



USE OF INTERNET RESOURCES BY STUDENTS OF ENGINEERING COLLEGE LIBRARIES IN BELAGAVI CITY: A STUDY.

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ABSTRACT

The present paper discusses the use of Internet information resources available on internet in engineering colleges. The dialogue about their availability on internet and guide to serf search engines, information content of information resources. Further, highlights the awareness about internet information resources it is much useful in engineering college users in various departments and limitations to access the available sources on internet.

KEYWORDS : Internet, Engineering Colleges, Information Resources, Users.

1. INTRODUCTION

Information Technology in general and computer technology in particular has been the harbinger of the library and information system. They have helped in speeding up and precisising of information collection, processing and distribution. The new developments in the software design and their applications to multivariate aspects of information storage and retrieval has called for a renewed interest in the development of new information tools for library users as well as library staff.

1.1 Internet Information Resources

Internet information resources can be defined as resources that include both documents and non-documents in electronic or e-format that provide information or a pointer to the information and can be accessed via Internet.

Nature of E-Resources

These electronic resources could be of varied nature. Broadly, we could categories them as follows:

- **Primary Sources of Information:** These include electronic conferences, electronic journals, electronic pre-prints and e-prints, electronic theses and dissertations, patents, standards, technical reports, project reports including status reports of current ongoing projects, news, software courseware, tutorials, manuals and the like.
- **Databases,** Data sets and other Collections: These include abstracting and indexing databases; digital collections comprising images, audio, video; scientific data sets comprising numeric, properties, structural databases; library catalogues; virtual libraries; museums and archives, etc.
- **Electronic Books:** Such as Net Library (<http://www.netlibrary.com/>); E-library (<http://www.ebrary.com/>), etc. Generally online book selling and print-on demand features also facilitated. For instance Net Library has entered into print-on-demand marketplace. Similarly Amazon.com (termed as the largest library — though not a library in true sense of the word) facilitates online book selling (<http://www.amazon.com/>)
- **Reference Sources:** such as dictionaries; encyclopedias; biographies; handbooks; thesauri and the like.
- **Organisations and People:** Information about organisations and people ranging from funding agencies to libraries; information centers; research institutes; and experts; directories of people of varied nature (scientists; archaeologists, etc.)
- **Meta Resources:** Resources that facilitate easier access to network based resources in a defined subject area and a plethora of such resources under various names available on the Internet, such as subject gateways; virtual libraries; clearing house; pathfinders and the like.
- Databases (reference works & indexes)
- E-Journals
- E-books
- E-News
- E-Images
- E-Music & Sound Collection
- Data/GIS
- Academic Commons
- E-references
- Subject guides

- Web search tools
- The web
- Subject or Information gateways

2. Role of All India Council for Technical Education (AICTE)

All India Council for Technical Education was set-up in November 1945 as a national level Apex Advisory Body to conduct survey on the facilities of technical education and to promote development in the country in a coordinated and integrated manner. In order to ensure the same, as stipulated in, the National Policy of Education (1986), AICTE was vested with statutory authority for planning, formulation and maintenance of norms and standards, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in the country. The purview of AICTE covers programmes of technical education including training and research in Engineering, Technology, Architecture, Town Planning, Management, Pharmacy, Applied Arts and Crafts, Hotel Management and Catering Technology etc. at different levels.

3. Growth and Development of Technical Education in Karnataka

Imparting technical education as a part of curriculum made its beginning in 19th century, when the first institute, the School of Engineering was established in Bangalore in 1862. This school affiliated to Madras University had two classes and was intended to train men for employment in subordinate engineering services. Thereafter, public works department school was established by Rao Bahdur Arcot Narayanaswamy Mudaliar in Civil and Military station in 1873.

