

Information Seeking and Usage in Digital Environment

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ABSTRACT

Libraries are facing new challenges, and new technologies have facilitated the transformation of data into digital format. A library researcher has the facility of having 24/7 access to information in whatever format they require. In this changing environment, the information usage pattern of the clientele has taken new dimensions. The present study is an attempt to analyse the information seeking and usage pattern of the clientele of a University Library with Madurai Kamaraj University Library as a case study.

Keywords: Digital format; Information usage; Madurai Kamaraj University Library.

INTRODUCTION

The twenty-first century is remarkable for the internet-based information services which will have a lasting impact on publishing. The impact is clear by the increasing number of publishers – both commercial and private, as well as individuals. The publishers are using the Internet as a global means to offer their publications and writings to the international community of scientists and technologists, as well as students, the interested layman, and, indeed, the public at large. With the advent of globalization in the realm of education, there has been an information explosion - the driving force for the emergence of electronic journals which are made available in digital formats, online, and whose contents may or may not be peer reviewed. Most of the science and technology libraries have changed their

contemporary outlooks and the library environment is rapidly changing to an electronic one and the use of e-journals is the most popular source of undertaking research.

OBJECTIVES

- To identify the extent of use of Internet by the students and scholars
- To identify the search engines preferred by the students and scholars
- To determine the common purposes of using Internet
- To find out the purpose of using e-journal services
- To identify problems faced by the research scholars while using e- journals;
- To find out the effectiveness of e-journals

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Review of Literature

User studies continue to be an important area of library research, as studying the information-seeking behavior of specific user groups has contributed to the development of a variety of library services. Many research studies on the information-seeking and

information-use pattern are found in the literature of library and information science. The Internet and other modern facilities particularly in this discipline gained ground in the new millennium. The following review of literature published during the last few years is sufficient to understand the usage pattern and behavior of users towards modern electronic information technology. The review covers surveys of researchers, faculty, and students from all disciplines throughout the world.

Bates[1] found that most humanities scholars made little use of online databases. Scholars appreciated that the databases covered many topics, but complained about the difficulty of their search language and the lack of availability of desired resources. It is interesting to note that scholars regarded themselves as experts in their subjects and did not expect to learn anything new from the databases. McCann[2] (1997) surveyed 58 faculty members of 16 humanities and social sciences departments at the University of South California to explore the academic use of electronic publications. A total of 63 per cent indicated some use of electronic publications while 74 per cent indicated they believed electronic publications would be important to their fields in the next five years.

A ten-year longitudinal study of a group of humanists, by Wiberley and Jones[1] (2000), revealed that the senior scholars adopted new technology at a slow pace. "They normally began with the OPAC in their home library; then adopted word processing; next, while on administrative assignment, became regular e-mail users; and finally, did their own searches on bibliographic databases." On the other hand, younger scholars adopted electronic information technology more readily than older ones.

In a survey of 48 Fine Arts faculty at Texas Tech University, Reed and Tanner[1] (2001) found that the faculty continued to use the familiar paper products even when remote access to the electronic version of the same product was available. Most of them considered books (75 per cent) important for

their research as compared to electronic databases (20 per cent). The primary information sources were libraries (90 per cent), personal library (81 per cent), colleagues (69 per cent), internet (65 per cent), and bookstores (44 per cent).

Rose[5] (2002) studied the technology's impact on the art historians' information-use pattern. It was found that print and electronic journals, when available, were a regularly used resource by 40 per cent respondents. The computer was mostly used for e-mail, CD-ROM, drawing programs for making maps and plans, material analysis, and storing images. Respondents also mentioned online catalogs as a valuable source for locating information.

Baljinder Kaur and Rama Verma¹ attempted to describe the use of electronic resources and services provided at the central library of Indian Institute of Technology, Delhi. They found that awareness among the users motivated them to use e-resources and services of the library. The main users of library e-resources were postgraduates, research scholars and faculty. The maximum numbers of users preferred to use both the formats of the documents, i.e. print as well as electronic, for seeking information. The e-journals were generally used regularly, two-three times a week.

Tibbo[2] (2003) surveyed 700 historians from 68 US universities to explore how they locate primary resource material in the digital age. She found that for many historians, the traditional methodologies for locating primary materials remained the most utilized. Of the total historians, 98 per cent indicated that they found materials by following leads and citations in printed sources. She concluded that there was a need for user education with regard to electronic search methodologies.

Dalton and Charnigo (2004) surveyed 278 historians and found that informal means of locating information, especially references in the works of other scholars and book reviews, continue to be prominent. Browsing is still important. Print remains the principal format of the information used. But at the same time,

most of the historians also use electronic sources. Most of the previous studies reveal that the use of electronic information is on the increase.

METHODOLOGY

The survey method was used to collect primary data in this research investigation. Primary data was collected by the distribution of self-administered questionnaires to 50 clientele of the digital division of Dr.T.P.M. Library, selected at random. Each and every respondent was personally interviewed to collect the relevant information. The data thus collected is tabulated to show useful results.

Data Analysis and Research Findings

Questionnaires were distributed to about 50 respondents, of which 41 responded fully. Among the respondents, 41.46 per cent were PG students and 36.59 per cent were M.Phil scholars, the details of which are presented in Table 1. Since the research scholars had the Internet facility within their departments, there were few respondents in this category.

Table I. Frequency distribution of respondents by course

Course	Respondents	Percent
PG	17	41.46
M.Phil	15	36.59
Ph.D	9	21.95
Total	41	100

An observation of the clientele visiting the digital division of the Library indicated that they sought academic information using the common search engines like Google, Yahoo, Alta Vista. Though there are a number of search engines, these are the common search engines preferred by the Internet users. Majority of the scholars used Google for getting information (70.73%). Though the second

Table 2. Frequency Distribution of Respondents by search engine preferred

Course	Respondents	Percent
Google	29	70.73
Google & Yahoo	10	24.39
Google , Yahoo & Alta Vista	2	4.88
Total	41	100

ranked search engine is yahoo, scholars preferred to use both Google and Yahoo (24.39%), and this is given in Table 2.

