

*Full Length Research Paper*

# **Usage of ICT products and services by faculty members and research scholars of Shobhit University, Meerut, India**

**Jamal Siddiqui**

Shobhit University, Meerut, Uttar Pradesh, India

Accepted 4 December, 2012

---

Information and communication technology (ICT) has transformed library and information services radically globally. The internet has provided universal access to information. This study describes the use of information and communication technologies (ICTs), mainly internet services by the faculty members and research scholars of Shobhit University, Modipuram, Meerut. A well structured 110 questionnaires were distributed among the faculty members and research scholars of Shobhit University in the academic session 2009-2010 to find out the users of ICT product and services. The questionnaires were checked and out of 102 filled questionnaires returned, 95(86.36%) were found fit for analysis and out of which 07(06.36%) were considered unusable. The present study demonstrates and elaborates the various aspects of use of information and communication technologies (ICTs), purpose and frequency of use of ICTs, expertise in use of ICTs, preferred search engines, impact of ICTs on academic efficiency and research works and difficulties faced by users in using ICTs. Suggestions have been given to make the service more beneficial for the academic community of the mentioned university. The paper recommends proper training and guidance for use of ICT-based technologies for the optimum utilization of these services by the users. Shobhit University is situated in the rural area of western part of India where students are not aware about ICT application in library services. The study will provide them with guidelines and procedure regarding the available ICT and its application in information transfer.

**Key words:** Information and communication technologies.

---

## **INTRODUCTION**

Shobhit University aims to create a conducive, enabling academic climate to facilitate integration of the younger generation into the logic of the present system and to develop educational means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. Situated at the heart of the campus, the library is open 16 h a day during semesters and provides you with all the information you need. The surroundings are modern, comfortable and ideal for study and there are reading spaces available for both group-work and quiet study. In order to

enhance seating and stacking capacity, the library has been shifted to a new and spacious building. Numbers of new books have been added to existing stocks taking the number to approximately 40,000 books. Journal strength was enhanced to over 4000 by subscribing to many national and international journals individually and through AICTE-INDEST and DELNET scheme. A repository of over 300,000 journals has been established as a part of e-library. Besides the above, the university has established a virtual-library facility in the premises of the main library. The database of the virtual-library is a

repository of approximately 4, 50,000 e-books on management, pharmaceutical sciences, computer sciences, information technology and electronics. This unique facility is being used by the student community and faculty, and others associated with the university.

### Facilities available in the library

1. Library Membership: Any student/ faculty member who has joined the University can become the member of the Library.
2. Periodical and Newspaper Section: The library holds a very rich collection of relevant periodicals and magazines.
3. Net Lab: Internet facility with a 6 Mbps dedicated leased line is available within the library premises for easy access of information.
4. Reference service: Ready help and guidance is provided to all searching for any book or other reference material within the library.
5. Easy search through software: Students can make easy search of particular title or book in the library with the help of state-of-the-art library software.
6. Xerox facility: for the convenience of staff and students the library has Xerox machines to offer Xerox facility.

### REVIEW OF LITERATURE

A careful review of literature discloses that, many investigations have already been carried out to study the use of Internet and e-resources in India by the faculty members, students and research scholars of different academic institutions from time to time. On the basis of the available literature, the design of the present research was made. Most of the studies reported acceptance of e-resources and services by the users' community and have emphasized on training programmes to make the e-users aware about ever changing tools and techniques of ICT and e-resources. Swain and Panda (2009), in their study, have made a very close watch into accessibility and usability of e-resources by the faculty members of business schools in the states of India and found high preference on the use of e-articles by the users, while the least preference goes to the use of electronic theses and dissertations (ETDs). Gowda and Shivaligaiah (2009) conducted a study of the attitude of research scholars towards usage of electronic information resources of university libraries of Karnataka. The study reveals that e-resources have created a positive hope among the research community in searching information. Singh et al (2009) conducted the study of the use of internet based e-resources at Manipur University. The study reveals that low speed internet access, erratic power supply and lack of required full text journals are problems found in the use of internet based resources. Maharana et al. (2010) conducted a study on the use of internet and e-resources

