

# Use of Electronic Resources by the Faculty Members in Engineering College Libraries with reference to R.M.K. Group of Institutions, Thiruvallur District, Tamil Nadu. A Survey

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**Abstract** - This paper aims to assess and evaluate the use of e-resources by the faculty members Engineering College Libraries with special reference to R.M.K. Group of Institutions, with a view to examine the exposure of faculty members to e-resources. Besides, it aims to highlight the problems encountered by the users and suggests some remedial measures for its improvement. The authors investigate the use of e-resources by the faculty members of R.M.K. Group of Institutions, through a survey based on a structured questionnaire. Various statistical methods have been used for data analysis. The study confirmed that faculty members are aware of the e-resources and various types of e-resources, e-database, and e-journals. It is found that there are 142 (95.94%) faculty members who use IEEE (ASPP) e-journals, followed by 138 (93.24%) faculties use Science Direct, 122 (82.43%) faculties use McGraw Hill's Access Engineering, 117 (79.05%) faculty members use Springer e-journals, 100 (67.56%) faculties use J-Gate, 82 (55.40%) faculty members use ASME online packages, from the R.M.K. Group of institution Libraries and also found that majority (94.59 %) of the respondents use electronic resources for browsing journals followed by 92.56 % who use the e-resources for finding technical and research reports from the Libraries.

**Key Words:** Internet, Electronic resources, faculty members, online packages, Academic Libraries.

## 1. INTRODUCTION

The rapid advancement of information and communication technology (ICT) has brought a revolutionary change in the information scenario giving rise to a number of options to handle varied information sources conveniently and effortlessly as a result of which e-resources have become the most sought after modern library's reserves in satisfying varied needs of students, teachers, and researchers with minimum risk and time. To know the effectiveness of various resources, services and facilities provided to the faculties of R.M.K. Group of institution libraries a well structured questionnaire is designed keeping in mind the objectives of the study. Out of 154 questionnaires distributed to the staff researchers who are pursuing research in R.M.K. Group of institutions under study, 148 filled questionnaires were received back with the response rate of 99.97%. The filled in questionnaires were

analyzed, tabulated and interpreted so as to derive reasonable findings.

## 2. OBJECTIVES OF THE STUDY

The objectives of the study are:

- To assess the contemporary use of electronic information resources by the faculty members in R.M.K. Group of institutions.
- To study the use of different types of electronic resources by faculty members.
- To study the purpose of use of electronic resources by faculty members.
- To identify and analyse the specific factors that promote or hinder the use of electronic resources.
- To suggest measures for improving the existing library system and services of R.M.K. Group of Engineering college Libraries, particularly in promoting the use of e-resources by the faculty members.

## 3. SCOPE OF THE STUDY

This study is an attempt to ascertain the use of the online resources by the faculty members in the engineering colleges under R.M.K. Group of Institutions, Thiruvallur District, Tamil Nadu. The scope of study is confined to following three colleges, namely R.M.K. Engineering College, R.M.D. Engineering College and R.M.K. College of Engineering and Technology. The data was personally collected from the faculty member of R.M.K. Group of institutions.

**Table 1: Distribution of Questionnaire**

Name of the Colleges	Number of questionnaire distributed	Number of Respondents		Total Percentage
		Male	Female	
R.M.K. Engineering College	58	24 (16.21%)	31 (20.94%)	37.15%
R.M.D. Engineering College	50	20 (13.51%)	28 (18.91%)	32.42%
R.M.K. College of Engineering and Technology	46	28 (18.92%)	17 (11.48%)	30.40%
Total	154	72 (48.64%)	76 (51.33%)	99.97%

Table 1 indicates that a total 148 questionnaires responded out of 154 and consisted of 55 faculty members from R.M.K. Engineering College, 48 from R.M.D. Engineering College, 45 from R.M.K. College of Engineering and Technology. Majority of respondents 76 (51.33%) are female and remaining 72 (48.64%) of them are male respondents. Whereas gender and college wise where it is found that female are more represented from R.M.K. Engineering college and R.M.D. Engineering colleges and male are more represented from R.M.K. College of Engineering and Technology.

