

Information Use Behaviour of Engineering Students: A Case Study

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Abstract

Study of information use is an important aspect of understanding the end users' behaviour. This study is aimed at understanding the information use behavior of postgraduate engineering students in an institute of technology. The data for this study was collected through an online survey of 130 postgraduate engineering students belonging to various disciplines. The study reveals the frequency of library visit, the purpose of visiting the library, types of facilities, services and library resources used by the students. Data on strategy for searching documents sources, user's opinion, and user satisfaction with print and e-resources were also collected. The study shows that most of the students are satisfied with library facilities.

Keywords: Engineering Students, Information Behaviour Patterns, Information Use

1. Introduction

Information behaviour is an area of interest to librarians and information scientists⁶. It is concerned with the kind of information sought, for what reason, how information is searched, evaluated and used, how these needs can be identified, etc. Studies of information behaviour date back to 1940s when Dr. J. D. Bernal made a study. Since then a good number of studies have been carried out on different aspects of information behaviour³. King defined information seeking as the "manner in which a user conducts himself in relation to a given information environment. Therefore, it is regarded as essentially as process of interaction between the user and the rest of the information system⁷.

The use of information is complex that there cannot be a simple system to manage the task for searching information without assessing the specific requirements or needs of the users. Information behaviour is concerned with how an individual or a library and information system user chooses sources of information among many, that best suits his needs, requirements, and purposes⁵.

Information has been growing at a rapid rate and

so is the diversity of information resources¹. There have been changes in information seeking behavior with the advent of technology and usage of information and communication technology services in libraries. This has to lead to a complex situation and it has become difficult for an institution library to understand the way information is sought. A study has observed that there is a close link between information producing and information seeking behaviour. The reason why most information systems are not well accepted is that they fail to provide linkage between these two activities⁴.

In this study an attempt has been made to examine the behaviour of post-graduate students of an established technological institute in Bengaluru that runs both undergraduate and postgraduate programs in engineering. The study is particularly aimed at seeing if there is any pattern in the use behaviour of students. The method adopted was the administration of a questionnaire comprising queries, the responses to which could indicate information use behaviour of students, factors of library resource usage, in nature and type of library assistance that is sought, and essential user education needed to achieve optimal use of the library and its services.

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2. Methodology

The study employed a questionnaire as the data collection tool. Relevant questions were framed to elicit required information that reflected seeking behaviour, the utility of library, purposes of the seeker’s visits for the library including a few queries that could yield levels of their overall satisfaction in the process of satisfaction of library services.

A pilot survey was carried out by randomly administering a questionnaire to about 25% of postgraduate students who visited the library. The preliminary analysis carried out gave the opportunity to modify the questionnaire to obtain pointed information to serve the objectives of the study. The modified questionnaire was administered to 130 postgraduate students belonging to different branches of engineering. Additionally students who were administered the questionnaire were also briefed about the objectives of the study. In all out of 130 postgraduate students 112 students returned filled-in questionnaires that were taken up for analysis.

3. Data Analysis and Findings

The survey collected data on various demographic parameters like; age, the gender of respondents. Most of the students were in the age group of 22-30. It was assumed that there will be no significant difference between male and female students in so far as academic information seeking and use is concerned. So, the data on these parameters are not presented in the tables, and the study would directly present the data on use and information seeking by the respondents, i.e. postgraduate students.

The reasons why postgraduate students visited the library are as follows:

- 48% of postgraduate students came to the library purely for academic purposes – like reading textbooks, consulting reference and borrowing the books. About 29% of students visited the library to use internet facilities and to watch NPTEL videos; 16% of students availed reprographic and binding services provided by the library 7% of students visited just to read / browse newspapers and magazines.
- In response to another query 55% of postgraduate students preferred to study inside library in the afternoons between 12 noon and 4 pm; followed 24% of postgraduate students preferring to study in the library between 4-7 pm and almost same proportion of students preferring forenoon 8-12 noon (21%).

