

# Impact and Awareness of Accessing Electronic Information Resources by Users in R.M.D Engineering College, Chennai: A Study

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**Abstract - E-resources are very important tool in the field of Engineering and Technology; it provides vital information for academic and research development. In mid 1990s, e- resources were not popular in India. But now it competes with the print media as it is very easy to use, easily accessible and requires very less storage space. The only limitation of e-resources is that it is costly for a self financing engineering college. In order to overcome this limitation, AICTE provides Mandatory e-resources at consortia prices for all engineering colleges. This paper deals with analysis of the impact and awareness of electronic information resources on the basis of factors such as availability of e-resources, frequency of usage of e-resources, purpose of e-resources, and roadblocks in accessing e-resources in RMDEC Library. It is observed that users access e-resources effectively, especially utilizing it in their area of research and academic curriculum in the field of science, engineering and technology.**

**Keywords:** Electronics Information Resources, Library Consortia, Mandatory of E-Resources

## I. INTRODUCTION

Since the Alexandrian library began, the expectation of librarians and scholars has been to amass all the resources in a single library in various branches of knowledge. Due to the exponential growth and the increasing cost of information resources, especially the journals, it is difficult for a library to acquire all documents, which may be required by the user of a library. Due to the financial crunch, it is also difficult for a single library to acquire everything that satisfies the

core interests of the institution to which the library belongs. The peripheral interest is being satisfied by using inter-library loan/document delivery. Therefore in a collective development situation, it is logical for a library to look up to the other institutions to meet its peripheral interest.

Even in this situation, a library can drop a core item, if availability to the same is ensured by another library in the neighborhood. To achieve the aforesaid objectives, various library and information center networks have been emerged. A number of resource sharing networks that have evolved in India include CALIBNET (1986), DELNET (1988), BONET, MALIBNET (1993), BALNET (1997), INFLIBNET (1988 - For University libraries) and sectoral networks like BTISNET, ENVIS, FOSTIS etc in late 1980's.

The concept of Library consortia is not new. Library cooperation in America has existed for more than a century. However, library consortia first began to purchase electronic journals from publishers in the mid-nineties in USA. In India the library consortia became operational after 2000 with advent of e-resources. The Library consortia play an active role in the collection development. The accessibility for international journals in Indian universities and technical institutions has improved many folds with setting-up of a few Government-funded library consortia. Prior to setting up of consortia, the access to e-journals was restricted to premier institutions like IISC, IITs, and IIMs. And few Central Universities subscribed to several e-resources including bibliographic databases on CD-ROM, a few e-journals free accessible with subscription

to their print versions and a negligible fraction of journals on subscription. In India more than half a dozen Library consortia were established by various government bodies such as INDEST, DELNET, MALIBNET and INFLIBNET.

## **II. RMD ENGINEERING COLLEGE PROFILE**

Sri Swaminatha Naidu Educational Trust was founded in the year 2000 with the main objective of imparting quality technical and management education with a main thrust on research and training in various disciplines of engineering, Technology and management. In pursuant of this objective an ideal R.M.D. Engineering College was started in the academic year 2001-02. The College is situated at Kavaraipettai, which is 45 kilometer from Chennai. The engineering college offers branches of CSE, EEE, ECE, IT, E&I, MCA, MBA & ME(CSE). All programmes are approved by AICTE, New Delhi and Affiliated to Anna University, Chennai. Four eligible under graduate branches of engineering are accredited by NBA, AICTE, for five years at the first instance. RMDEC is first institution in the country to achieve this distinction. RMDEC was awarded the Bharatiya Vidya Bhavan National Award for the Best Engineering College in India in 2010 and the Best Engineering College Principal award in 2011. In all 3221 students are enrolled and 207 faculties are working in different departments.

### **A. Central Library Profile**

Library plays a vital role in achieving the objectives of improving the standard of education and stimulates academic interest among the student community. The Computerized Library of the college has a collection of nearly 56257 books, 11495 titles, e-resources such as e-journal, e-books, NPTEL web and video e-learning courses(as mandatory by AICTE),4383 CD ROMs and has subscribed to 125 national journal, 45 curriculum related national and international technical magazines. In addition, it has a collection of 1028 back volumes of periodicals.

The library also has a collection of books related TOEFL, GRE, GATE, GMATE, MAT, SAT, TANCET, Placement Training books and Civil services examination to help the students prepare for competitive, placement training and higher studies. A fully furnished, air-conditioned,

comfortable reading room that can accommodate about 150 students at a time, is attached to the library. In Addition, the library has OPAC (online public access catalogue) facility to enable the user and easy access.

Apart from this, the Library has digital resources facilities for students and staff, such as AICTE-INDEST consortium in IEEE, ASTM, EBSCO, J-GATE (Engineering) J-GATE (MBA), Elsevier Science direct, Springer link and McGraw access engineering e-Books, DELNET(Developing Library Network) New Delhi, and Inventi Publication online journals. A tie up with British Council Library, Chennai and Anna University Library, Chennai hae been made for an interlibrary loan for resource sharing purpose.

