

INFORMATION COMMUNICATION TECHNOLOGY (ICT) APPLICATION IN LIBRARY SERVICES: AN ANALYTICAL STUDY

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Abstract This article is an effort to examine the use of web-based information and services by research scholars of the universities of Udaipur, Rajasthan. The study enquires into the web-based information services of university libraries that are beneficial to the students. A structured set of questions was framed to examine the satisfaction of respondents for the web-based services offered by the libraries. Analysis performed over the factors, innovations and developments in library services that encourage the research scholars for utilising the library resources, analysis of relationship between relative importance of web-based information and library services and its importance for student satisfaction with the Information Communication Technology services are measured in this article. This article is an effort to evaluate the affirmative side of integration of web-based information and services and how this integration could utmost benefit the students in achieving their academic purposes. The study includes 150 students of 10 different affiliated colleges of MLSU Udaipur. It concludes that web-based information services deliver professional educational development to the students while accessing the library.

Keywords: *Web-Based Information, ICT Application*

INTRODUCTION

Information is an essential resource for any type of research. The university library plays a special role for research scholars. There are many web information services available in university libraries and offered by the college libraries. A library of the technical degree course is like a practice ground for the students to learn and acquire the necessary skills and abilities that their future employer may ask in them. So, it is expected that a library should be well-equipped with several services, which may help a student to develop his knowledge, intellectual abilities, interpersonal and communication skills, etc. Today, the application and integration of information and communication technology (ICT) in every field of education system are governed by the government and the administration of the universities, to cater to the knowledge-based services to students whenever and wherever they require them. This integration is directly linked to the information collected and disseminated by libraries, which defines the quality of teaching/learning process in a college. A library should be equipped with electronic means of information management and library automation system to manage the affairs of the library, like book issuing, book collection, etc. According to S.R. Ranganathan, libraries are not mere store houses, they are

rich springs from which knowledge flows out to irrigate the side field of education and culture, without the help and cooperation of a library no formal educational programmers can successfully fructify. It was recognised during the study that many students do not have proper place for reading at their homes and hostels, so it is essential that the libraries of the colleges should be able to deliver comfortable reading, selective information dissemination, current awareness services, employment information, indexing, internet facilities, digital library services, electronic book facilities, online journal and e-libraries subscription, etc. So modernisation through web-based information is very essential and will definitely deliver the satisfaction among the students as well as for the colleges and universities.

OBJECTIVES OF THE STUDY

The study focuses on examining the satisfaction of students towards web-based information services of MLSU affiliated college libraries in Udaipur, Rajasthan. To fulfil the aim of the study, following objectives have been considered to study the impact of web-based information on student satisfaction for the library services of colleges libraries Udaipur, Rajasthan.

- To understand the current web-based services in university library.
- To identify the frequency of the use of web-based services by research scholars.
- To observe the students' opinion on the ICT application in library services.

COLLEGES OF UDAIPUR

Udaipur is known as the 'Venice of Rajasthan' and is also ranked as Asia's most famous and beautiful visiting place. The education facilities in Udaipur are very good in terms of universities (Mohanlal Sukhadia University, JRN Rajasthan Vidyapeeth, Pacific University, Geetanjali Medical University, Pacific Medical University, Singhania University) operating in the region and a good number of colleges offer different degree courses. At present 35 different institutes are offering technical degree courses that are diploma, degree, post-graduation, Ph.D. etc. There has been a substantial quantitative growth of technical degree institutions towards the promotion and development of technical education in the Udaipur region. Each institution and college has its own library and information centre attached to it, catering the needs of faculty, students and research scholars.

SCOPE OF STUDY

The study investigates the attitudes of students for the web-based services of college libraries in Udaipur. The scope of study is kept limited to 150 students of 10 affiliated colleges that were established before the year 2000 and have well developed libraries and related environments. The study also covers different types of library services and facilities, including computerised library access, digital library facility, internet, e-subscriptions, etc.