Need for using Internet - A ten-point programme

Internet has become a common gateway for getting any information. Knowledge about using the Internet has become the breathing air for all. Therefore, the human society has attained a stage wherein man cannot survive without Internet. The main purpose of using Internet is e-mail. The common academic purposes of using Internet are

- Searching for information
- Communicating for professional purposes
- Sending and receiving documents
- Getting instructional materials
- Obtaining information regarding meetings and conferences
- Searching information for personal use
- Reading newspapers and magazines
- Downloading software
- Entertaining yourself
- Shopping, browsing, bidding electronically

The scholars and students used Internet facility mainly for searching academic information (87.8%). The other important purposes were getting instructional materials (46.3%) and communicating for academic purposes (34.1%). Here, it is interesting to note that the students and scholars did not use

Table 3. Frequency distribution of respondents by purpose of using Internet

Sl. No.	Course	Respondents	Percent
1	Searching for information	36	87.8
2	Communicating for academic purposes	14	34.1
3	Sending and receiving documents	4	9.7
4	Getting instructional materials for seminars	19	46.3
5	Obtaining information regarding meetings and conferences	7	17
6	Searching information for personal use	7	17
7	Reading newspapers and magazines	0	0
8	Downloading software	4	9.7
9	Entertaining yourself	0	0
10	Shopping, browsing, bidding electronically	0	0

Internet for reading newspapers or entertainment or shopping. This shows that the clientele of the University Library are serious academicians.

All the search engines provide a platform for basic search and advanced search. Basic search uses keyword search in all fields while advanced search uses search in specific fields with option for using Boolean operators. Among the respondents, 41.4% used basic search techniques for getting their required information. There were students

Table 4. Frequency distribution of respondents by search techniques used

Search Techniques	Respondents	Percent
Basic Search	17	41.4
Boolean Search	0	0
Phrase Search	0	0
Field Search	14	34.1
Title field	12	29.2

Table 5. Frequency distribution of respondents views on the benefits of Internet

Benefits of Internet	Respondents	Percent
Time saving	30	75.00
More informative	31	75.61
Learn experience	5	12.20
Easy to use	5	12.20

and scholars who searched information using field search (34.1%) or title field search (29.2%). This shows that most of the students and scholars used advanced search, but they were not familiar with using Boolean operators during their search.

In a traditional library environment, the users have to search the catalogue to locate their required information and get the document that provides information. Now, the Internet simplifies this task and provides information instantly. Nearly 75 per cent of the respondents felt that Internet is time saving and more informative. (Table 5)

Table 7 indicates the opinion of researchers regarding the usefulness of e-journals in their research work. It is observed that 63.41 percent of students and researchers at MKU found e-journals very useful while 26.72 percent expressed their opinion as useful. The analysis further presents that 9.76 percent of users indicated they had no opinion. The results indicate that the degree of usefulness and utility of e-journals is high among the two sets of researchers.

Table 6. Usefulness of e-journals in research work

	Respondents	Percent
Very useful	26	63.41
Useful	10	24.39
Average	4	9.76
Not useful	0	0.00
Cannot say	1	2.44

Table 7. Problems faced while accessing e-journals

	Respondents	Percent
Limited number of computers	30	73.17
Slow downloading	26	63.41
Lack of training	32	78.05
Lack of technical knowledge	34	82.93
Lack of software	12	29.27

Table 8. Impact of e-journals on research works

Impact	Respondents	Percent
Expedite research process	33	80.49
Improve professional competence	27	65.85
Access to current information	23	56.10
Access to wider range of information	30	73.17
Fast access of information	35	85.37

Table 9. Frequency distribution of respondents by their requirement of help from the library staff

Help from Library Staff	Respondents	Percent
Yes	24	58.54
No	17	41.46

The researchers were requested to furnish details regarding the problems faced while accessing e-journals. Table 7 reveals that most of the researchers of MKU (73.17 percent) faced problems because of a limited number of computers. At the same time, 63.42 percent of researchers faced problems of slow downloading. Almost 78 percent believed that the lack of training was an obstacle in using e-journals. Similarly, 82.93 percent of researchers felt a lack of technical knowledge. Only around 30 percent replied that lack of software was a hindrance.

Table 8 shows the impact of e-journals on academic efficiency and research work. The information available in e-journals has proved to be a great asset to many of the researchers (80.49%). 65.85 percent of researchers had improved their professional competence, and 56.10 researchers observed that e-journals gave them current information. Approximately 73.17 percent researchers believed they had access to a wider range of information and 85.37 percent opined that e-journals provided faster access of information.

The students and scholars got guidance from the library staff (58.54%). This shows that only 40 per cent of the students and scholars were experts in using the Internet for accessing information.

CONCLUSION AND RECOMMENDATIONS

The results of this study reveal that Internet has a great impact on the information-seeking behavior of the students and scholars of Madurai Kamaraj University. Although, they still stick to the print resources, they do pay good attention electronic technology. They face many problems in retrieving and using electronic facilities, but they perceive that their work has become easier with technology. To improve the provision of modern information technology for students and scholars of Madurai Kamaraj University, it is suggested that more computers have to be provided in the University Library. Information literacy programmes must be conducted on periodical basis. Training programmes have to be conducted in using and culling out information from the Internet. The ICT revolution has enhanced the role of librarians as intermediaries. Thus librarians working in University libraries should also enhance their skills in providing information to the users.

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