinion from the overall respondents regarding the use of NPTEL a majority of 161 (86.1%) respondents use NPTEL most often followed by, often (7%), sometimes (3.7%) and rarely (3.2%) respectively. It is getting opinion from the overall respondents regarding the use of DELNET, a majority of 165 (88.2%) respondents use DELNET most often followed by, often (5.3%), sometimes (2.7%) and rarely (3.7%) respectively.

Table 5: Opinion on Impact of Electronic Resources on Academic Career

S.No.	Impact	No. of Respondents	Percentage
1.	Expedites the research/project process	134	71.7
2.	Expedites the teaching process	105	56.1
3.	Access to a current up-to-date information	153	81.8
4.	Easier access to information	161	86.1
5.	Faster access to information	113	60.4
6.	Access to a wider range of information	139	74.3
Total N= 187			

Source: Primary data - Multiple Response

Table 5 describes the opinion on impact of electronic resources on academic career. In this study, a majority of 161 (86.1%) of respondents' opinion is easier access to information. This is followed by 153 (81.8%) respondents' opinion is access to a current up-to-date information, 139 (74.3%) access to a wider range of information, 134 (71.7%) expedites the research/project process, 113 (60.4%) faster access to information and 105 (56.1%) respondents expedites the teaching process. Therefore (86.1%) more than four fifth of the respondents' opinion is easier access to information of electronic resources on academic career.

Table 6: Level of Satisfaction with Internet for Research Purpose

S. No.	Satisfaction	No. of Respondents	Percentage
1.	Most helpful	111	59.4
2.	Helpful	58	31
3.	No comments	11	5.9
4.	Not helpful	7	3.7
Total		187	100

Source: Primary data

Table 6 observes that a majority of 111 (59.4%) respondents report that the level of satisfaction with internet for research purpose is most helpful. This is followed by 58 (31%) respondents report that it is helpful, 11 (5.9%) have not expressed any comments and 7 (3.7%) respondents report that it is not helpful. Hence three fifth of the respondents' level of Satisfaction with internet for research purpose is most helpful.

Table 7: Suggestions for make easier to use of E- resources

S. No.	Suggestion	No. of Respondents	Percentage
1.	Provide web- based guide tour	149	79.7
2.	Introduce written instruction for e-resources	132	70.6
3.	Frequent circulars and notices on what is newly available	104	55.6
4.	Others	33	17.7
Total N = 187			

Source: Primary data - Multiple Response

Table 7 describes the suggestions for make easier to use of E- resources by the respondents. Among the overall 187 respondents, a majority of 149 (79.7%) respondents suggest that providing web- based guide tour will make it easier to use of E-resources. This is followed by 132 (70.6%) respondents introduce written instruction for e- resources, 104 (55.6%) respondents frequent circulars and notices on what is newly available. Besides cited above, there are some other suggestions also (17.7%). Hence (79.7%) more than three fifth of the respondents suggest that the provide web- based guide tour for make easier to use E-resources.

Table 8: Chi-square analysis on satisfaction about the E – resources provided by KPR Institute of Engineering and Technology

S.No.	Gender	Opinion (%)					Total N
		Very good	Good	Satisfactory	No comments	Poor	
1.	Male	49 (39.8)	38 (30.9)	21 (17.1)	9 (7.3)	6 (4.9)	123
2.	Female	23 (35.9)	15 (23.4)	11 (17.2)	8 (12.5)	7 (10.9)	64
Total		**72**	**53**	**32**	**17**	**13**	**187**
Source: Primary data - Chi-square value - 4.46 – df - 4							

Table 8 shows the Chi-square analysis on satisfaction about the gender–wise respondents regarding the E – resources provided by KPR Institute of Engineering and technology. Among the male respondents, a majority of 49 (39.8%) respondents' satisfaction level is very good and it is followed by, 38 (30.9%) good, 21 (17.1%) satisfactory, 9 (7.3%) have not expressed any comments and 6 (4.9%) poor. Among the Female respondents, a majority of 23 (35.9%) respondents' satisfaction level is very good and it is followed by, 15 (23.4%) good, 11 (17.2%) satisfactory, 8 (12.5%) have not expressed any comments and 7 (10.9%) poor. It is concluded that the two fifth of the male and female respondents' satisfaction level is very good.

Testing of Hypothesis

Ho: Null Hypothesis

There is no association between the male and female respondents and their opinion about the E- resources provided by KPR institute of Engineering and Technology.

H_1: Alternative Hypothesis

There is an association between the male and female respondents and their satisfaction about the E- resources provided by KPR institute of Engineering and Technology.

Chi-Square Summary Result

Chi-Square Calculated Value	Degrees of Freedom	Chi-Square Table Value @ 5%
4.46	**4**	**9.49**
Source: Computed data		

The table value of chi-square for 4 degrees of freedom at 5% level of significance is 9.49. The calculated value of chi-square is lower than this table value and hence the Null hypothesis is accepted and hence Alternative hypothesis is rejected. It is concluded that there is no association between the male and female respondents and their satisfaction about the E- resources provided by KPR Institute of Engineering and Technology.

Findings

1. More than three fifths of the respondents belong to the category of Male.
2. More than one third of the respondents belong to the category of age group below 20.
3. 37.97 % of the BE and ME students use the E-Resources daily.
4. Nearly half of the respondents use E – resources for Research Work.
5. 86.1% of the respondents' opinion is easier access to information of electronic resources on academic careers.
6. Three fifth of the respondents report that the level of Satisfaction with internet for research purpose is most helpful.
7. 79.7% of the respondents suggest that the providing web- based guide tour to make easy to use E- resources.
8. Two fifth of the male and female respondents' satisfaction is very good with E-resources provided by KPR Institute of Engineering and Technology.
9. There is no association between the male and female respondents and their satisfaction about the E- resources provided by KPR Institute of Engineering and Technology.

Conclusion

As Electronic resources are relatively new on the library scene, the identification of the criteria to be used is the logical initial step in confronting the challenges posed by evaluation of these resources. Since electronic resources content may be viewed as part of a library's collection, evaluation of electronic resources content is a logical extension of collection evaluation. The study proves that a majority of the students of the KPR Institute of Engineering and Technology, Coimbatore use the E-resources for their betterment of

Academic activities. The study also proves that there is no disparity between the male and female students regarding the satisfaction of using E-resources.

References

1. Ahmed (2013). Use of electronic resources by the faculty members in diverse public universities in Bangladesh, *The Electronic Library*, Vol. 31 No. 3, p. 290-312.
2. Alexsis Leon and Mathews Leon (1999). Fundamentals of Information Technology, UBS publishers' distribution Ltd, p21.1, 21.17.
3. Bansal (2004). Textbook of Information Technology, APH Publishing corporation, p211- 215.
4. Islam & Habiba, (2015). Using Pattern of Internet and E-resources by the Students and Faculty Members of a Private University in Bangladesh. *American Journal of Educational Research, 3*(5), p. 541-546.
5. Paul Pandian, M and Ashok Jambhekar (2001). Internet for libraries and information centres, Tata McGraw-Hill publishing company Ltd, p. 13-17.
6. http://www.kpriet.ac.in