

## Information searching habits of Internet users: A users' study of Banaras Hindu University

Mohd Nazim<sup>a</sup> and Sanjiv Saraf<sup>b</sup>

<sup>a</sup>Assistant Librarian, Banaras Hindu University, Varanasi-221005, E-mail: nazim@bhu.ac.in

<sup>b</sup>Deputy Librarian, Banaras Hindu University, Varanasi-221005, E-mail: gyanshrisanjiv@rediffmail.com

The study reports the results of a survey conducted at Banaras Hindu University (BHU) to determine the extent to which Internet users are aware and make use of the Internet. Efforts are on to find the information searching habits of Internet users. Data were collected using a questionnaire and follow-up interviews with the Internet users of three institutes and six faculties. Results show that all respondents are using Internet because of quality information they got through the Internet. Majority of respondents use Internet for research work because the university library has provided access to a large number of databases and online journals. Fifty percent of respondents search information through the search engines, whereas thirty-five percent prefer to go through the specific website/URL. Google and Altavista are more widely used search engines compared to others due to their wide coverage and user-friendly interface. About seventy percent of respondents prefer to take print out before making use of Internet material as compared to those who prefer online or CD. Thirty-five percent of respondents believe that Internet is most useful because they find valuable information all the time. It has also been observed that slow speed, high Internet charges, lack of training and lack of organized information are some of the factors that affect the use of Internet. Presents recommendations to improve the use of Internet, including a well planned Internet literacy program and preparation of subject gateways.

### Introduction

For hundreds of years, printed information sources have been used either by users purchasing them, or by using them through libraries. The situation began to change about four decades ago with the introduction of computers in information handling, and there has been a dramatic change over the past few years. 'Recent developments in information and communication technologies, especially the Internet and the web, have brought significant changes in the ways we generate, store, access and make use of information'<sup>1</sup>. The Internet, a collection of interlinked computer networks or a network of networks, enables access to information resources and supports learning and teaching in the academic environment. 'Use of Internet to support learning and teaching is growing exponentially, as more and more educational organizations are recognizing the potential that it offers'<sup>2</sup>. Over the years, sources of information and other opportunities available via the Internet have been increasing exponentially and various programs have been developed for using Internet. With the development of more sophisticated searching tools, it has become easier to obtain information from Internet.

In addition to providing access to readily available information, the Internet also enables individual users to reach other people and institutions all over the world, and exchange or obtain information. Anyone who has access to the Internet can make use of this network to search for information or to communicate via electronic mail (e-mail), mailing list server, news groups, chat boxes, Wide Area Information Server (WAIS), and the World Wide Web.

The Internet has several electronic libraries ready for users. These libraries consist of various electronic resources, such as electronic books, electronic journals, and electronic reports. 'A new class of digitized documents has been added to the electronic resources category, comprising those documents either originally published in print or other formats and converted into the digital format'<sup>3</sup>. Now most of the popular newspapers and magazines have their e-versions providing full text of news items and feature articles. As a result, it has become difficult to decide about the quality and authenticity of such information available in digital form. In addition, a user or information searcher needs to have basic skills in finding relevant information in the Internet's ocean of information.

Banaras Hindu University (BHU), established in 1916 by Pt. Madanmohan Malviya, is one of the most prestigious central universities of India. The university is situated in the district Varanasi (Kashi) of Uttar Pradesh, with an area of 1300 acres. Another campus of the university is coming up at Barkacha in Mirzapur district, covering an area of 2700 acres. The university consists of fourteen faculties, one Women's College, three Institutes viz., Institute of Agricultural Sciences, Institute of Medical Sciences and Institute of Technology and one hundred twenty four independent departments with the unique distinction of having them all in the same walled campus<sup>4</sup>.

At present BHU, with more than 15,000 students, 1,700 teaching staff, and 8,000 non-teaching staff offers educational services in diverse disciplines of sciences, humanities, social sciences, commerce, law, education, visual arts, performing arts, sanskrit, management, medicine, engineering and technology, agriculture, library and information science, journalism and a large number of Indian and foreign languages<sup>5</sup>.