- The library has OPAC in place and the staffs are well trained to provide necessary information about library resources. However, the present survey indicated that only 37% of respondents relied on library staff for their information needs. Similarly, about 39% of the students get information from their friends and faculty; 24% of respondents indicated that they use google and other online websites for obtaining required information. It is important for the library to adopt strategies to maximize the use of library resources and services. However, when in need of a specific document, the entire user community relied on the library. About 60% of the users indicated that they would request via E-mail the library to provide the required document; the rest mentioned that they personally visit the library to get the document or to place a request for the document.

The administered questionnaire had four specific questions about library resource usage. The data is presented in Table 1.

Table 1. Usage of library resources and services

Sl. No.	Description	1 to 10
1.	How many articles have you re-requested through email in the year?	65%
2.	How many Textbooks have you borrowed in the year?	70%
3.	How many Reference books have you referred ad in the library in the year?	85%
4.	How many online journals have you read in the library in the year?	81%

Table 2. Frequently used e-journal portals

Sl. No	Which of the e-journal portal do you use frequently?	% age
1.	IEEE	45%
2.	Science Direct	25%
3.	Springer	17%
4.	Taylor and Francis	10%
5.	None	3%
	Total	100

The figures appear to suggest extensive use of reference books indicating that the collection is of good quality.

The library also subscribes to a number of e-journals through consortium. To identify the most popular e-journal portal user responses were sought. The data is presented in Table 2. It is seen that a majority of students frequently used IEEE e-journal portal (45%) followed by science direct portal (25%). The springer portal is also visited by a small number of students (17%).

This is natural considering that the respondents are students of different branches of engineering.

Training in the use of the library and its resources plays an important part in users' information behaviour. User education and orientation is considered an important function of any library. In response to a query on the type of programmed sought by users, the respondents to the survey made the following suggestions (Table 3).

Table 3. Training need on use of library resources

Sl. No.	What type of training in Library resources use do you prefer?	% age
1.	Training classes	17.86
2.	One-on-one consultation with Librarians	17.86
3.	Online tutorials	33.03
4.	Booklets	29.47
5.	Not required	1.78
	Total	100

It reveals that most of the students prefer online tutorials to know about use of library resources (33%); about 30% of users suggested that the library should bring out a brochure and 17.86% prefer one-on-one consultation with library staff; only about 2% say training is not required.

4. Suggestions

This study is primarily intended to see if students of

engineering continue to use the physical library even in the present Internet age when many resources are available on the Web. The study does suggest that a significant proportion of students continue to depend on the library not only for using the resources physically available in the library but also to make use of online resources. It is important for our academic libraries to promote the idea that the campus library is not merely for accessing resources, but is a meeting place for students and faculty to discuss, exchange ideas and to get exposure to new ideas. Recognizing this many academic libraries in the developed countries have planned and set up space for group discussions within the library. New library building plans have accommodated this concept. It is important for academic libraries in India too add such features.

5. References

- Hilbert M. (2012). How much information is there in the "information society"? *Significance*. 9(4):8–12. Crossref.
- Krikelas J. (1983). Information-seeking behaviour: A pattern and concept, *Library Quarterly*. 19(2):5–20.
- Mahajan P. (2011). Information use pattern: A survey of TS Central State Library, Chandigarh, *International Journal of Information Dissemination and Technology*. 1(3):180. Retrieved from: <http://search.proquest.com/openview/0571088cb383aa83625b4eb5a2b25f6a/1?pq-orig-site=gscholar>.
- Mick CK. (1980). Towards usable user studies, *JALIS*. 31(5):347–50. Crossref.
- Reddy S. and Karisiddappa CR. (1997). Information seeking behaviour of the professionals in the field of disabilities with special reference to mental handicap in India, *Annals of Library Science and Documentation*. 44(2):54–64.
- Siddiqui S. (2011). Information seeking behaviour of B.Tech and M.B.B.S. students in Lucknow: A comparative study, *55 International Research: Journal of Library and Information Science*. 1(1).
- King DW., Casto J. and Jones H. (1994). *Communication by engineers: A literature review of engineers' information needs, seeking processes, and use*. Washington, DC: Council on Library Resources.