by the students of Business Management of Sambalpur University, India The investigation result shows that majority of the students (1/3 of them) have a long experience of using Internet for 2 - 4 years and all are more or less aware of the applications of Internet technology. More than half of the students surveyed in the study strongly feel that management study will be severely affected without the use of internet and e-resources. Madhusudhan (2010) conducted a study on the use of electronic resources by research scholars of Kurukshetra University. The main findings of the study of electronic resources have become an integral part of the information needs of research scholars at Kurukshetra University. Further, it finds that e-resources can be good substitutes for conventional resources, if the access is fast, and more computer terminals are installed to provide fast access to e-resources. Google is the most widely used search engine for locating information electronically.

### Scope and limitations of the study

The present study focuses on the usage of ICT products and services by the faculty members and research scholars of Shobhit University, Modipuram, Meerut. Attempts have been made to know the information requirements of faculty members and research scholars. The main focus of this study is to identify the needs and requirements of the faculty members and research scholars in general and Shobhit University Library Internet facilities in particular. The study is confined to Shobhit University Library users.

### Objectives

The objectives of the study are:

1. To find out the level of use and purpose of using various ICT products and services by the faculty members and research scholars of Shobhit University.
2. To know the frequency of use of ICTs and time spent.
3. To find out the level of expertise of users regarding the use of ICTs.
4. To determine how ICT has impacted research work.
5. To know the difficulties faced by the faculty members and research scholars of Shobhit University, Modipuram during access of e-resources.

### METHODOLOGY

This study used questionnaire to collect data from users. A well structured 110 questionnaires were personally distributed among the randomly selected users (faculty members and research scholars) of Shobhit University during the academic session of 2009-2010 to find out the users of ICT product and services The questionnaires were checked and out of 102 filled questionnaires returned 95(86.36%) were found fit for analysis and out of which

**Table 1.** Use of ICT products.

ICT products	Total No. of respondents (n=95)			
	Male(n=63) response	%	Female(n=32) response	%
Computer	58	(92.10)	28	(87.50)
Laptop	11	(17.46)	12	(37.50)
Internet	63	(100)	27	(84.37)
MS-Word	45	(71.43)	22	(68.75)
MS-PowerPoint	32	(50.79)	11	(34.37)
MS-Excel	19	(30.16)	09	(28.12)
Printer	48	(76.19)	18	(56.25)
Scanner	24	(30.10)	10	(31.25)
DVD/CD/Pen Drive	38	(60.32)	17	(53.12)

07(06.36%) were considered unusable. Overall 63 (66.32%) respondents were males and 32(33.68%), females. Data collected from the questionnaires were analyzed using frequency counts and simple percentage.

## RESULT

Respondents were asked to express their level of use of various ICT products for their research work. Table 1 shows that 92.10% male and 87.50% female users use computer for their research work. All male (100%) and female users (84.37 %) use Internet. As far as various application softwares are concerned ,it was found that 71.43% male users use MS Word, 50.79% use MS Power Point, and 30.16%, MS Excel. In comparison 68.75% female users use MS word, 34.37%, MS Power Point and 28.12%, MS Excel. As far as other various ICT products are concerned, it was found that 76.19% male users use printer, 60.32%, DVD/CD/Pen Drive and least number of users (30.10%) only use Scanner (Figure 1). In comparison, 56.25% female users use printers, 53.12%, DVD/CD/Pen Drive and only 31.25% users use Scanner for their respective purposes.

Users were asked to indicate the purpose for which they use various ICT products and services (Figure 2). Table 2 shows that 96.82% male users use them for electronic journals; 93.65%, for e-mail and document exchange and to update knowledge; 87.30%, to locate and collect data; 80.95%, for casual internet surfing; 76.19%, for preparing manuscripts, proposals and papers; 71.43%, for online databases; 69.84%, for preparing presentations, documents; followed by 55.55% for blogging, Web OPAC/OPAC, discussion forums and career development. As far as female users are concerned, 90.62% use ICT products for electronic journals and to update knowledge; 87.50%, for e-mail and document exchange, to locate and collect data and for casual internet surfing; 65.62%, for online databases; 56.25%, for career development; other services are less used. The less used services among both male and

female users were Web OPAC/OPAC, blogging, electronic books and discussion forums. The investigators feel that the users might not have got proper training/ guidance and assistance from the staffs/librarians which are very necessary for the effective use of ICT products and services.

