# Information Seeking Behavior Habits of Teachers and Scholars for Use of E-Resources in Engineering College Libraries - A Survey

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Abstract - The study aims to get the information seeking behavior habits of teachers and scholars for use of E-Resources in engineering college libraries of Bangalore region under Visvesvaraya Technological University, Belgaum, Karnataka. The internet and web are constantly influencing the development of scholarly communication work. The teachers and scholars were considered as core group in using the resources to the maximum extent. Ultimately, sufficient computers, adequate facility of internet, audio visual systems, multimedia equipments and e-book readers are considered as tool to access the e-resources at their liberty. The way the developments have taken place in the academic environment particularly in engineering college libraries has changed the Librarian role. This paper will discuss about the facility, technical feasibility and ensures the users opinion about the library staff involvement and co-operation.

*Keywords:* Information Seeking Behavior, Habits, Users, Opinion, Teachers, Scholars, E-Resources, Engineering Colleges, Bangalore Region

#### I. INTRODUCTION

The emergence of information and communication technology has created revolutionary changes in twenty first century. Libraries being the reservoir of knowledge are no exception to adopt the technology change to survive and provide quality services to its users in the academic environment. Consequently, the academic community has undergone tremendous changes and thirst for required information from Library to enhance their knowledge. It is no doubt that, the libraries have witnessed radical changes in recent years both in their collection development and in their service. Information landscape is changing; due to this the libraries have gained momentum. Changes are accepted and libraries started adopting e-versions of information and today they have been referred in various nomenclatures such as e-Library, Digital Library and Virtual Library. This study describes the Information seeking behavior habits of teachers and scholars for e-Resources in engineering college libraries of Bangalore region.

## II. INFORMATION SEEKING BEHAVIOR MEANING AND DEFINITION

The term information seeking behavior (ISB) has been in the research literature since 1950's. Various studies were carried out in this area, with an objective to map the academics information use and preference pattern so as to enhance their information provision. Information seeking is a complex process carried out by human being for their development and cognizant behavior<sup>11</sup>. Information seeking behavior means the manner in which a user conducts himself in relation to a given information environment<sup>11</sup>. Information seeking behavior is used to denote all activities comprising information seeking, information gathering, information receiving and communicating<sup>12</sup>. Information seeking behavior refers to the information needs, use patterns and various modes of locating and searching information, evaluation and use of information by the user community.

ISB is broadly defined as the field composed of studies that are concerned with who needs what kind of information and for what reason; ho information is found, evaluated and used; and how these needs can be identified and satisfied<sup>10</sup>. David Ellis in the International Encyclopedia of Information and Library Science defines ISB as the complex patterns of actions and interactions that people engage in when seeking information of whether kind for whatever purpose<sup>15</sup>.

### **III. OBJECTIVES OF THE STUDY**

The key objective of the study is to investigate the Information seeking behavior habits of teachers and scholars. The behavior of academicians in electronic environment was considered important. This study was undertaken to assess the behavior of academicians and the following objectives are considered:

- 1. To study the information seeking behavior habits of teachers and scholars in electronic environment;
- 2. To find out the availability sufficient computer terminals and other facility in engineering college libraries to access e-Resources;
- 3. To assess the availability of e-Book reader and other latest gadgets usage in the Library;
- 4. To know the users opinion about the library staff for their involvement to serve the users.

#### **IV. Relevence And Scope of The Study**

This study aims to find out the information seeking behavior habits of teachers and scholars for use of e-Resources in engineering colleges. Hence, it was felt appropriate to take up the study on information seeking behavior habits of teachers and scholars for use of e-Resources in engineering colleges of Bangalore region of Visvesvaraya Technological University, Belgaum, Karnataka. This study was undertaken to assess the information seeking behavior habits of teachers and scholars for use of e- resources in electronic environment.