The university has its own telecommunications setup, a press, a most modern network system, a computer center, and a university library system with a central library at apex; three institute libraries, eight faculty libraries, and twenty-five departmental libraries<sup>6</sup>.

The Internet facility is available for teachers, research scholars and students in the central library, computer centre and some faculties and departments. The present article focuses on the information searching habits of Internet users at BHU, to find out the status of information searching nature.

### **Review of related studies**

Many studies have examined the information searching behavior of Internet users. Singh presented the results of a study on the use of Internet by the librarians in Malaysia<sup>7</sup>. The findings revealed that 90% of the respondents used Internet for work related purposes of which most of the respondents were recent users. Becker found from a study on the Internet use that 90% of the teachers from public and private schools in the U.S. had Internet access<sup>8</sup>. Majority of the teachers (59%) had Internet access at home and a majority of the teachers (68%) used Internet to find information resources for preparing their lessons.

Voorbij examined the use of the Internet amongst students and academicians in the Netherlands<sup>9</sup>. The study revealed that students and academicians faced many problems while searching general, factual, ephemeral or very specific information. Bavakutty and Salih conducted a study at Calicut University, which showed that students, research scholars, and teachers used the Internet primarily for the purpose of study, research and teaching<sup>10</sup>. Mahajan and Patil carried out a study on the purpose of using Internet by research workers at Pune University<sup>11</sup>. They found that researchers used Internet primarily for conducting literature search.

Naushad Ali conducted a study at Aligarh Muslim University, Aligarh<sup>12</sup>. The study showed that more than 50% of the study population was satisfied regarding the timings of the Internet service, but were not satisfied with staff's cooperation, and reservation facility. Majority of the respondents were not happy with the number of nodes available. Laite presented the results of a survey on Internet use of 406 graduate and undergraduate students from Shippensburg University<sup>13</sup>. They found that majority of graduate and undergraduate students used the Internet 1-2 times per week. E-mail was found to be the most used Internet service as hundred percent of the graduates and undergraduate students used it. Chandran conducted a study on use of Internet resources and services in S. V. University, Tirupathi, which showed that more than 56% of respondents used Internet for accessing information<sup>14</sup>. It was found that Web and e-mail services of Internet were used by a majority of the respondents. A survey of use of Internet facility at the Guru Nanak Dev University, Amritsar was conducted by Kaur, which indicated that all respondents used Internet for sending e-mail and 82% for Web browsing<sup>15</sup>. More than 60% of the respondents used Internet for primary information, 38% for secondary and only 15% used it for consulting OPACs.

Kalichman et al conducted a survey on the Internet access and use for health information among people living with HIV-AIDS<sup>16</sup>. They found that majority of people were not aware about the availability of health information on Internet. Spink discussed the changes in Web search trends from 1997 to 2003 that explored how people search the Web<sup>17</sup>. They pointed out some patterns and trends in general Web searching.

Akporido investigated Internet usage patterns in a Nigerian suburban setting - Abraka Delta State<sup>18</sup>.

Findings revealed the personal characteristics of the respondents, different aspects of their internet use such as duration of internet usage access time, motivation for using the Net, search engines employed, internet skills acquisition, frequency of internet use, evaluation of internet information content, problems encountered while using the internet as well as way forward. Badu conducted a study to find the extent of awareness and use of the Internet and its resources by academic staff and postgraduate students of the University of Ghana<sup>19</sup>. The main findings indicate that both staff and students are fully aware of the Internet and most of its services. The study established that e-mail is highly used by both staff and students. Both staff and students found the Internet a very useful resource. The main reason for non-use of the Internet is inadequate training. Both staff and students need appropriate education and training to ensure effective use of the Internet in all their academic pursuits.

A survey of eighty-one users of a cyber café owned and run by the Delta State University, Abraka was conducted by Igun to examine the self reported level of Internet skills<sup>20</sup>. The results showed that 71% of respondents rated their Internet skills between average and very high. 78.8% acquired their Internet skills either online or through teaching by colleagues or friends. World Wide Web (WWW) skills were the most sought after additional skill (73%). Continuing education and self-study were the most preferred ways to acquire new skills. Asemi conducted a survey on the search habits of Internet users at the Medical University of Isfahan (MUI), to find the search requirements related to the use of the Internet information<sup>21</sup>. Results showed that all the respondents were using the Internet frequently because all faculties have provided connection to the Internet. He found that the researchers of MUI were getting quality information through the Internet. Researchers used the Internet in different ways, such as accessing to online journals, downloading software or text, chatting, discussion, E-mail services and for finding related references.