Table 3 shows that 55.25% male and 56.25% female users use internet daily; 22.22 and 18.75% male and female users, for two to three times in a week; and 09.52% male and 12.50% female users, weekly. A few users use it monthly and occasionally.

The investigators asked the users to indicate their overall expertise in handling various types of ICTs (Figure 4). Table 4 shows that only 19.04% male user and 18.76% female users indicated that they are very expert in using ICTs, while 25.40% male and 25.00% female indicated that they are expert users of ICT. 50.79% male and 46.87% female users indicated that they are average users of ICTs. The reasons for less expertise in using ICTs are that a majority of the users do not have a formal knowledge or computer training.

Regarding the use of search engines respondents were asked to indicate multiple answers according to their use. Table 5 shows that 100% users both male as well as female use Google. Besides Google, 85.71% male users also use Yahoo, 25.37%, MSN; and in the case of female users no major differences were found as 56.25% use Yahoo, 12.50%, MSN and least number of male and female users use other search engine like Alta Vista, Excite (Figure 5).

Table 6 shows the impact of ICTs on research works and academic efficiency of the users of the Shobhit University. Majority of male as well as female users were of the view that ICTs have enhanced the access to current information, improved professional competence, access to wider range of information and quick access of information (Figure 6). The users feel that the emergence of ICT has a great impact on every work of research and has improved the quality of research

The difficulties in accessing information using ICTs

**Table 2.** Purpose of using ICT products and services.

Purpose of Using ICT	Total No. of respondents (n=95)			
	Male(n=63) response	(%)	Female(n=32) response	(%)
E-mail and document exchange	59	93.65	28	87.50
Electronic journals	61	96.82	29	90.62
Electronic books	28	44.44	11	34.37
Locate, collect data using Internet	55	87.30	28	87.50
Online databases	45	71.43	21	65.62
For career Development	26	41.27	18	56.25
Preparing presentations, documents	44	69.84	16	50.00
Preparing; manuscripts, proposals, and papers	48	76.19	14	43.75
To update knowledge	59	93.65	29	90.62
Search Web OPAC/OPAC	34	53.97	14	43.75
Discussion Forums	28	44.44	14	43.75
Blogging	35	55.55	11	34.37
Casual Internet Surfing	51	80.95	28	87.50

**Table 3.** Frequency of use of computer and Internet.

Frequency	Total No. of respondents (n=95)			
	Male(n=63) response	(%)	Female(n=32) response	(%)
Daily	35	55.25	18	56.25
2-3 times in a week	14	22.22	06	18.75
Weekly	06	09.52	04	12.50
Monthly	05	07.54	02	06.25
Occasionally	03	04.76	02	06.25

**Table 4.** Expertise in using ICTs.

Level of expertise	Total No. of respondents (n=95)			
	Male(n=63) response	(%)	Female(n=32) response	(%)
Very expert	12	19.04	06	18.76
Expert	16	25.40	08	25.00
Average user	32	50.79	15	46.87
Poor	02	03.17	03	09.37

**Table 5.** Preferred search engines.

Search engines preference	Total No. of respondents (n=95)			
	Male(n=63) response	(%)	Female(n=32) response	(%)
Google	63	100	32	100
MSN	16	25.37	04	12.50
Yahoo!	54	85.71	18	56.25
Alta Vista	04	06.35	02	06.25
Excite	04	06.35	02	06.25

**Table 6.** Impact of ICT on academic efficiency and research work.

Impact of ICT	Total No. of respondents (n=95)			
	Male n=63		Female(n=32)	
	response	(%)	response	(%)
Expedite research process	44	69.84	22	68.75
Improve professional competence	49	77.78	19	59.37
Access to current information	58	92.06	29	90.62
Access to wider range of information	53	84.13	31	96.87
Fast access of information	45	71.43	27	84.37