#### V. EARLIER STUDIES

The academic and the everyday: Investigating the overlap in mature undergraduates information seeking behaviors by Given, L, M.  $(2002)^1$  stated that, mature students information needs are made all the more complex by the great variety of competing activities in which they

engage (e.g., parenting and volunteering). To manage their time effectively, these everyday activities become overlaps become tightly interwoven with academic work. By examining the overlaps between individuals everyday and other life contexts, researchers, educators, and librarians may paint a more holistic picture of individual's informational activities. Information behaviors cannot be purely defined by the situation but must also take account of other areas of individuals live that help to inform situational contexts. It is vital that researchers and information professionals examine and understand these complex information contexts, in order to provide individuals with meaningful informational support. Information-seeking behavior and use of Social science faculty studying stateless nations: A case study by Meho, L. I., & Haas, S, W. (2001)<sup>2</sup> has provided an insight into the information seeking behavior of social science faculty the Kurds. Results shows that, main reason for, or barriers to, the use and nonuse of government information was not due to the faculties knowledge or lack of knowledge about information services and sources but was due to different library collections and services. Although the interdisciplinary character of Kurdish studies is also demonstrated by the scatter and diverse nature of the government information used by the study participants, further research is required to support this claim and discuss its implications on theory and practice As per the argument from Garvey (1979)<sup>13</sup> about why librarians should actively involve themselves in user-related research, communication and information transfer process. He has analyzed the role of librarians and pleads that the sooner the librarians can interact with scientist in the process of communication to fulfill the information service functions. Foskett (1984)<sup>12</sup> has said 'it is not enough for librarians merely to respond to new ways of reacting and disseminating information'. A more creative approach will come from a much greater involvement with both producers and consumers of information.

#### VI. SCOPE, LIMITATIONS AND METHODOLOGY

The scope of the present study possesses certain limitations as the study is limited to the teachers and scholars working in various colleges under Visvesvaraya Technological University in Karnataka only. Faculty members who are teaching undergraduate courses and post graduate courses and research scholars who have undertaken research work as well as teaching were considered for the study as the sample frame. Teachers and scholars working in

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engineering colleges of Bangalore region which comprises of six districts in Karnataka State in India such as Bangalore Rural, Bangalore Urban, Ramanagar, Tumkur, Kolar, and Chikkaballapur were only considered. The total survey population of 866 was taken on the basis of availability of users during the time of the survey. The total number of users surveyed was based on random selection and categorized as Professors, Associate Professors, Assistant Professors and Research scholars working in various departments of the selected engineering colleges under VTU, Karnataka. The data was collected through survey methods with the help of a structured questionnaire. The accessibility and availability issues regarding the information were discussed with the experts, and professors and the questions proposed by them were included in the questionnaires prepared for the final research study. The data collected was analyzed with descriptive statistics methods using SPSS 20 software package and presented in the form of Tables for the goal of a clear understanding of the survey results.

#### VII. DATA ANALYSIS

TABLE I CATEGORY OF	RESPONDENTS
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Designation	No. of Respondents	Percentage
Professor	70	08.00
Associate Professor	134	15.50
Assistant Professor	496	57.50
Others (Research scholar)	166	19.00
Total	866	100

The results of the study reveals that, 496 (57.50%) out of 866 respondents working as teachers in various engineering colleges under Visvesvaraya Technological University in Karnataka state are Assistant Professors and 134 (15.50%) are Associate Professors, 166 (19%) are working in areas like research and only 70 (08%) are Professors.

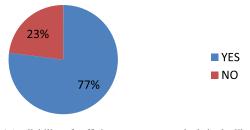


Fig. 1 Availability of sufficient computer terminals in the library to access e-Resources

The analysis of the study indicates that 77% of the engineering college libraries have sufficient number of computer terminals in their college library to access electronic resources while 23% of the college libraries do not have sufficient number of computer terminals in their college library to access electronic resources.

It is observed from the above table that 634 (73%) out of 866 teachers inform that there are adequate internet facilities in their college libraries, 599 (69%) inform that adequate photo copiers and printers are available, 538 (62%) inform that adequate scanners are available, 508 (59%) inform that adequate audio visual systems are available. However 617 (71%) inform that their college library does not have enough digital pen and 527 (61%) of the teachers inform that there are not have enough multimedia equipments.

Adequate facilities in their Library	Very Inadequate	Inadequate	Somewhat Inadequate	Very Adequate	Adequate	Mean	S.D
Internet	140	92	85	204	345	3.60	1.49
Audio visual systems	133	225	150	132	226	3.11	1.436
Computer terminals	119	112	107	214	314	3.57	1.434
Scanners	124	204	154	152	232	3.19	1.422
Digital pen	136	276	205	90	159	2.84	1.327
Printers	116	151	149	183	267	3.39	1.417
Photo copiers	103	164	145	173	281	3.42	1.410
Multimedia equipmen	105	224	198	156	183	3.10	1.327

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Availability of E-Book Reader	No. of Respondents	Percentage
Yes	09	01.00
No	857	99.00
Total	866	100.00

TABLE III AVAILABILITY OF E-BOOK READER IN THE LIBRARY

It is fact from the above table that 857 (99%) out of 866 teachers inform that their library does not have e-book

reader. 664 (77%) teachers inform that the e-resources provided by their college Library is adequate.

