



Awareness and Use of E- Resources by the Users of Selected Engineering College Libraries of Jammu Division: A User Study

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ABSTRACT

Engineering, an application of scientific, economic, social, and practical knowledge that designs, builds, maintains structures, machines, devices, systems, materials and processes that plays a key role in socio-economic development of any nation. Excellent engineering colleges are essential to prepare engineers with good knowledge and skills in engineering. The library is a very important source of information and knowledge of any educational organization. Unless these libraries have sufficient resources such as finance, building, furniture etc., they may not be able to provide necessary services to their users. The present paper highlights the need and importance of various E -Resources in selected Engineering College Libraries under study. The main objectives of the present study are to find out the existing e-resources and to study the awareness level and use of e-resources by the users. It further states the satisfaction level of users towards e-resources and finds out users preference in the use of print and e-resources and cause of their preferences. The survey method was used to collect the requisite data for the analysis for which questionnaire was framed and were distributed among the users. About 570 questionnaires were received back duly filled. The study covered the students and faculty members. From the study it was clear that students and faculty members give preferences on e- resources than printed material. In current scenario electronic resources are becoming an essential part of the engineering libraries and for the educational vision especially the higher educational outlook..

Introduction

Engineering education is vital and essential input for national technical development and for strengthening the industry, economy and ultimately improving the eminence of life of the people. Engineering and Technical Education all over the world is gaining importance day by day because of rapid advancements in science and technology and innovations in various disciplines due constant and continuous research in each and every field. In the developing countries especially in India, the knowledge of advancement in technology is one

of the basic requirements for any development activities. The demand for technically qualified personnel is rapidly gaining momentum in various fields of technology. It is skillful, artful and constructive education that rises to application minded mankind who are essential for the socio-economic development of any country. The engineering college libraries are the store house of information resources and services. The main aim of the engineering libraries is to satisfy the user community by providing the relevant and appropriate services as and when they are in need. E-resources are back bone of present society and it is very important for users point view as well as library researches want quick information

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and it is possible through only electronic resources. With the rapid development of electronic publishing, libraries are not only acquiring reading materials such as printed books and journals but also providing access to various resources in electronic form.

Literature Review

A review of literature helps to identify the established findings on the chosen research problem. There are number of studies published related to various aspects of library e-resources and services in Engineering Institutes. Some of such studies which are reviewed and deserve to be mentioned are as under:-

Gupta and Tyagi (2024) in their paper highlighted a comprehensive analysis of user satisfaction levels and the extent to which these resources meet the requirements of their users.

Jangra (2023) in their study found that 78% of respondents were aware of available library resources in selected public university libraries, followed by 73.66% of respondents who were familiar with selected private libraries and the percentage of respondents who were not aware of available resources and services of selected public and private universities were 21.33 and 26.33%, respectively.

Parashar and Praveen (2022) in their study found that many users utilize electronic resources and there was a small group of users who does not use them as well as a group of users that use both electronic and print resources.

Muzamil and Ariba (2020) in their study found that these colleges were much more interested in focusing on building a strong e-resource collection in their libraries. It was also revealed that majority of libraries lack proper collection development policy, especially for e-resources.

Bharathi and Sujatha (2019) in their paper investigated that the utilization and effectiveness of digital libraries in 51 self-finances Engineering Colleges affiliated to the Visvesvaraya Technological University in the State of Karnataka, India. The majority 88.9% of users were of the opinion that digital library services were superior to conventional library services. Dhanalakshmi and Nalhe (2017) in their study found that 80 % of the students are satisfied with circulation service. About 26.66 % of the students spend more than 7 hours in the library. 38 % of students expressed that their class work affects the usage of library whereas majority of them felt that class work do not influence the usage of library services as they have enough free time.

Kiran Kumar (2017) in their study outlined that the need for switch from traditional print resources to electronic resources and the university library can set up servers like Ezproxy in the library and provides library resources and services to the door steps of it users.

Rathour and Rana (2015) in their study outlined the information needs and information seeking behavior of faculty members in engineering colleges of Haryana. The

result shows that most of faculty use library collection and services but they are not familiar with new library technologies.

Firdaus and Haridasan (2015) in their study revealed that for majority of PG engineering students (92%), Internet was found to be the main source of information about the web resources. The study recommends that to ensure proficient and productive use of web resources by engineering students, hands on training, workshops and orientation programs can be provided to them.