**Table 7.** Difficulties in accessing information using ICTs product and services.

Details	Total No. of respondents (n=95)			
	Male response	(n=63) (%)	Female(n=32) response	(%)
Lack of knowledge in computer handling	26	41.26	12	37.50
Lack of knowledge in browsing e-journals	22	50.79	16	50.00
Limitations of internet access speed	48	76.19	29	90.62
Limitations of online full- text Journal article	54	85.71	31	96.87
Unfriendly Library staff	25	39.68	08	25.00
Lack of power supply	16	25.39	07	21.87
Untraceable documents	34	53.97	16	50.00

**Table 8.** Requirement of users.

Details of requirement	Total No. of respondents (n=95)			
	Male n=63 response	(%)	Female(n=32) response	(%)
More numbers of computers of latest configuration	43	68.25	19	59.37
Faster Internet Access	61	96.82	29	90.62
E-resources downloading & Printing facilities	34	53.97	18	56.25
Frequent Training facilities for the end users	49	77.78	24	75.00

product and services are shown in Table 7. Limitations of online full- text journal article; limitations of internet access speed and untraceable of the documents are the three major difficulties encountered during accessing information using ICTs product and services by both male and female users of Shobhit University (Figure 7). It can be seen from the analysis that the major difficulties in accessing electronic journals are due to slow speed of Internet connectivity and less number of electronic journals subscribed.

Table 8 shows that major needs of majority of male (96.82%) as well as female (90.62%) users were to increase the speed of internet access speed, followed by frequent training facilities, numbers of computers of latest configuration and E-resources downloading and printing facilities .

## Conclusion

University libraries play a vital role in promoting research

and development of a country. The electronic resources are directly impacting on nature and quality of research across the globe. The present study investigated that a majority of users (faculty members and research scholars) of Shobhit University used a variety of ICT products and services mainly internet services for their academic purposes and research work, as it is helpful in finding information quickly and also helps the users to access, manage, integrate, evaluate, create and communicate information easily. The low speed internet access and not getting proper training/guidance are general problems related to the internet based e-resources and same have been found in this study as well. In addition, limited full text journals are reported. The library should arrange and organize training programmes related to ICT. This study gives a snapshot use of ICTs products and services by faculty members and research scholars at a single university; however, the snapshot makes it clear that most library users use the ICT based services daily for research and development purposes and to access

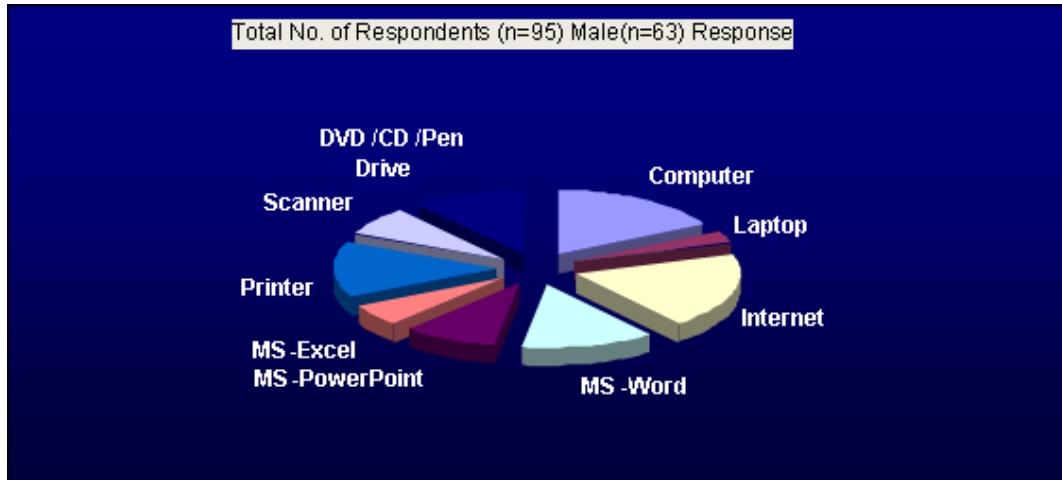


Figure 1. Use of ICT products.