Sl. No.	E-resources provided	No. of Respondents	Percentage
1	More than adequate	133	15.00
2	Adequate	531	61.00
3	Inadequate	152	18.00
4	Do not know	50	06.00
5	Total	866	100.00

TABLE IV OPINION ON E-RESOURCES PROVIDED BY THE LIBRARY

Table III reveals that 15%% of the libraries provide more than adequate e-Resources, 61% provide adequate e-Resources, 18% do not provide adequate e-Resources. However, it is not known whether 6% of the engineering college libraries provide adequate e-Resources or not.

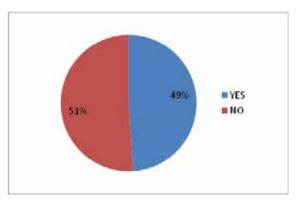


Fig. 2 Orientation/Training Programs to access e-Resources

The above graph indicate that 51% of the libraries have not provided any orientation/training programs to their staffs for using e-resources. 49% of the libraries have given orientation/training programs on how to use e-Resources. The Table V illustrates that 686 (79%) teachers strongly agree that their library staffs help them in a friendly manner and give good co-operation, 672 (78%) teachers strongly agree that their library staffs have willingness to help their

Sl. No.	Staff cooperation		Somewhat disagree	Strongly agree	Somewhat agree	Mean	S.D
1	Immediate response	41	41	638	146	3.03	0.644
2	Cooperation with friendly manners	36	37	686	107	3.00	0.577
3	Willingness to help Users	40	41	672	113	2.99	0.602
4	Provide services On time	32	58	595	181	3.07	0.648
5	Sound knowledge of ICT skills	43	103	484	236	3.05	0.767
6	Communication with users on time	45	68	588	165	3.01	0.691

Sl. No.	Information seeking habits	No. of Respondents	Percentage
1	Conversing with experts	640	74.00
2	Conversing with colleagues	636	73.00
3	E-mailing with colleagues/experts	572	66.00
4	Discussion lists/servers	292	34.00
5	Reading e-mail alerts	476	55.00
6	Scanning Journal titles	450	52.00
7	Reading Articles/books	672	78.00
8	Attending conferences/workshops	624	72.00
9	Searching electronic databases	477	55.00
10	Referring to electronic journals	556	64.00

TABLE VI PREFERRED INFORMATION SEEKING HABITS

users, 638 (74%) teachers strongly agree that library staffs in their colleges respond immediately to their needs., 595(69%) strongly agree that library staffs provide services on time without any delay. 484 (56%) teachers strongly agree that their college library staffs have sound knowledge of ICT skills, and 588 (68%) teachers strongly agree that library staffs communicate well in time with their users.

The data in table VI exhibits that, 672 out of 866 respondents inform that reading books and articles on a particular topic is the best information seeking habits for them. 640 respondents inform that conversing with experts on the topic, for 636 respondents conversing with their colleagues, 624 attending seminars, conferences and workshops. 572 e-mailing with colleagues/experts, 556 referring to electronic journals, 477 searching for electronic databases are the best information seeking habits for them. Only in case of discussion lists/list servers, for 292 respondents is the preferred information seeking habits.

## VIII. RESULTS OF THE STUDY

The preferred ways of information seeking habits confirms that, 78% of the teaching staffs read books and articles as part of preferred way of information seeking habits, 74% of them conversing with experts on the topic, 73% conversing with their colleagues, 72% by attending seminars, conferences and workshops, for 66% of the teachers through e-mail to colleagues/experts, for 64% referring to electronic journals, and for 55% of them searching for electronic databases are the best information seeking behavior habits. Approximately of 34% of the teachers think, discussion lists/list servers is the preferred information seeking habits. 77% (665 out of 866) of the engineering college teachers in Visvesvaraya Technological University have indicated that, sufficient computer terminals and adequate internet facility with required accessories are made available to access e-Resources. 99% (857 out of 866) of the respondents inform that their library does not have e-Book reader where the librarians should take a note of it. Another remark given by the teachers and scholars that 51% of the libraries, have not provided any orientation/training programs to their staffs for using e-Resources.