Mahajan conducted a study on Internet use by researchers in Punjab University, Chandigarh, which analyzed the convergence of information and communication technologies as embodied by the Internet which has transformed the present day society into a knowledge society<sup>22</sup>. It was stated that the Internet is considered to be the most valuable among other computer technologies available to the society.

### Objectives of the present study

The rapid growth of Internet in the BHU has necessitated a need of users' study on searching habits and problems related Internet services. The objectives of the study are the following:

- 1 To find out the availability of the Internet services in BHU;
- 2 To find out the extent of use of the Internet and its resources at BHU;
- 3 To understand about the search tools of the BHU Internet users; and
- 4 To identify the problems faced by the Internet users.

### Scope and research methodology

The study was limited to post graduate students and research scholars of the three institutes, and six out of the fourteen faculties on the campus of the university as follows:

- 1 Institute of Agricultural Sciences (IAS)
- 2 Institute of Medical Sciences (IMS)
- 3 Institute of Technology (IT)
- 4 Faculty of Arts (FA)
- 5 Faculty of Commerce (FC)
- 6 Faculty of Law (FL)
- 7 Faculty of Management Studies (FMS)
- 8 Faculty of Sciences (FS)
- 9 Faculty of Social Sciences (FSS)

A questionnaire was designed and distributed to 315 respondents of the above-mentioned institutes and faculties. The sample for this study was drawn through random selection method. To find out the real users and non-users of the Internet, a questionnaire was distributed among the selected sample in the institutes and faculties covered. All the respondents selected as sample were familiar with the computer and the Internet.

### Analyses and results

#### Response rate

There was high response rate to the questionnaires administered to the students as well as research scholars as shown in Table 1.