## **III. LITERATURE REVIEW**

A number of relevant studies have been carried out on the use of e-resources by teachers, students and research scholars of universities and research organizations. 78% of the respondents feel that the use of the UGC-Infonet e-journals has created high dependency value on their research work and they need current article alert services and electronic document supply services (Madhusudhan 2008) [1]. 67.64% of research scholars from faculty of Science and 69.23% of research scholars from engineering use e-journals for research work whereas 35.29% of science faculty use e-journals to update knowledge and 23.70% of engineering faculty use e-journal for study. Speed of availability and the ease of accessibility of information cause the users are using electronic resources more frequently. 49% of respondents are marginally satisfied with online services provided by the library. The survey indicates that the use of e-resources in Jamia Millia Islamia[2] is not satisfactory and needs constant guidance/orientation to enhance their usage. E-journals are becoming a basic need for the academic research scholars every day. Navjyoti[3] finds that speedy publication and availability on the desktop are the key advantages that attract research scholars. Lack of training is a major demotivating factor in the usage of e-journals, so it needs to be improved. Kennedy[4] proposes the inclusion of Web pages to the library catalogue as a solution to the maintenance of increasing web site links. Kaur[5] reports e-resources can be good substitutes for conventional resources if the access speed is fast. All the important e-journals are provided and more computer terminals are installed to provide access

to e-resources. Renwick[6] recommends there should be greater promotion of the library's e-resources. Kaur and Verma[7] find that users use all the sources available to them regularly, like CD ROMs, online databases, Web resources and audio/video tapes.

#### **IV. OBJECTIVE OF THE STUDY**

1. To classify the different types of e-resources and available services in RMDEC;
2. To observe the different type of electronic resources used by students, faculty and Research scholars;
3. To examine the purpose and frequency of using e-resources;
4. To survey the awareness of e-resources;
5. To know the usage in different department and users;
6. To identify the need for training and orientation for the user;
7. To find out user difficulties for accessing e-resources.

#### **V. E-RESOURCES SUBSCRIBED IN RMD ENGINEERING COLLEGE**

S.No	PUBLISHERS	NO OF E-JOURNALS	NO OF E- BOOK	NO OF INDEXED	NO OF OPEN ACCESS JOURNALS	BACK FILE FROM
1	ASPP IEEE ONLINE	145				2000
2	SPRINGER LINK	134				1997
3	J-GATE (ENGG.)	-		4700	1700	-
4	J-GATE (MANAGEMENT)	-		6700	2000	
5	ASTM DIGITAL LIBRARY		1700		13000 ARTICLE	
6	ELSEVIER SCIENCE DIRECT	275				200
7	EBSCO MANAGEMENT	1802				2011
8	MCGRAW HILL ACCESS ENGINEERING		333	11400		

#### **VI. METHODOLOGY OF STUDY**

With the above objectives in mind, a structured questionnaire was prepared and distributed to collect data from the users of e-resources (among students and faculty Members in RMD engineering college), Chennai. Questionnaire contains various relevant questions pertaining to the impact and use of e-resource. For this purpose a total of 200 questionnaires were distributed among student and

faculty. Out of 200 questionnaires distributed, 189 valid questionnaires were collected and this constitutes 94.55% (189/200) of the total response. The collected data were analyzed, tabulated, interpreted and presented the in this paper.

Users were also interviewed in order to collect information regarding their areas of interest to obtaining desired information, as they accessed e-resources.

#### **VII. DATA ANALYSIS**

TABLE I SAMPLE SIZE OF RESPONDENT

S.No.	Type of users	Number of users	Percentage
1	Students 1	45 6	8.59
2	Faculty	44	20.80

Table I Shows that 189 respondent used e-resources during the period of this study including 145(68.59%) students and 44(20.80%) faculty. It was noted that students used the e-resources more often than faculty.

TABLE II LEVEL OF RESPONDENT ACCESSING E-RESOURCES GENDER WISE

S.No.	Users	Number of users	Percentage
1	Male	115	54.42
2	Female	74	34.99

Table II shows that 115 (54.42%) male users accessed e-resources while 74(34.99%) female users accessed the same. It is seen that male users access e-resources more than female users.

TABLE III LEVEL OF RESPONDENT'S AWARENESS OF ACCESSING E-RESOURCES

S. No.	No of Respondents	Less than one year	More than one year
1	189	38 (17.96%)	151 (71.43%)

Table III Indicates that 38(17.96%) respondents have awareness of less than one year about access e-resources and 151(71.43%) respondents have more than one year of awareness. This shows that maximum respondents have experience and awareness about access of e-resources for more than one year.

TABLE IV DIFFERENT TYPE OF ACCESSING RESOURCES IN AVAILABILITY OF LIBRARY

S.No.	Type of Resources	Number of users	Percentage
1	Print	56	26.47
2	Electronic	103	48.74
3	Both	180	85.09

Table IV indicates that 56 (26.47%) users access print resources. 103 (48.74%) users access electronic resources and 180(85.09%) users access both print and e-resources. It is seen that majority of users access both (print and Electronics) information channel of resources.