As a first step, an industrial school was established at Hassan in 1889 and a similar school at Mysore in 1892. There were 14 industrial schools in old Mysore at the time of integration. Some of them were converted into industrial training institutes and some others closed. The Sri Krishnarajendra Silver Jubilee Technological Institute was founded to commemorate the Silver Jubilee of the reign of Krishnarajendra Wodeyar in 1938 with textile technology as the subject of study. Presently this is offering graduate and post-graduate courses in textile technology and recently it is upgraded as Government Engineering College.

The Sri Jayachamarajendra Occupational Institute (presently Sri Jayachamarajendra Polytechnic) was started in 1943, with a view to train youth by utilizing the munificent donation of Rs 2.00 Lakhs by Sir M. Visvesvaraya. Before 1922, the Jaya Chamarajendra Technical Institute, Mysore had a Civil Engineering section imparting instruction in Civil and Mechanical Engineering. The Engineering School, Bangalore imparted instruction in Electrical and Mechanical Engineering.

The expansion of industry during the 2nd World war as well as in the post war period created a greatly increased demand for technicians of grades, which was met by expanding the existing technical institutions. By 1955-1956, the number of industrial and vocational schools rose to 15. The number of courses in Jayachamarajendra Occupational Institute also increased. Vocational institutes were started at Hassan (1948), Davanagere (1949), Chintamani (1950), Bhadravati (1950). In 1954, CPC Polytechnic at Mysore was started.

In 1956 there were 9 institutions in the then Mysore State.

In 1917, the Mysore government started an engineering college at Bangalore. For a long time till 1946 this was the only college for the whole state. After 1946 three more colleges were started, one of which was by government and the two were by private societies. And at the time of unification, there were four engineering colleges in Mysore region and one college of engineering in Bangalore Bombay Karnataka region. They were, the college of engineering, Bangalore (government), the BMS College of Engineering, Bangalore (private), The National Institute of Engineering, Mysore (private), BVB College of Engineering, Hubli (private) and BDT College of Engineering, Davanagere (government). The total student strength of these five institutes during 1956-57 was 2,924. Between 1956-57 and 1968-69, 10 private engineering and one government college i.e. Karnataka Regional Engineering College (KREC), Suratkal were established. Now it is renamed as National Institute of Technology, Karnataka.

Visvesvaraya Technological University (VTU), Belgaum established on 1st April 1998 is named after Bharat Ratna Sir M. Visvesvaraya, is a dream come true for technocrats and academicians of Karnataka. The University has the jurisdiction throughout Karnataka and at present 182 Engineering colleges are affiliated to it. Ministry of Education and Directorate of Technical Education play a great role in enhancing the standard and quality of technical education by laying the policies.

4. Review of related literature

Justin Chisenga (1996) ¹ explains the ability and use of information technology in libraries and documentation centres in Lesotho. His survey looks at the types of computers being used; software systems installed and also examines the availability of appropriate information technology skills among the Library and Information professionals in the country. The conclusion is reached that Information Technology is generally underutilized due to lack of appropriate training among the library professionals in the country. Kasi Rao and Ramesh Babu (1999) ² their article covers "Application of IT in Self-Financed Professional College Libraries, Information and Documentation Centres (LIBIDOCs) in Chennai: A Study of its Impact on Library and Information Services (LIS)" attempts to study the extent of application of IT in a sample of 50 academic libraries comprising university Libraries, Government professional colleges and polytechnic Libraries, Government Aided/Autonomous Colleges Libraries, and specialized Institutions. Ramalingam (2000) ³ gives description of information technology and its advantages to the library services. He also discusses online computer service, electronic service delivery, multimedia catalogue, public service networking, local area network software and library networking. Krishan Gopal (2003) ⁴ in his book "Impact of Information Technology services in Libraries" stated that technology is changing the nature of libraries and librarians, and it continues to exert a major influence on the strategic direction of libraries in society. Today, the library services are transitioning from local traditional collections to global resources provided on demand via the most advanced networking technologies. It is now to obtain the most up-to-date information from the form of the library without walls, or the virtual library. McMaster, Don (2005) ⁵ in his article "25 years in the International application of information technology(IT) and standards to process and disseminate patent information, from 1980 to 2004" presented the Information progress in the application of Information Technology(IT) and standards to process and disseminate patent information over the past 25 years. Much of this progress has mirrored wider changes, such as the advent and use of online, CD-ROM, and the Internet. The major international patent information dissemination. Ramesh, Sahu and Karisiddappa (1999) ⁶ explains the Internet, its growth, its resources in particular reference to engineering sciences. Internet access to Engineering resources through search engine, gateways, virtual libraries are discussed. Useful sites on different engineering disciplines, engineering institutions, academic departments, engineering companies, publishers' homepages, E-journals, databases, full text publications, standards & patents, general reference works, engineering news groups collected, arranged and presented. Some of the available engineering resources on Internet are also highlighted. Mallinath Kumbhar and Siddayya Shirur (2001) ⁷ conducted a survey on the users of Sree Jayachamarajendra college of engineering regarding the exploitation of internet resources. A questionnaire was used to make a survey of the use of Internet facilities at SJCE. The analysis of the data thus collected covers characteristics of study population, purpose of internet use, most used internet services, problems faced by the internet users while using the Internet services,