RESEARCH METHODOLOGY

In order to collect the feedback of 150 students of college libraries, Questionnaire method was used as a primary data collection method. Questionnaire method is a powerful method to collect the opinion of the respondents. The questions included in the questionnaire administered for the study were classified into seven sections to observe student satisfaction. Questionnaire was designed to obtain data on the use and availability of library services, opinions on subject directories, library networking and consortia, satisfaction with overall library services, information regarding resources and services of their respective college libraries. The study

was limited to 150 students of college libraries. To collect the 150 duly filled questionnaires, 265 questionnaires were distributed among the students, personally via e-mail. So, the percentage analysis between the distributed and collected questionnaire was 56.60%.

DATA ANALYSIS AND FINDINGS

The data collected were analysed and inferences were derived. The results of the study are as under:

Personal Information of Respondents (Students)

The study population of user's age groups, gender, qualification and subject streams can be seen from tables below:

Table 1

Gender	Frequency	Percentage
Male	87	58%
Female	63	42%
Total	150	100%

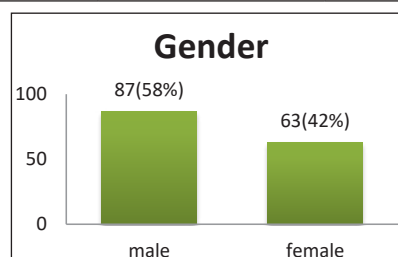


Fig. 1

The demographic information of the 150 students from different colleges is showed in Table 1. From the table it could be analysed that out of total students, 87(58%) are male and remaining 63(42%) are female students, who use the library services.

Table 2

Age	Frequency	Percentage
18-22 years	49	32.66%
23-27 years	38	25.33%
28-32 years	28	18.66%
33-37 years	19	12.66%
38-42 years	16	10.66%
Total	150	100%

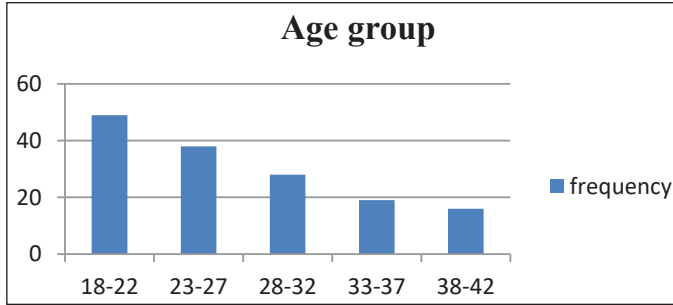


Fig. 2

It is revealed from Table 2 that 32.66% students belong to 18-22 years of age, 25.33% belong to 23-27 years of age group and whereas only 10.66% users belong to 38-42 years of age group.

Table 3: Analysis of Proper Usage of Libraries for Study

Education	Yes	No	Frequency	Percentage
Degree	40(60%)	26(40%)	66	44%
P.G. Degree	30(71%)	12(29%)	42	28%
M.Phil.	27(100%)	0	27	18%

Education	Yes	No	Frequency	Percentage
Ph.D.	15(100%)	0	15	10%
Total	112(75%)	38(25%)	150	100%

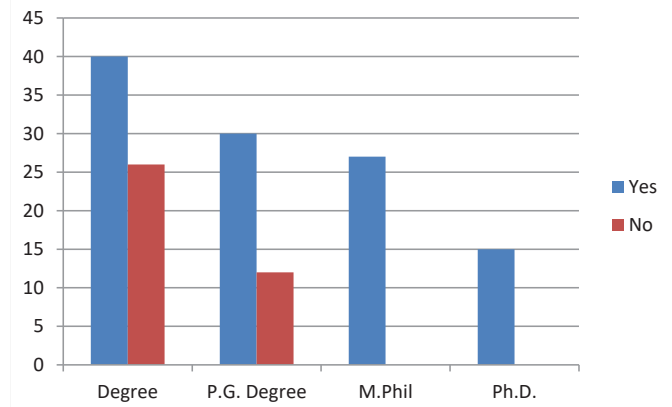


Fig. 3

From Table 3, it could be observed that out of 150 respondents, 75% students are utilising the library services for the research purpose and the remaining 25% students are not using the library service properly for the purpose of study and research as well.