Dhar (2014) in her study analyzed that the majority of users of GCET, Jammu that is 67 (56.77%) were satisfied with the circulation service and 51(43.22%) users were not satisfied with the circulation service of their college library. The respondents who were not satisfied with the circulation service of their library feel that the traditional services should be replaced by computerized service so as to make the library services easier and convenient.

Reddy and Reddy (2014) in their study investigated on the library collection and services in 23 selected engineering college libraries of Hyderabad and Ranga Reddy Districts, Telangana. The major findings of the study revealed that 79.8% of the users are satisfied with the collection of reference books, 77.8% of users were satisfied with the collection of textbooks, 73.7% users were satisfied with the collection of journals and 72.7% users were satisfied with the collection of general books.

Puttaswamy and Krishnamurthy (2014) observed in their study that majority of senior level teachers and research scholars access the e-Resources for the research work rather than teaching.

Objectives of the Study

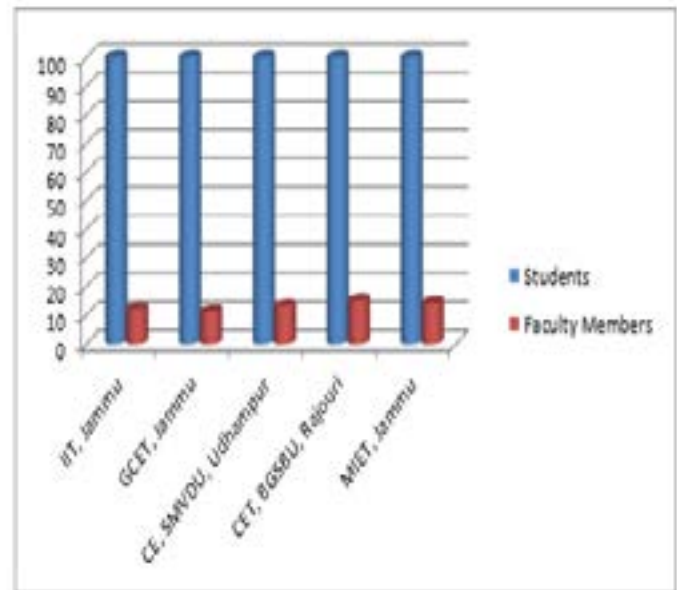
The following are the objectives of the study:-

1. To find out the availability of existing e-resources in Engineering Colleges Libraries.
2. To study the awareness and use of e-resources by the users of Engineering College libraries.
3. To study the frequency of the users for the use of e-collection.
4. To know the satisfaction level of users towards e-resources.
5. To study the overall satisfaction level of the users for e-collection and Services.

Scope of the Study

The study is limited to the students and faculty members of following five Engineering College Libraries of Jammu division:-

1. Indian Institute of Technology, Jammu.
2. Government College of Engineering and Technology, Jammu.
3. College of Engineering, Shri Mata Vaishno Devi University, Udhampur.
4. College of Engineering and Technology, Baba Ghulam Shah Badshah University, Rajouri
5. Model Institute of Engineering and Technology, Bantalab, Jammu.



Research Methodology

For the present study, questionnaire method was used as research tool to conduct the survey. Apart from this personal meetings and observations, discussions with the students and faculty members were conducted for this study. In addition website of concerned engineering colleges was also accessed to gather related information. Two types of questionnaires were framed for users, one for students and faculty members and second for Librarians of the library. A sample of 570 users was selected, which includes 500 students, 5 Librarians by equal allocation method and 65 faculty members purposively. The data collected have been analyzed to reach conclusion.

Data Analysis and Interpretation

Table-1: College/University-wise distribution of respondents

S r . No	Name of College/ University	Students	Faculty Members
1	IIT, Jammu	100	12
2	GCET, Jammu	100	11
3	CE, SMVDU, Udhampur	100	13
4	CET, BGSBU, Rajouri	100	15
5	MIET, Jammu	100	14
Total		500	65

Fig1: College-wise Distribution of Respondents

The Table 1 and Figure1 show the College wise distribution of respondents. The maximum number of the respondents from the category of faculty members was 15 from CET, BGSBU and minimum numbers were 11 from GCET.