satisfaction level of the users, opinion about facilities available in SJCE and finally it highlights the suggestions made by the users for further improvements of Internet services at SJ college of Engineering, Mysore. Rajashekar (2002) ⁸ studied use of Internet in Libraries. He stated that Information sources residing on the Internet need to be taken into account in the collection development strategy and in rendering information services. These sources also need to be reflected in the catalogues and indices prepared by the library. Users need to be trained in using effective Internet information access strategies.

5. Significance of the Study

1. This study throws light on the present state of the art of engineering colleges in Mumbai Karnataka area of Belagavi city.
2. It brings to light the status of use and need for IT applications in engineering colleges.
3. The study measures the needs and requirement of the faculty and students of the Engineering colleges with regard to provision of IT based services.
4. This study provides the base for research on Information Technology at a more perspective.

6. Objectives of the Study

The study has been conducted with the following objectives

1. To examine the applications of IT in selected Engineering College libraries in Belagavi.
2. To elicit availability of adequate IT Infrastructure in their libraries
3. To study the Internet facilities available in sample Engineering colleges
4. To find out the problems faced by the users while using the internet based resources in libraries.
5. To know the level of satisfaction of users with e-resources in engineering college libraries
6. To identify the barriers of internet services in Engineering college libraries
7. To offer suggestions for effective implementation of IT in engineering college libraries.

7. Scope and Limitations

This research study is confined to the study use of IT applications, Information resources and services, geographically it is braded to the belagavi.

1. The study has been limited to the selected Engineering colleges in Belagavi city.
2. The Engineering colleges which are offering M.Tech, courses are taken into consideration under this study.

8. METHODOLOGY

The study attempts to examine the application of Information technology in selected Engineering college libraries in Belagavi city. A structured questionnaire was designed to collect data on the opinions of the librarians, faculty members and students. Totally 100 questionnaires were distributes to the Engineering students Shaikh engineering college 40 questionnaires collected and Balekundri engineering college 40 users questionnaires were collected from engineering college. Hence, a total of 80 (80 %) questionnaires have been collected and use form this study. The results of the findings are presented in tables using percentage.

9. Analysis and Interpretation of Data

Table-9.1: Gender wise distribution of respondents.

Sl.No	Gender	Total	Average
1	Male	48	60%
2	Female	32	40%
Total		80	100%

Table 9.1 and figure 1 show that clearly, gender and institution wise response of respondents. The numbers of Male respondent were about 60 % than the Female counterpart with 40 % respondents.