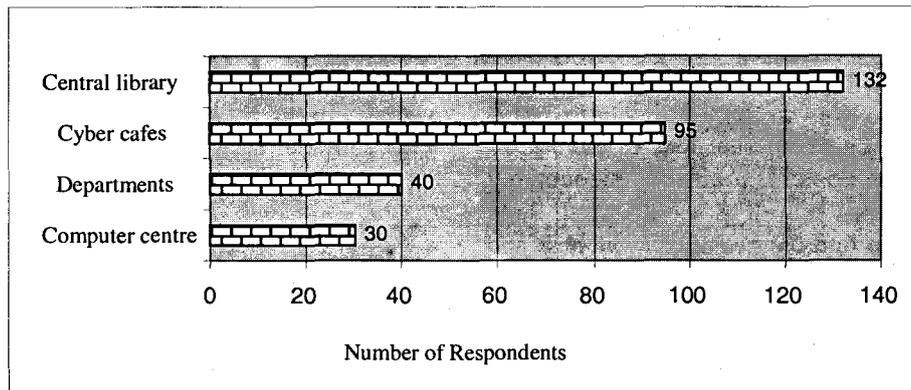


Figure 1 – Internet access

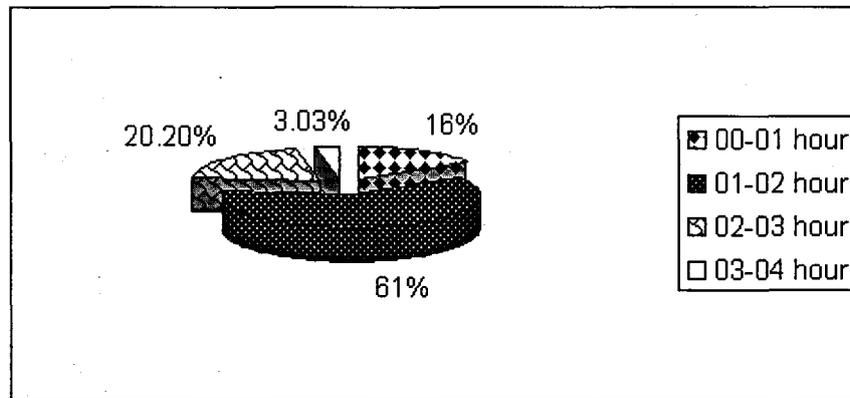


Figure 2 – Time spent on Internet

**Internet access**

The users of all the institutes/ faculties under study have access to the Internet through the central library, computer centre and departments. Hence, they were asked to indicate the location from which they prefer to access the Internet. As shown in Figure 1, 132 respondents (44.44%) access the Internet from the central library. Ninety five (31.98%) respondents access it at cyber cafes, 40 (13.46%) respondents at concerned departments and 30 (10.10%) access it through the facility in the computer center. This shows that the central library is the preferred location for accessing the Internet.

**Time spent on the Internet each day**

Figure 2 shows that majority of respondents (61%) access Internet for at least two hours a day. Only about

Table 1 - Institute/ Faculty-wise response from the Internet users

Institutes/Faculties	Questionnaires distributed	Responses received
Institute of Agricultural Sciences	50	48
Institute of Medical Sciences	50	47
Institute of Technology	50	50
Faculty of Arts	25	23
Faculty of Commerce	30	28
Faculty of Law	30	23
Faculty of Management Studies	30	30
Faculty of Sciences	25	24
Faculty of Social Sciences	25	24
<b>Total</b>	<b>315</b>	<b>297</b>

Table 2 - Information searches on the Internet

Kind of information	No. of respondents	Preference %
Research information	297	100
General (travel, tour, weather, etc)	61	20.53
Other (News, movies songs, etc)	35	17.78

3% respondents were found spending more than three hours on the Internet a day.

#### Information searches on the Internet

Information was gathered from the respondents to see the kind of information they search on the Internet. As shown in Table 2, all the respondents reported searching research information through the Internet. In addition to the research information, 20.53% respondents use Internet for general kind of information such as travel, tourism weather, etc., and 11.78% respondents search information on other aspects such as news, songs and movies. It was also found that about 75% users browse online journals on the Internet.

#### Search engines

It was found from the study that 50% of the users search for information using search engines and 30% search for information on specific websites by accessing it directly through the site's URL. The findings also revealed that Google and Altavista are the most popular and widely used search engines among Internet users as 163 (54.88%) and 65 (21.88%) respondents respectively reported using these search engines. Yahoo, HotBot and Scirus were used by 15%, 4% and 3.78% respondents respectively.

#### Quality of Internet information

With the availability of enormous information through the Internet, it has become difficult to decide about the quality and authenticity of the information. To the question on the quality of information on the Internet, majority of respondents (59.93%) believed that the quality of information available on the Internet was good and 71 (23.90%) respondents stated that Internet provided excellent information. However, 48 (16.16%) respondents were not satisfied as they reported that quality of information available through the Internet was average.

Table 3 - Problems faced by Internet users

Problems	Number of respondents	%
Internet access is slow	133	44.78
Lack of training	77	25.92
Internet charges are high	62	20.87
Lack of organized information	58	19.52
Irrelevant information	35	11.78
Lack of quality information	29	9.76
Changes in URL	23	7.74

#### Problems with the Internet

Though Internet has become a common information source among the academic and research community, 75% of the users of BHU stated that there are obstacles that come in the way when they use it. The specific problems faced by the users are given in Table 3.

#### Internet training

Adams and Bonk in a study found that the most common obstacle for the Internet users was their lack of knowledge about what was available and they argued for identifying alternatives to classes for the delivery of Internet training<sup>23</sup>. Though BHU has not provided any formal training for Internet search, 15.4% respondents have stated that they have received training and 82.4% respondents stated that they have not undergone any training for Internet search. To a further question as to whether they would like to receive training, 42.4% responded said that they did not want any training and 57.5% replied in the affirmative.

#### Conclusion

The present study corroborates the findings of similar studies in that Internet has become an indispensable information source of the academic community. To further enhance Internet usage at BHU, the number of computers with Internet connection needs to be increased especially in the central library considering the fact that majority of the users prefer to access the internet from the central library. Internet searching should be made free of charge and the library professionals on the campus must take initiatives to enhance the searching skills of the users.