## **IX.** CONCLUSION & SUGGESTIONS

The study reveals several aspects of information seeking behavior habits of teachers and scholars. The first critical aspect of the study is to focus in providing e-Book reader facility in the Libraries. The second aspect the study signifies the need a prompt attention towards orientation program for teachers and scholars for effective usage. The third important aspect of the study shows that additional facilities like, internet bandwidth, printers, multimedia equipments and scanners are needed for the users. The information landscape is changing swiftly with the progression in technology and prolific growth of electronic resources. Electronic resources promote and advance teaching and learning and also qualitative research. It is no doubt that, e-Resources play an important role in the day to day life

References

- L.M. Given, "The academic and the everyday: Investigating the overlap in mature undergraduates' information-seeking behaviors" *Library & information science research*, Vol. 24, No.1, 2002, pp17-29.
- [2] L.I. Meho and S.W. Haas, "Information-seeking behavior and use of social science faculty studying stateless nations: A case study" in *Library & Information Science Research*, Vol. 23, No.1, pp. 5-25.
- [3] C.S. Chandra Mohan Kumar and J. Domnic, "An users survey on Digital Library services in Engineering colleges at Coimbatore, Tamilnadu" *Asian Journal of Information Science and Technology*, Vol. 2, No.2, 2012, pp.51-53.
- [4] C.S.Chandra Mohan Kumar and J. Domnic, "Library Users Opinion on Book Circulation systems in engineering colleges in Coimbatore, Tamilnadu - A study" *Asian Journal of Information Science and Technology*, Vol. 2, No.2, 2012, pp.59-64.
- [5] A.Nallathambi and M. Kanakaraj, "Use of Information and Communication Technology by the Faculty members of Engineering Colleges in Salem and Namakkal Districts - A study", *Asian Journal* of Information Science and Technology, Vol.2, No.2, 2012, 30-34.
- [6] Rajpurohit Rajpal Singh, "The Use o Electronic Resources at Lachoo Memorial College of Science & Technology, Jodhpur" in Proceedings of National Conference, Trends in Developing & Managing E-resources in Libraries, 2012, pp 491-495.
- [7] Sarita Gulati, "Collection Management: Electronic Resources" in Proceedings of National Conference, Trends in Developing & Managing E-resources in Libraries, 2012, pp 108-112.
- [8] V.M. Bankapur and Sunil Mansur, "E-Resources Collection Development in engineering College Libraries: A Challenge" in Proceedings of National Conference, Trends in Developing & Managing E-resources in Libraries, 25-26 May 2012, pp 67-73.
- [9] M.S. Sridhar, "Information behavior of scientists and engineers: a Case study of Indian Space Technologies, 1995, New Delhi: Concept.
- [10] E. Auster, "Organisational behavior and Information seeking lesions for librarians" in Special Libraries, Vol. 73, No.3, 1982, pp173-182.
- [11] S.Shibu Ray and M.D. Balsy, "Information seeking behavior of the Academics of University Library Environment", IASLIC Bulletin, Vol. 55, No.4, December 2010, pp. 244-256.
- [12] D.J.Foskett, Pathways for communication: books and libraries in the information age. C. Bingley. ISBN 0851573568, 1984.
- [13] W.D. Garvey, W. D,Communication, the essence of science: facilitating information exchange among librarians, scientists, engineers and students. Oxford: Pergamon Press, 1979.
- [14] M.Bavakutty and R.Verghese R, Information Search Pattern in Electronic Environment, Ess Ess; New Delhi, 2007.
- [15] D.Ellis, "Information seeking behavior. In J.Feather and P. Sturges Ed., International Encyclopedia of Information and Library Science. Roultedge; London, 2003, pp 300-301.

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it helps them in preparing for their lectures, consultancy work, research work and for their professional development. College libraries and departments are the preferred place for accessing e-resources. The electronic resources mainly preferred by teachers and scholars in college libraries include e-journals, e-books, online references, library networks, library Websites/EPAC, open access and electronic thesis. From the above results, it is suggested the library managers to facilitate them effectively so as to provide the quality content to their users with convenient way to find and access them properly. Access to e-Resources is becoming important for teachers and scholars in University colleges; therefore libraries should emphasize on the useful e-Resources for their benefit. Today libraries and their users rely heavily on electronic resources and databases for their information needs and requirements, and therefore it is essential that these resources are made accessible to users along with other materials. As the libraries' primary task is to meet the information needs of all users, librarians should aim to bridge the current information gap concerning accessibility of the various electronic resources.

of teachers and scholars working in University colleges as