Table 4: Analysing the Importance of Web-based Information and Service and Usability for Students

	Very Much Useful	Mostly Useful	Sometime Useful or Sometime Not	Mostly Not Useful	Useless for Me	Very Complicated	Total
Little	15 (31.25%)	17(35.41%)	5(10.41%)	7(14.48%)	2(4.16%)	2(4.16%)	48(32%)
Some	14 (38.88%)	4(11.11%)	4(11.11%)	8(22.22%)	4(11.11%)	2(5.55%)	36(24%)
A lot	27(40.90%)	20(30.30%)	5(7.57%)	11(16.66%)	3(4.54%)	0(0%)	66(44%)
Total	56(37.33%)	41(27.33%)	14(9.33%)	26(17.33%)	9(6%)	4(2.66%)	150(100%)

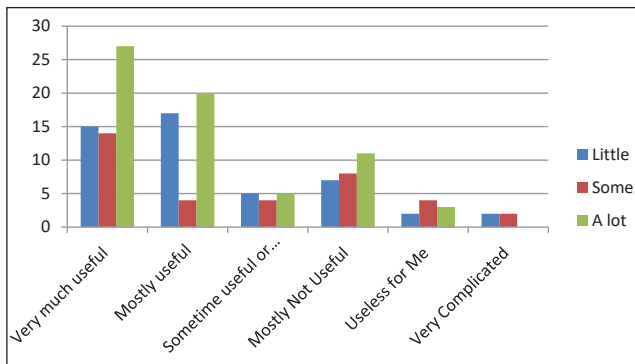


Fig. 4: Relative Importance of Web-based Service

From Table 4, it can be interpreted that there is a mixed response regarding the relative importance of web-based services of libraries. Web-based services are found to be very much Useful for 37.33% respondents, while 9.33% respondents show that they find it Sometime Useful or Sometime Not Useful for them. Additionally, 17.33% of

respondents stated that these services are mostly Not Useful for them, and 6% respondent show Useless for Me.

It could be observed that out of 150 respondents, 32% of students have lesser use of analysing the importance of web-based information and services and their usability for the study, and the remaining 44% students are lot using the importance of web-based information and services and usability of library services properly for the purpose of study and research.

Table 5: Preferable Tool for using Web Information

Search Engine	Numbers	Percentage
Google	82	54.66%
Yahoo	26	17.33%
MSN	14	9.33%
Bing	28	18.66%
Any other	0	0%
Total	150	100%

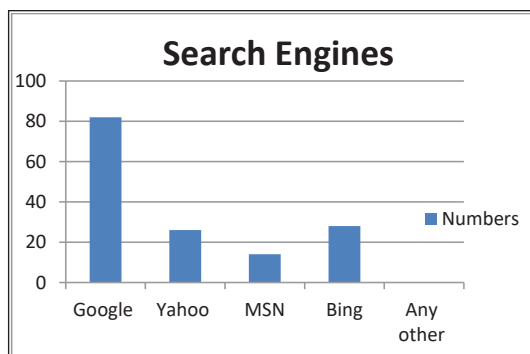


Fig. 5

The study of search engines used by the users reflected that 54.66% of users preferred Google. Concurrently, many of the users preferred other search engine like Yahoo (17.33%), MSN (9.33%) and Bing (18.66%).