Table-2: Year of Establishment of Engineering Colleges

S.No	Name	Year of establishment	Type
1	IIT, Jammu	2016	Government
2	GCET, Jammu	1993	Government
3	CE, SMVDU, Udhampur	1999	University-Autonomous
4	CET, BGSBU, Rajouri	2002	University – Autonomous
5	MIET, Jammu	1996	Private-Autonomous

Table 2 and Figure 2 indicate the year of establishment of College/ University. It was observed that the oldest college in Jammu division is GCET, which was established in 1993. After that MIET, Jammu was established in 1996, CE, SMVDU were established in 1999, followed CET, BGSBU, Rajouri that was established in 2002 and IIT, Jammu was established in the year 2016.

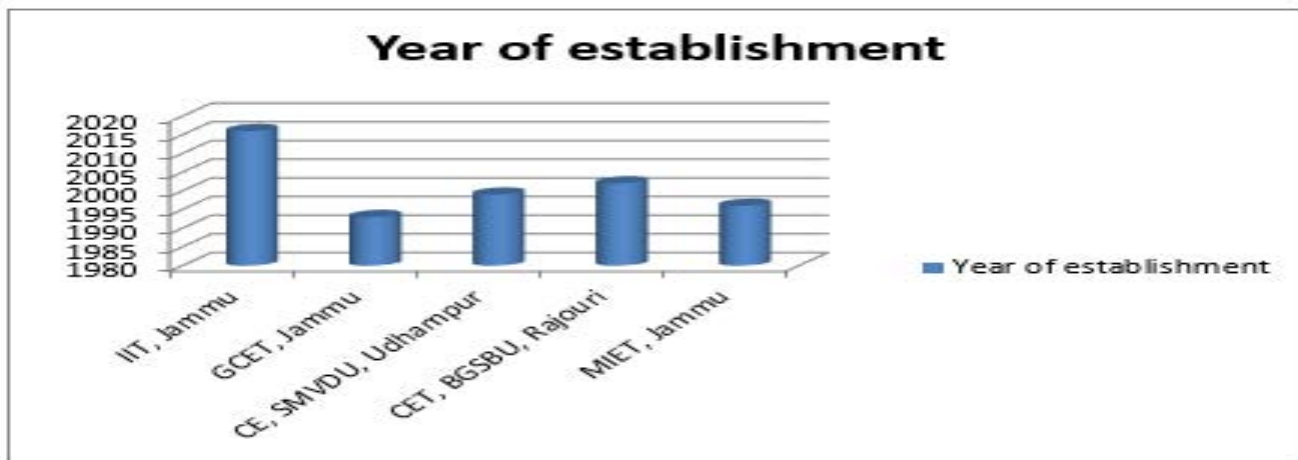


Fig 2: Year of Establishment of Engineering Colleges

Table 3 Electronic Collection available in engineering college libraries.

Sr. No	Name of College/ University/ Institute	e-collection							Total
		e-Books	e-Journals	Journals	CD-ROMs	On-Line Databases	E-News papers	Photographic and Illustrations	
1	IIT	3000+	6620+	81	10	10	01	NA	9722
2	GCET	199500+	6000+	10	NA	NA	5	NA	205515
3	CE, SMV-DU	10000 +	46,409+	3000+	6	15	02	125	59557
4	CET, BGS-BU	10000+	6000+	2706	06	20	Yes	25	18757
5	MIET	1,19,6,360	193	1800	TLSS	15	Yes	NA	1198368