#### 4. REVIEW OF LITERATURE

Several studies on usage of e-resources have been carried out by students, research scholars, and teachers of various institutions all over the world. Babu, Sarada and Ramaiah<sup>1</sup> investigate the use of Internet resources by the academic community of the Sri Venkateswara University (SVU), Tirupati and highlighted various problems and issues involved in handling digital library and give few suggestions for improvement of library services. Sinha and Sinha<sup>2</sup> evaluate the usage pattern of electronic resources made available in the Assam University Library under the UGC-INFONET Digital Library Consortium and provide few suggestions and recommendations for the improving the access to Internet, e-journals and e-resources. Appleton<sup>3</sup> in his study, perceptions on electronic library resources in further education, has expressed personal experiences on

the use of e-resources and their impact on teaching and learning activity. Swain and Panda<sup>4</sup> in their study, 'Use of e-services by faculty members of business schools in a state of India: A study', have discussed on quantitative and qualitative use of E- resources by the faculty members of business schools of Orissa. Mounissamy and Swaroop Rani<sup>5</sup> in their study, 'Evaluation of usage and usability of electronic journals', have identified the usage and usability of e-journals by the users of the NIT, Tiruchirapalli.

#### 5. METHODOLOGY

This study is based on survey (questionnaire) method. A structured questionnaire was designed to collect data from the faculty members of R.M.K. Group of institutions, three engineering colleges, Thiruvallur District, Tamilnadu, keeping in mind the basic objectives of the study. The data was personally collected from the faculty members. 154 questionnaires were disseminated to the users, selected suitably from the three engineering college libraries under study. Therefore, a total of 148 questionnaires were returned. Then the collected data tabulated and analyzed accordingly. The results of the findings were accessible in tables using percentage.

## 6.ANALYSIS AND INTERPRETATION

**Table 2: Frequency of Internet use**

Frequency of Internet use	Department							Total
	CSE	EEE	ECE	E&I	IT	MECH.	S&H	
Daily	6 (20%)	1 (5.26%)	3 (12.50%)	0 (0.00%)	1 (6.66%)	2 (9.52%)	6 (17.14%)	19 (12.83%)
Twice a Week	11 (36.66%)	11 (57.89%)	10 (41.66%)	2 (50.00%)	8 (53.33%)	12 (63.15%)	18 (51.42%)	72 (48.64%)
Once in a Week	12 (40%)	5 (26.31%)	11 (45.83%)	2 (50.00%)	6 (40.00%)	7 (33.33%)	9 (25.71%)	52 (35.13%)
Fortnightly	1 (3.33%)	2 (10.52%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	2 (5.71%)	5 (3.37%)
Once in a Month	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Occasionally	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Total	30 (100%)	19 (100%)	24 (100%)	4 (100%)	15 (100%)	21 (100%)	35 (100%)	148 (100%)

Table 2 shows that the frequency of internet use by the respondents for accessing e-resources, it clearly reveals that most of the faculty member 72 out of 148 (48.64%) were

using the internet twice a week, 52 (35.13%) using the internet once in a week, 19 (12.83%) respondents use daily and 5 (3.37%) visit fortnightly.

**Table 3 : User Opinion about Convenience of Working Hours**

Convenience of Working Hours	Department							TOTAL
	CSE	EEE	ECE	E&I	IT	MECH.	S&H	
Convenient	29 (96.66%)	17 (89.47%)	23 (95.83%)	4 (100%)	13 (86.66%)	20 (95.23%)	32 (91.42%)	138 (93.24%)
Not Convenient	1 (3.33%)	2 (10.52%)	1 (4.16%)	0 (0.0%)	2 (13.33%)	1 (4.76%)	3 (8.57%)	10 (6.76%)
Total	30 (100%)	19 (100%)	24 (100%)	4 (100%)	15 (100%)	21 (100%)	35 (100%)	148 (100%)

The table 3 shows that the data relating to user opinion about convenience of working hours. Majority of the researchers 138 (93.24%) opined that the working hours of their respective libraries is convenient and only 10 (6.76%) faculty member.

opined not convenient. where it is found that the positive response about convenience of working hours were more represented in CSE, ECE, Mechanical and S&H departments.