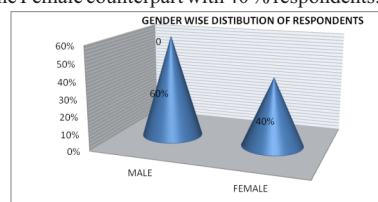
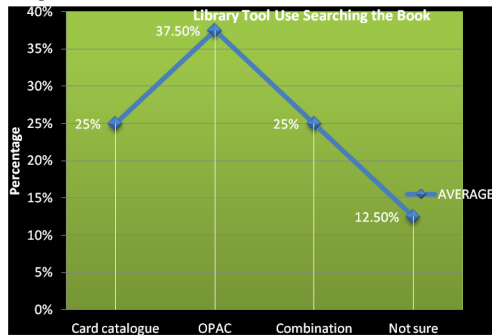


Figure No-1 gender wise distribution of respondents.

Table-9.2: Library Tools Use Searching the Book.

Sl.No	Library tools	Total	Average
1	Manual card catalogue	20	25%
2	OPAC	30	37.5%
3	Combination	20	25%
4	Not sure	10	12.5%
	Total	80	100%

Table 9.2 and figure 2 show that different types of library tool use searching of the book used by the engineering students of Shake and Balekundri engineering colleges. More than 37.5% respondent's OPAC service to locate required document in library, 25% respondents used manual and catalogue, 25 % respondents used combination and 12.5 % respondents not sure.

**Figure No-2 library tool use the respondents****Table-9.3: Internet Sources and Services.**

Sl. No	Internet Services	Total	Average
1	Yes	60	75%
2	No	10	12.5%
3	Not sure	10	12.5%
	Total	80	100%

Table 9.3 shows that total of 75% users are satisfied with internet services that provide in the library, 12.5% are not satisfied with the internet services and 12.5 are not sure satisfied with the internet services.

Table-9.4: Place of frequently use of Internet.

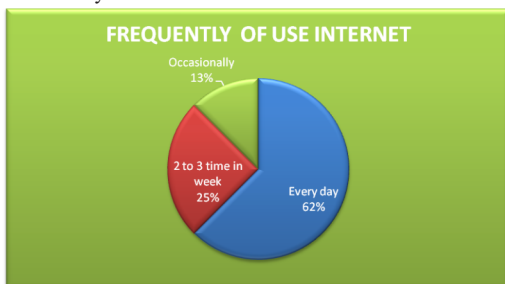
Sl. No	Place of use of internet	Total	Average
1	At library	20	25%
2	At home	20	25%
3	Outside internet café	10	12.5%
4	Wi-Fi center	30	37.5%
	Total	80	100%

Table 9.4 show that place of frequently use of internet. It was found that majority of the users 37.5 % uses Wi-Fi center, in Home 25 %, 25 % library and Outside internet cafe used 12.5 %.

Table-9.5: How Often Do You Internet

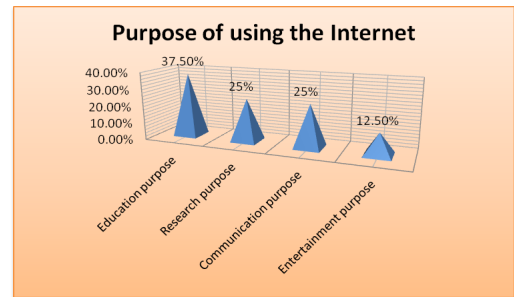
Sl. No	Frequently of use internet	Total	Average
1	Every day	50	62.5%
2	2 to 3 time in week	20	25%
3	Occasionally	10	12.5%
	Total	80	100%

Table 9.5 and figure 3 show the use of internet, it was found that majority of the users 62.5% uses every day, 2 to 3 times in week 25% and occasionally used 12.5%.

**Figure No-3 often used internet****Table-6: Purpose of using the Internet.**

Sl.No	Purpose of using the internet	Total	Average
1	Education purpose	30	37.5%
2	Research purpose	20	25%
3	Communication purpose	20	25%
4	Entertainment purpose	10	12.5%
	Total	80	100%

Table 9.6 and 4 shows that which purpose you are using the internet, more number of 37.5% respondents' education purpose using the internet, 25% respondents using research purpose, 25% respondents using communication purpose and 12.5% respondents using entertainment purpose.