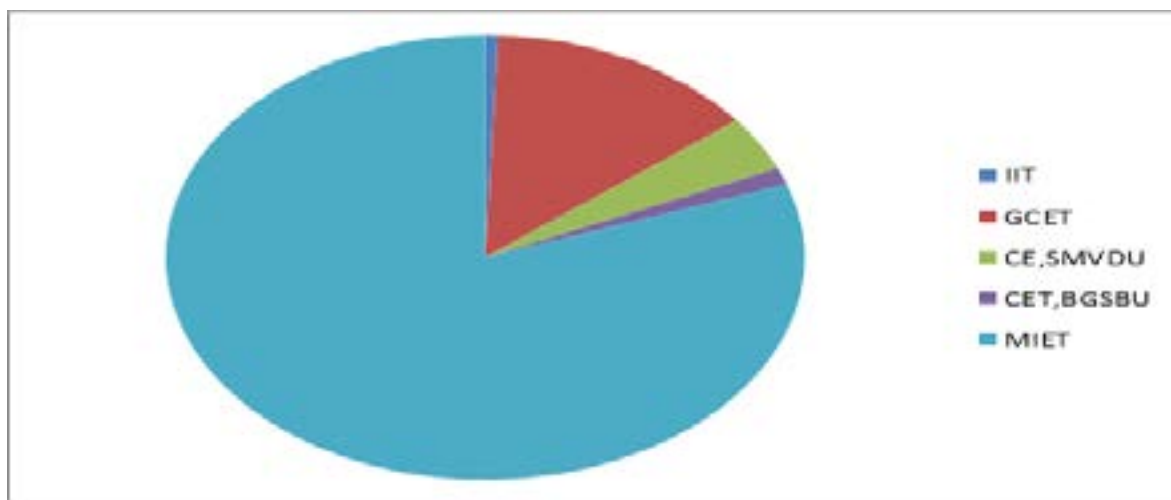


Fig 3: Showing Pie chart of Electronic Collection available in engineering college libraries

Table 3 and Figure 3 indicate various types of electronic collections available in Engineering College Libraries under study. It was observed that the highest number of library e-Collection is in MIET, Jammu i.e. 1198368, followed by GCET, Jammu, 205515, CE, SMVDU, Katra, 59557 CET, BGSSBU, Rajouri 18757 and IIT, Jammu 9722.

Users' Awareness Level about Library Electronic Collection
The respondents were asked about their awareness level towards electronic collection. The response of respondents is indicated in Table 4.

Table 4 Users' Awareness Level about Library Electronic Collection

Types of Col- lection	Students (n=500)	F a c u l t y M e m b e r s (n=65)	Response rate (%)
Electronic Collection			
e-books	4 8 6 (97.2%)	63(96.92%)	5 4 9 (97.16%)
Online refer- ence Sources	4 8 4 (96.8%)	64 (98.46%)	5 4 8 (96.99%)
e-journals/peri- odicals	3 4 4 (68.8%)	42 (64.61%)	3 8 6 (68.31%)
CD-ROMs	2 3 1 (46.2%)	28 (43.07%)	2 5 9 (45.84%)
e-Theses/Dis- sertations	2 8 9 (57.8%)	39 (60%)	3 2 8 (58.05%)
e-Newspapers	3 5 6 (71.2%)	44 (67.69%)	4 0 0 (70.79%)
e-Encyclopaee- dias	3 0 9 (61.8%)	41 (63.07%)	3 5 0 (61.94%)

(Multiple options were allowed)

Table 4 demonstrates that out of 565 respondents 549 (97.16%) of Students and Faculty Members were aware about e-books, 548 (96.99%) of Students and Faculty Members were aware about Online reference Sources, 386 (68.31%) of Students and Faculty Members were aware about e-journals/periodicals, 259 (45.84%) of Students and Faculty Members were aware about CD-ROMs, 328 (58.05%) of Students and Faculty Members were aware about e-Theses/Dissertations, 400 (70.79%) of Students and Faculty Members were aware about e-Newspapers, 350 (61.94%) of Students and Faculty Members were aware about e-Encyclopaedias.

Satisfaction Level of the Users for Electronic Collection available in College/University library

The respondents were asked about the satisfaction level of users towards electronic library collection and user's

satisfaction level about the electronic library collection satisfaction or dissatisfaction level of respondents towards the electronic collections provided by the library. Table 5 depicts the respondents' satisfaction level with electronic library collections.

Table 5 indicates that about 214 (42.8%) of the Students were highly satisfied for the electronic collection available in College/University library whereas 121 (24.2%) were satisfied. 82 (16.4%) of the Students said that they were moderately satisfied with the library electronic collection, 11(2.2%) of the Students were dissatisfied whereas 72 (14.4%) were highly dissatisfied. Further it is revealed that about 25 (38.46%) of the Faculty Members were highly satisfied for the electronic collection available in College/University library whereas 16 (24.61%) were satisfied. 17 (26.15%) of the Faculty Members said that they were moderately satisfied with the library electronic collection, 2 (3.07%) of the Faculty Members were dissatisfied whereas 5 (7.69%) were highly dissatisfied.

Frequency of the Users for the Use of Electronic Collection
The respondents were asked about their frequency regarding use of electronic collection. Their response is indicated in Table 6.

Table 6 gives us an idea about the frequency of using electronic collection available in College/University library. In this table, 250 (44.24%) of the Students and Faculty Members use electronic collection almost all of the time whereas 230 (40.70%) of the Students and Faculty Members used most of the time. About 81 (14.33%) of the Students and Faculty Members used it some of the time while very less number of the 4 (0.70%) of the Students and Faculty Members said that they never use electronic collection.