**Table 4: User opinion about Effectiveness in Accessing Information Resources Library**

Effectiveness in Accessing E-Information Resources Library	Very effective	Effective	Some what effective	Ineffective	Very ineffective	Total
E-books	54 (36.48%)	68 (45.94%)	10 (6.75%)	0 (0.00%)	0 (0.00%)	132 (89.17%)
E-Journals	107 (72.29%)	34 (22.97%)	5 (3.37%)	0 (0.00%)	0 (0.00%)	146 (98.63%)
Abstracts & Indexing resources	36 (24.32%)	50 (33.78%)	10 (6.75%)	4 (2.70%)	0 (0.00%)	100 (67.55%)
Projects	45 (30.40%)	48 (32.43%)	12 (8.10%)	0 (0.00%)	0 (0.00%)	105 (70.93%)
CD ROM databases	36 (24.32%)	40 (27.02%)	18 (12.16%)	5 (3.37%)	0 (0.00%)	99 (66.87%)
Conference/ workshop/seminars proceedings	33 (22.29%)	44 (29.72%)	12 (8.10%)	2 (1.35%)	0 (0.00%)	91 (61.46%)

Table 5 shows that the data relating to faculty members opinion about effectiveness with regard to the accessibility of effectiveness in accessing information resources in their respective engineering college libraries. There are 148 (96.10%) respondents opined that access to E-Journals are 'very effective', followed by 107 (72.29%) 'effective', followed by 34 (22.97%) 'somewhat effective', followed by 5 (3.37%) respondents. opined that access to

E-Books is effective', followed by 68 (45.94%) 'very effective', followed by 51 (36.48%) 'somewhat effective', followed by 10 (6.75%) respondents. opined that access to Conference/ workshop/seminars proceedings is 'effective', followed by 44 (29.72%) 'very effective', followed by 33 (22.29%) 'somewhat effective', followed by 12 (8.10%) 'ineffective followed by 2 (1.35%) respondents.

**Table 5: Type of E- Resources Frequently used**

Name of the E-resource	Department-wise Respondents							TOTAL
	CSE	EEE	ECE	E&I	IT	MECH.	S&H	
IEEE (ASPP)	29 (96.66%)	19 (100.00%)	23 (95.83%)	4 (100.00%)	15 (100.00%)	20 (95.23%)	32 (91.42%)	142 (95.94%)
ASME	15 (50.00%)	12 (63.15%)	14 (58.33%)	2 (50.00%)	6 (40.00%)	21 (100.00%)	12 (34.28%)	82 (55.40%)
Science Direct	29 (96.66%)	19 (100.00%)	24 (100.00%)	3 (75.00%)	14 (93.33%)	19 (90.47%)	30 (85.71%)	138 (93.24%)
Springer	25 (83.33%)	12 (63.15%)	20 (83.33%)	2 (50.00%)	10 (66.66%)	17 (80.95%)	31 (88.57%)	117 (79.05%)
McGraw Hill's Access Engineering	22 (73.33%)	14 (73.68%)	19 (79.16%)	3 (75.00%)	12 (80.00%)	19 (90.47%)	33 (94.28%)	122 (82.43%)
J-Gate (JET)	20 (66.66%)	10 (52.63%)	15 (62.50%)	2 (50.00%)	9 (60.00%)	20 (95.23%)	24 (68.57%)	100 (67.56%)

The analysis of the data in the table 5 shows that were the most used e-resources by the respondents as seen from their responses which are 142 (95.94%) faculty members who use IEEE (ASPP) e-journals, followed by 138 (93.24%) faculties are use Science Direct, 122 (82.43%) faculties are use McGraw Hill's Access Engineering, 117 (79.05%) faculty members are use Springer e-journals, 100 (67.56%) faculties are use J-Gate, 82 (55.40%) faculty members use ASME e-journals, from Engineering College Libraries.