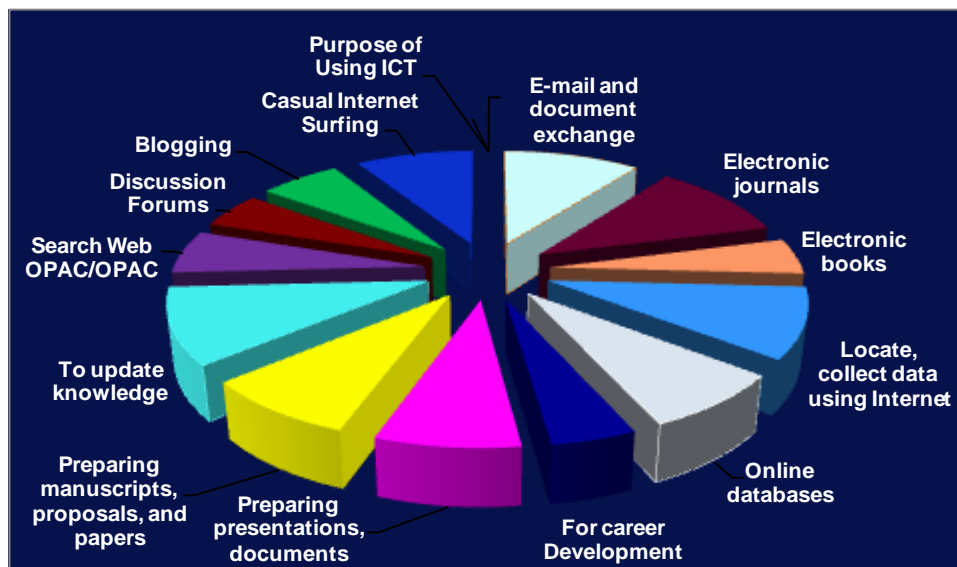


Figure 2. Purpose of using ICT products and services.

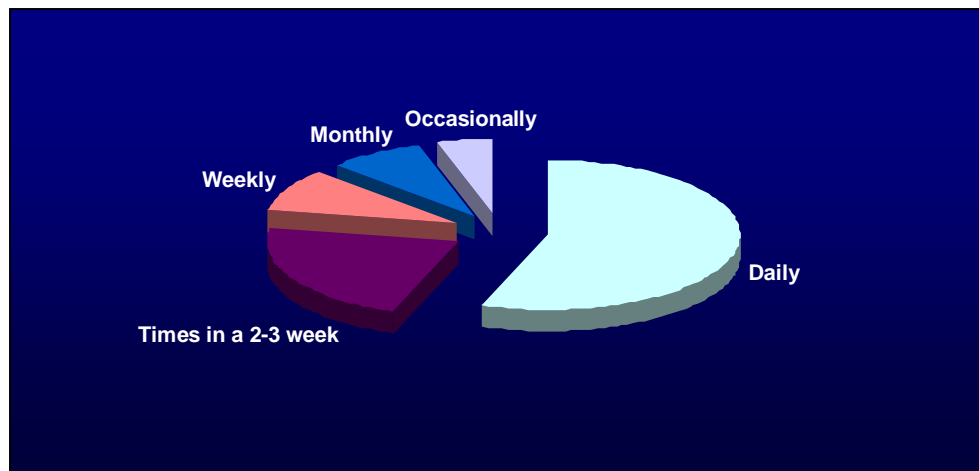


Figure 3. Frequency of use of computer and Internet.