Overall Satisfaction level of the Users for the Electronic Collection and Services

The respondents were asked about their level of satisfaction toward electronic collection and services. The responses of respondents in this regards is presented in Table 7.

It is indicated that 168 (29.73%) of the Students and Faculty Members were highly satisfied for the use of electronic collection and services whereas 283 (50.08%) of the Students and Faculty Members were satisfied. Whereas response of 76(13.45%) of the Students and Faculty Members was neutral while 27 (4.77%) of the Students and Faculty Members were dissatisfied. Very less number of 11 (1.94%) of the Students and Faculty Members said that they have no opinion about the use of electronic collection and services.

Table 5 Satisfaction Level of the Users for Electronic Collection available in College/University library

Satisfaction Level of the Users towards Electronic Collection	Students(n=500)	Faculty Mem- bers (n=65)	Responserate (%)
Highly Satisfied	214 (42.8%)	25 (38.46%)	239 (42.30%)
Satisfied	121 (24.2%)	16 (24.61%)	137 (24.24%)
Moderately Satisfied	82 (16.4%)	17 (26.15%)	99 (17.52%)
Dissatisfied	11 (2.2%)	2 (3.07%)	13 (2.30%)
Highly Dissatisfied	72 (14.4%)	5 (7.69%)	77 (13.62%)
Total	500	65	565 (100%)

Table 6 Frequency of the Users for the Use of Electronic Collection

Frequency	Students(n=500)	Faculty Members (n=65)	Response rate (%)
All of the time	220 (44%)	30 (46.15%)	250 (44.24%)
Most of the time	204 (40.8%)	26 (40%)	230 (40.70%)
Some of the time	73 (14.6%)	8 (12.30%)	81 (14.33%)
Never	3(0.60%)	1 (1.53%)	4 (0.70%)
Total	500	65	565 (100%)

Table 7: Overall Satisfaction Level of the Users for the Electronic Collection and Services

Overall Satisfaction level for electronic collection	Students (n=500)	Faculty Members (n=65)	Response rate (%)
Highly satisfied	146 (29.2%)	22 (33.84%)	168 (29.73%)
Satisfied	256 (51.2%)	27 (41.53%)	283 (50.08%)
Neutral	68 (13.6%)	08 (12.30%)	76(13.45%)
Dissatisfied	23 (4.6%)	4 (6.15%)	27 (4.77%)
No opinion	7 (1.4%)	4(6.15%)	11 (1.94%)
Total	500 (100%)	65 (100%)	565 (100%)

Findings

1. As depicted from Table 2 and Figure 2, the oldest Engineering College is GCET, Jammu and IIT, Jammu is established recently.
2. It was observed that maximum number of the electronic - collection is in MIET, Jammu i.e. 1198368, while minimum number 9722 e-collection is in IIT, Jammu as indicated in Table 3 .

3. Majority i.e. 549 (97.16%) of respondents aware about with e-books as indicated in Table 4.
4. Maximum numbers of 239 (42.30%) respondents were highly satisfied while minimum number 13 (2.30%) respondents were dissatisfied as indicated in Table 5.
5. About 250 (44.24%) of respondents use the e-collection all the time whereas 14 (2.8%) respondents have no opinion as indicated in Table 6.
6. Overall 283 (50.08.30%) respondents were satisfied while very less number i.e. 11 (1.94%) of the Students and Faculty Members said that they have no opinion about the use of e-collection and services as indicated in Table 7.

Recommendations

Based on the findings of the study, the following recommendations are suggested:-

1. Library professional of each Engineering College Library have to create more awareness on E-resources among the users.
2. Library has to take steps to arrange various training and orientation programmes for students and faculty members to use the available Electronic-resources in the library
3. Speed of internet connection needs to be increased for quick access to available E-resources.

Conclusion

The libraries are facing a lot of challenges due to the tremendous impact of IT. The users today are not completely dependent on libraries but they are getting the required information from the internet as well. Users have become more technology savvy because of the increased online environment. Accessibility to the required information at a fast rate as well as quick response to the query is the expectations of users. The result of the study shows that a proper guidance is needed for the users which will help them to save the time and to get the right information. Almost all Engineering Colleges having good resources in the library both print and electronic format, but because of lack of proper knowledge among the users they are not using these resources. The College/University authorities must

take necessary steps to improve the library services and also provide proper guidance to the users.

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