## References

- 1 Chowdhury G G and Chowdhury S C, Introduction to digital libraries. 2003. Facet Publishing: London.p1.
- 2 Nazim M and Chowdhary A H, Services using Internet and Intranet technology. 49<sup>th</sup> All India Library Association Conference 2004: Responding to Users' Need in Changing Information Landscape from Palm-leaf to Palmtop, 29 December 2003 to 01 January 2004, Jhansi: Bundelkhand University.
- 3 Spink A, Bateman J and Jansen B J, Searching the Web: a survey of EXCITE users, *Internet Research: Electronic Networking Applications and Policy*, 9 (2) (1999) 117-12.
- 4 <http://202.107.14/bhulibrary/history.htm>
- 5 Know your Library: BHU library and its information resources. Central Library. BHU, Baranasi.2005.p1
- 6 BHU Annual report, 2000-01.p91.
- 7 Singh D, The use of Internet among Malaysian librarians, *Malaysian Journal of Library and Information Sciences*, 3 (2) (1998) 1-10.
- 8 Becker H J, Internet use by teachers. Available at: <http://www.crito.uci.edu/TLC/findings/Internet-Use/startpage.html>
- 9 Voorbij H, Searching for scientific information on the Internet: A Dutch academic user survey. *Journal of the American Society for Information Science*, 50, 7; 1999; 598-615.
- 10 Bavakutty M, and Salih Muhamad T K, Internet services in Calicut University. *National Convention Academic Libraries in the Internet Era*. Organized by INFLIBNET, 18-20 February 1999, Ahemdabad, p.37-44.
- 11 Mahajan S G, and Patil S K, Internet: Its use in university libraries in India. *National Convention Academic Libraries in the Internet Era*. Organized by INFLIBNET, 18-20 February 1999, Ahemdabad, p.483-488.
- 12 Naushad Ali P M, Internet and its use in Aligarh Muslim University: A survey. *Conference on Information Services in a Networked Environment in India*. Organized by INFLIBNET, 18-20 December 2000, Ahemdabad, p.1.78-1.82.
- 13 Laite B, Internet use survey: analysis. Available at: <http://www.ship.edu/~bhl/survey/>
- 14 Chandran D, Use of Internet resources and services in S. V. University, Tirupathi environment. *Conference on Information Services in a Networked Environment in India*. Organized by INFLIBNET, 18-20 December 2000, Ahemdabad, p.3.124-3.127.
- 15 Kaur A, Internet facility at GNDU: A survey. *National Seminar on Academic Libraries in the Modern Era*, Organized by IASLIC, 4-6 December 2000, Bhopal, p. 119-124.
- 16 Kalichman S C, Weinhardt L, Benotsch E, Difonzo K, Luke W and Austin J, Internet access and Internet use for health information among people living with HIV-AIDS, *Patient Education and Counseling*, 46 (2) (2002) 109-116.
- 17 Spink A and Jansen B, A study of Web search trends, *Webology*, 1 (2) (2004). Available at <http://www.webology.ir/2004/v1n2/a4.html>
- 18 Akporido C E, Internet use in a Nigerian suburban setting, *Electronic Library*, 23 (3) (2005) 302-310.
- 19 Badu E E, Internet awareness and use in the University of Ghana, *Information Development*, 21 (4) (2005) 260-268.
- 20 Igun S E, Users and Internet Skills: A Report from Delta State University, Abraka, Nigeria, *Electronic Journal of Academic & Special Librarianship*, 6 (3) (2005) 5-15.
- 21 Asemi A, Information searching habits of Internet users: A case study on the Medical Sciences University of Isfahan, Iran, *Webology*, 2 (1) (2005), Available at <http://www.webology.ir/2005/v2n1/a10.html>
- 22 Mahajan P, Internet Use by Researchers: a Study of Panjab University, Chandigarh, *Library Philosophy & Practice*, 8 (2) (2005) 1-4.
- 23 Adams J A and Bonk S C, Electronic information technologies and resources: use by university faculty and faculty preferences for related library services, *College & Research Libraries*, 56 (2) (1995) 119-131.