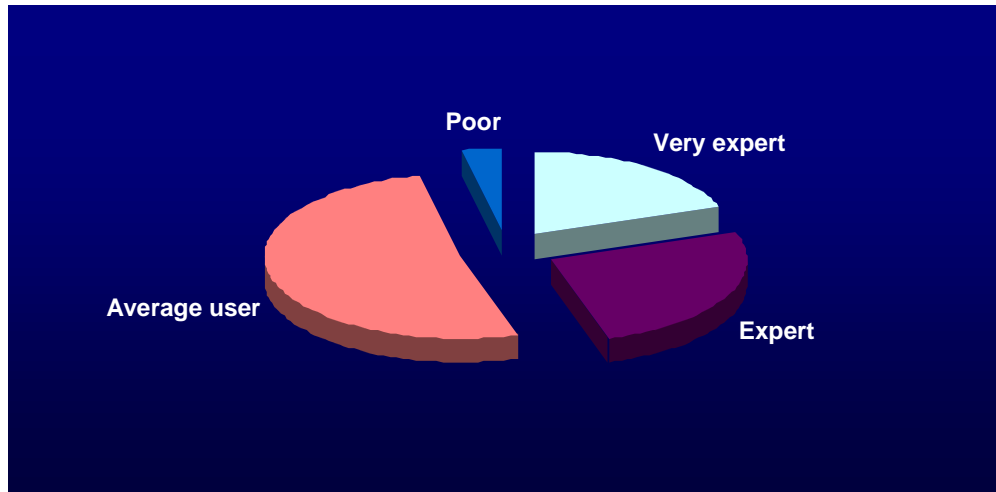


Figure 4. Expertise in using ICTs.

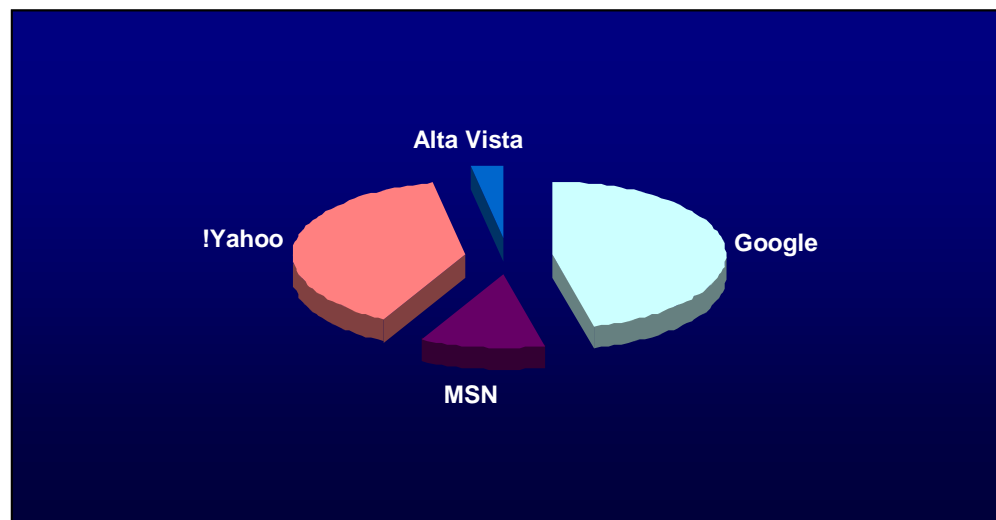


Figure 5. Preferred search engines.