TABLE V FREQUENCY OF ACCESSING E- RESOURCES

Type of users	Daily	Twice a week	Once in a week	As and when required
Students	65 (30.77%)	43 (20.37%)	13 (6.14%)	24 (11.34%)
Faculty	53 (25.05%)	7 (3.30%)	5 (2.41%)	9 (4.30%)

Table V Indicates that nearly 65 (30.77%) students access e-resources for every day. 43 (20.37%) twice a week, 13 (6.14%) once in a week and 24(11.34%) as and when required. 53 Faculty members access e-resources (25.05%) daily, 7 members access (3.30%) twice a week, 5 members access (2.41%)once in a week, and 9 members access (4.30%) as and when required. It is highlighted that majority of the users access e-resources daily or twice a week.

TABLE VI FREQUENCY OF ACCESSING DIFFERENT TYPE OF E-RESOURCES

Type of Users	E-RESOURCES						
	IEEE	ASTM	EBSCO	J GATE	ELESVIER	SPRINGER	MCGRAW HILL
Students	75	5	3	12	25	23	2
Faculty	23	2	3	5	4	3	4
Total	98	7	6	17	29	26	6
%	46.32	3.30	2.83	8.03	13.75	12.29	2.83

It clearly shows that nearly 98 (46.32%) users access information from IEEE, 7(3.30%) from ASTM Digital library collection, 6(2.83%) users access from EBSCO e-resources, 17(8.03%) users from j-gate electronic resources platform while 29(13.75%) users access from Elsevier science direct, 26(12.29%) students get information from Springer link e-journals and 6(2.83%) users access information from McGraw Hill access engineering e-books. This data on analysis highlights that IEEE journals play a major role in Engineering and Technology area. Similarly Elsevier Science Direct, J-gate, EBSCO, McGraw hill, Springer link journals, and ASTM Digital library, also play a significant contribution in the area of Engineering.

TABLE VII PURPOSE OF ACCESSING E-RESOURCES

S.No.	Purpose	No. of Respondent
1	Research	25(11.81%)
2	Paper presentation	78(36.87%)
3	Project report	18(8.50%)
4	Course work and teaching	23(10.92%)
5	Updating	45(21.32%)

12.5% of the respondents use e-resources for their research purpose, 78(39%) respondents access for paper presentation, 18(9%) for Project reports, 23(11.5%) users access for their course work and teaching, 45(22.5) users access for updating their knowledge. This data shows that

maximum users access e-resources for paper presentation and updating their knowledge.

TABLE VIII LEVEL OF DIFFICULTIES FOR ACCESSING E-RESOURCES

S.No.	Difficulties	No. of Respondent
1	E-resources available for my subject is limited	28(13.23%)
2	Package of e-resource do not cover my area of interest	18(8.50%)
3	No assistance from library staffs	3(1.41%)
4	Lack of Training	76(35.92%)
5	Timing is not suitable	15(7.09%)
6	Lack of awareness about e-resources	49(23.16)

Table VIII Indicates that 28(13.23%) respondent answered that e-resources available for their subject was limited, 18(8.50%) respondent felt Package of e-resource do not cover their area of interest, 3(1.41%) respondent had no assistance from library staff, 76(35.92%) respondent opined Lack of Training for accessing e-resources, 15(7.09%) respondent felt time is not convenient for access, 49(23.16) respondent answered Lack of awareness about e-resources. This table shows that majority of the respondent answered lack of training for access e-resources and lack of awareness about e-resources and followed by e-resources available for their subject is limited.

TABLE IX LEVEL OF SATISFACTION OF SERVICE OF E-RESOURCES IN LIBRARY

S.No.	Level of satisfaction	No. of Respondent
1	Very Satisfied	95(44.91%)
2	Satisfied	59(27.89%)
3	Average	26(12.29%)
4	Not Satisfied	9(4.25%)

Table IX shows that 95(44.91%) respondents are very satisfied for providing service of e-resources in library, 59(27.89%) answered satisfied, 26(12.29%) responded have average satisfaction of e-resources and 9(4.25%) respondent have not satisfied. It is found that majority of respondent are very satisfied of e-resources.

### VIII. FINDINGS AND CONCLUSION

Study shows that the use of e-resources is very common among the faculty, students and research scholars of R.M.D.Engineering College, Chennai and majority of the teachers, student and research scholar are dependent on e-resources to get desired and relevant information.

But practically the effectiveness in the usage of some e-resources does not measure up in worth in comparison to investments made in acquiring these resources. Secondly infrastructure and training programs should also be revised as per requirements. It is observed that the availability of e-resources and infrastructure on campus is sufficient for all the existing disciplines but the users do not have adequate awareness, training imparted by experts, publishers, seminars, conferences and workshops for accessing e-resources effectively is needed. It is also observed that majority of the respondents are more awareness and access IEEE online database journals.

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