**Figure no-4 purpose of using the internet****Table-9.7: Library services using on Internet.**

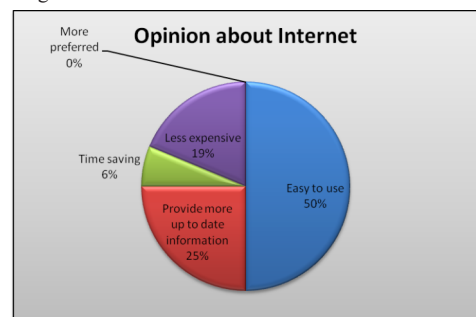
Sl.No	Services using on internet	Total	Average
1	E-mail	30	37.5%
2	WWW	40	50%
3	Career planning	10	12.5%
	Total	80	100%

Table 9.7 shows the library services using on internet, majority of the users 50% uses www (web), email using 37.5% and carrier planning 12.5% library services using on internet.

Table-9.8: Opinion about Internet.

Sl.No	Opinion about internet	Total	Average
1	Easy to use	40	50%
2	Provide more up to date information	20	25%
3	Time saving	5	6.25%
4	Less expensive	15	18.75%
5	More preferred	-	-
	Total		100%

Table 9.8 and figure 6 show the opinion about internet large number of 50% respondents easy to use in internet services, following 25% respondents provide more up to date information in internet services, 18.75% respondents less expensive and 6.25% respondent time saving in internet services.

**Figure No-6 opinion about internet.****Table-9.9: Problem of using Internet.**

Sl.No	Problem of using internet	Total	Average
1	Lack of sufficient number of computer	10	12.5%
2	Slow access/less speed	40	50%
3	Overloading of server	20	25%
4	It take more time to view/download the copies	10	12.5%
5	Privacy problem	-	-
	Total	80	100%

Table 9.9 shows that problem facing by you while using internet. More number 50 % respondent slow access/less speed using internet, 25% respondents overloading of server in internet, 12.5% respondent lack of sufficient number of computer and 12.5% respondent it take more time to view/ download the copies.

Table-9.10: Satisfaction of Internet Services.

Sl, No	Satisfaction of internet services	Total	Average
1	Fully satisfied	30	37.5%
2	Partially satisfied	40	50%
3	Least satisfied	10	12.5%
	Total	80	100%

The table 9.10 shows that, 50% users are partially satisfied with internet services that provide in the library, 37.5% are fully satisfied with the internet and 12.5% are least satisfied with the internet services.

Table-9.11: Circulation of library books on computer.

Sl.No	Circulation of library books on computer	Total	Average
1	Yes	15	18.75%
2	No	65	81.25%
	Total	80	100%

The table 9.11 shows that large number of respondents 81% users is satisfied with circulation of library book on computer, 18.75% are not satisfied with the circulation of library book on computer.

Table-9.12: Reference queries, library staff searches.

Sl. No	Reference queries, library staff searches	Total	Average
1	Online/digital sources	10	12.5%
2	Printed sources	40	50%
3	Both	30	37.5%
	Total	80	100%

Table 9.12 show the answering your reference queries, library staff searches 50% respondents used to printed sources, 37.5% respondents used both and 12.5% respondents used online/ digital sources.

Table-9.13: Library staff in providing it based service.

S.NO	Library staff in providing it based services	Total	Average
1	Strongly Agree	05	6.25%
2	Agree	20	25%
3	Uncertain	30	37.5%
4	Disagree	10	12.5%
5	Strongly disagree	15	18.75%
	Total	80	100%

The table 9.13 show that total of 37.5 % user are uncertain with library staff in providing IT based services, 25% are agree with IT based providing services, 18.75% are strongly disagree IT based providing services 12.5 % disagree and 6.25% user are strongly satisfied with IT based providing the services.