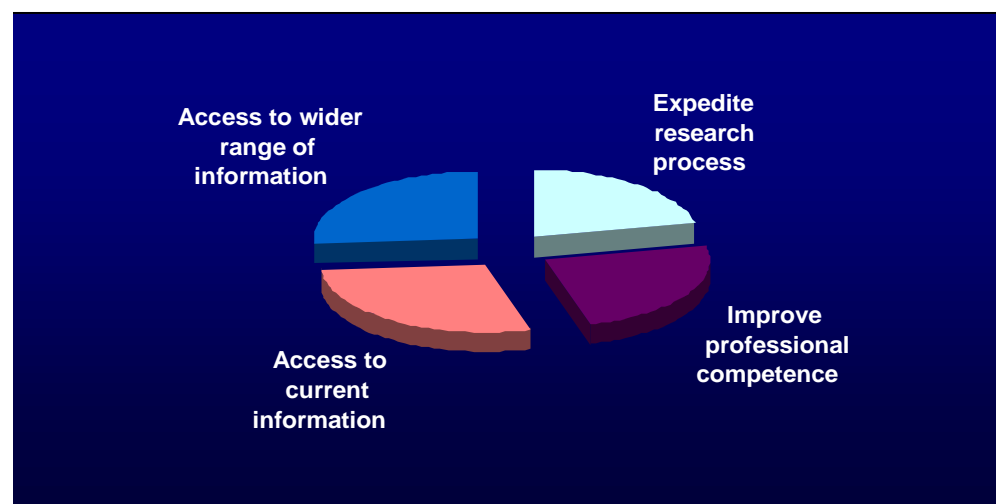
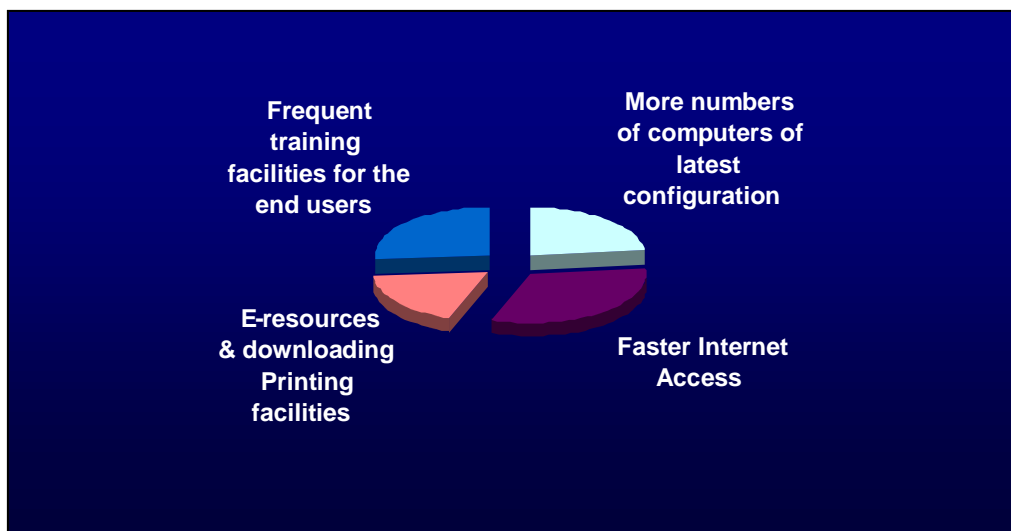


Figure 6. Impact of ICT on academic efficiency and research work.



**Figure 7.** Difficulties in accessing information using ICTs product and services.



**Figure 8.** Requirement of users.

information quickly. The result of the present study will provide a path to the working librarians in various educational institutions established during the last decade and converting the region into educational hub. The professional will try to apply these ICTs in their respective libraries for providing better services.

#### REFERENCES

- Gowda V, Shivaligaiah D (2009). Attitude of research scholars towards usage of electronic information resources: a survey of university libraries in Karnataka. *Ann. Lib. Inform. Stud.* 56(3):184-191.
- Madhusudhan M (2010). "Use of electronic resources by research scholars of Kurukshetra University", *Electr. Libr.* 28(4):492-506. Available at 10.1108/02640471011033684.
- Maharana B, Sethi BB, Behera S (2010). Use of internet and e-resources by the students of business management: A survey of P. G. students of business administration, Sambalpur University, India, *Int. J. Lib. Inform. Sci.* 2(3):45-53.
- Singh RKJ, Devi Th. M, Raychaudhury A (2009). Use of internet based e-resources at Manipur University: a survey. *Ann. Lib. Inform. Stud.* 56(1):52-57.
- Shobhit University [www.shobhituniversity.ac.in/](http://www.shobhituniversity.ac.in/).
- Swain DK, Panda KC (2009). Use of electronic resources in business school libraries of an Indian state: A study of librarians' opinion. *Electron. Lib.* 27(1):74-85.