Table 6 reveals that majority (94.59 %) of the respondents use electronic resources for browsing journals followed by 92.56 % who use the e- resources for finding technical reports and research reports. Whereas 87.83% respondents use electronic information resources for updating the subject knowledge, 76.35% of the respondents use electronic resources for writing research papers or articles and only 74.32% of respondents using e-resources for finding course material.

**Table 6: Purpose of Using Electronic**

Purpose of Using Electronic Resources	Departments-wise No. of Respondents							Total
	CSE	EEE	ECE	E&I	IT	MECH.	S&H	
Browsing journals	28 (93.33%)	18 (94.74%)	22 (91.66%)	4 (100%)	15 (100%)	20 (95.23%)	33 (94.28%)	140 (94.59%)
For writing articles	24 (80.00%)	15 (78.94%)	19 (79.16%)	2 (50.00%)	11 (73.33%)	16 (70.19%)	26 (74.28%)	113 (76.35%)
Technical reports/ research reports	27 (90.00%)	17 (89.47%)	23 (95.83%)	3 (75.00%)	14 (93.33%)	21 (100%)	32 (91.42%)	137 (92.56%)
Finding Course Materials	22 (73.33%)	14 (73.68%)	19 (79.16%)	1 (25.00%)	12 (80.00%)	14 (66.66%)	28 (80.00%)	110 (74.32%)
For updating Subject	26 (86.66%)	18 (94.74%)	24 (100%)	3 (75.00%)	13 (86.66%)	16 (70.19%)	30 (85.71%)	130 (87.83%)

### 5.1. Major findings of the Study

1. It is found that the accessing of internet by the faculty members, 72 out of 148 (48.64%) were using the internet twice a week, 52 (35.13%) using the internet once in a week, 19 (12.83%) respondents use daily and 5 (3.37%) visit fortnightly for the purpose of accessing e-resources.
2. It is found that the positive response about convenience of working hours were more represented in CSE, ECE, Mechanical and S&H departments.
3. It is observed that majority of the faculty members, (99.32%) visit the Library to use E-journals and 67.56% faculties visit the Library for audio visual resources.
4. It is found that the E-Journals is 'very effective', followed by 107 (72.29%) 'effective', followed by 34 (22.97%) 'somewhat effective', followed by 5 (3.37%) respondents. opined that access to Conference/ workshop/seminars proceedings.
5. It is found that 95.94% faculty members who use IEEE (ASPP) e-journals, followed by 138 (93.24%) faculties are use Science Direct, 122 (82.43%) faculties are use McGraw Hill's Access Engineering, 117 (79.05%) faculty members are use Springer e-journals, 100 (67.56%) faculties are use J-Gate, 82 (55.40%) faculty members use ASME e-journals, from Engineering College Libraries.
6. It is found that majority (94.59 %) of the respondents use electronic resources for browsing journals followed by 92.56 % who use the e-resources for finding technical reports and research reports.

### 6. SUGGESTIONS

- ❖ The LIS professionals of the Central Library have to create more awareness on e-resources. In this context the website of library, newsletter of the institution should highlight the available e-resources at the library regularly.
- ❖ The Central Library needs to arrange various orientation and training programmes to their users for the optimum use of available e-resources. In this context, the Central Library may arrange orientation and refresher programmes to it's users. Also, product trials of various e-resources for specific user groups need to be introduced.

### 7. CONCLUSION

Faculty members are heavily dependent on e-resources for their required information and to keep themselves up-to-date in their subject area. Though some expects that the role of libraries as a gateway to the e-resources will have less importance in future as faculty members access more and more e-resources in their respective departments or personal desktop/laptop, it seems to be more hypothetical. Rather the role of libraries in the age of e-resources will increase tremendously, particularly in providing training and guidance to use authentic and relevant information. The study reveals that the faculty members of R.M.K.Group of institutions, Thiruvallur, Tamilnadu are using the available e-resources satisfactorily. At the same time the Central Library of R.M.K Institutions are playing an important role I promotion, assistance and guidance in accessing the e-resources to their users.

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