10. Findings of the study

Study attempt has been made to summarize the findings based on analysis and interpretation of data.

1. It is observed from the study that there were totally 60% of male and 40% of female users. (Table-9.1)
2. Engineering college student More than 37.5% respondent's OPAC service to locate required document in library. 25% respondents used manual and catalogue. 25 % respondents used combination and 12.5 % respondents not sure. (Table-9.2)
3. Engineering college Library provide internet services total of 75% users are satisfied with internet services that provide in the library. 12.5% are not satisfied with the internet services. 12.5 are not sure satisfied with the internet services. (Table-9.3)
4. The place of frequently use of internet. It was found that majority of the users 37.5 % uses Wi-Fi center, Home 25 % and 25 % library. Outside internet cafe used 12.5 %. (Table-9.4)
5. The use of internet, it was found that majority of the users 62.5% uses every day. 2 to 3 time in week 25% and occasionally used 12.5%. (Table-9.5)
6. The which purpose you are using the internet. More than 37.5% respondent's education purpose using the internet. 25% respondents using research purpose. 25% respondents using communication purpose and 12.5% respondents using entertainment purpose. (Table-9.6)

7. The library services using on internet. It was found that majority of the users 50% uses www (web).email using 37.5% and carrier planning 12.5% library services using on internet. (Table-9.7)
8. The opinion about internet. more than 50% respondents easy to use in internet services. 25% respondents provide more up to date information in internet services. 18.75% respondents less expensive and 6.25% respondent time saving in internet services. (table-9.8)
9. The problem facing by you while using internet. More than 50 % respondent Slow access/less speed using internet. 25% respondents overloading of server in internet. 12.5% respondent lack of sufficient number of computer and 12.5% respondent it take more time to view/ download the copies. (Table-9.9)
10. Satisfied with internet services total of 50% users are partially satisfied with internet services that provide in the library. 37.5% are fully satisfied with the internet. 12.5% are least satisfied with the internet services. (Table-9.10)
11. The totally of 81.25% users are satisfied with circulation of library book on computer. 18.75% are not satisfied with the circulation of library book on computer. (table-9.11)
12. The answering your reference queries, library staff searches. More than 50% respondents used to printed sources. 37.5% respondents used both and 12.5% respondents used online/ digital sources. (table-9.12)
13. 13. the totally of 37.5 % user are uncertain with library staff in providing IT based services. 25% are agree with IT based providing services. 18.75% are strongly disagree IT based providing services. 12.5 % disagree and 6.25% user are strongly satisfied with IT based providing the services. (table-13)

11. Suggestions

The following suggestion has been given on the basis of the analysis and interpretation of the data and the suggestion given by the respondents. In this section an attempt has been made to list the suggestions for improvement and the development of IT application use in library, etc.

1. Slow downloading problems in engineering library can be solved acquiring integrate services digital networks line for higher speed connectivity.
2. New digital environment the existing rare and valuable documents should be digitized in a phased manner for preservation and for future use.
3. Engineering library professionals should get wide varied user education programmes for maximum utilization of Information Communication Technology based library facilities and services.
4. The Wi-Fi facility its use in your college necessary of internet in your college students.
5. Computer based information its necessity of student and the information its improve the computer based information service in our college.
6. Improved the user satisfaction on IT application in engineering college library

12. CONCLUSION

Since most of the engineering students purpose of library visit for study, to IT based information, gets information to prepare competitive examination and access internet. The library should increase more number of latest subject books, periodicals/ magazines added to requirement of the users. Since most of the library users are not aware with the library collections and services. It is there for suggested that proper user education / library orientation programmers should be provided for the students. IT application easy to access and multi kinds of therapy which can work under trended minds and frayed nerves. Library and information science professional can play a significant role in development IT applications among users.

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