Table 6: Time Spend on Accessing of Web-based Information

Time Spend	Electronic	Percentage
Less than 1 hour	89	59.33%
1-3 hours	42	28%
4-6 hours	19	12.66%
More than 6 hours	0	0%
Total	150	100%

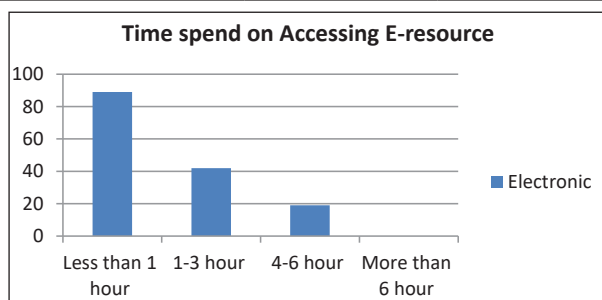


Fig. 6

The study of time spent on accessing e-resources reveals that 59.33% of users were spending less than 1 hour every day, 28% users were spending 1-3 hours and 12.66% of users were spending 4-6 hours daily on accessing web-based information.

Table 7: Method Adopted to Locate Information

Method Adopted	Numbers	Percentage
Searching OPAC	22	14.66%
Guidance of teacher	26	17.33%
Assistance of the library staff	16	10.66%
Help of friend	11	7.33%
Search print journal	38	25.33%
Browser online journal	14	9.33%

Method Adopted	Numbers	Percentage
Reference book	14	9.33%
Bibliography of relevant articles	9	6%
Total	150	100%

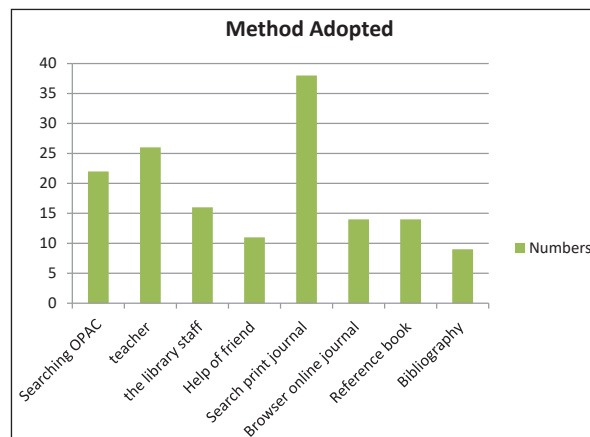


Fig. 7

The studies on retrieval of information by various methods revealed that the users were searching and locating information through OPAC (14.66%), 17.33% users took guidance from teachers, 10.66% of users took assistance from library staff. The study also revealed that 25.33% of respondents sought assistance from friends when searching for print journals, 9.33% browsed relevant online journals and similar percentage of respondents used reference books. Furthermore, 6% of them used Bibliography of relevant articles.

Table 8: Place to Access Web-based Information

Using Internet Web	Number	Percentage
Home (mobile)	81	54%
Library	43	28.66%
Cyber Café	26	17.33%
No access	0	0%
Total	150	100%

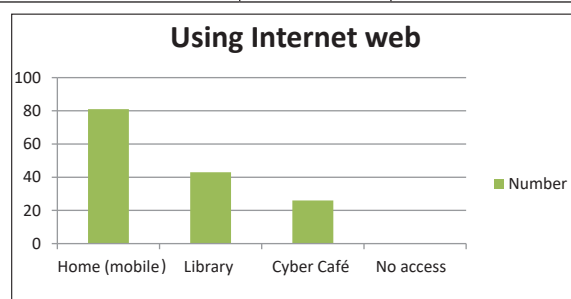


Fig. 8

The study of use of Internet web among users reflected that 54% of users used internet at home, 28.66% at the university library and 17.33% at cyber café.

Table 9: Analysis of Student Satisfaction for the Overall Web-based Information Services of Libraries

Degree Name	Satisfaction	Not Satisfaction	Total
Degree	31	13	44
P.G. Degree	33	14	47
M.Phil	30	6	36
Ph.D.	23	0	23
Total	117(78.0%)	33(22.0%)	150

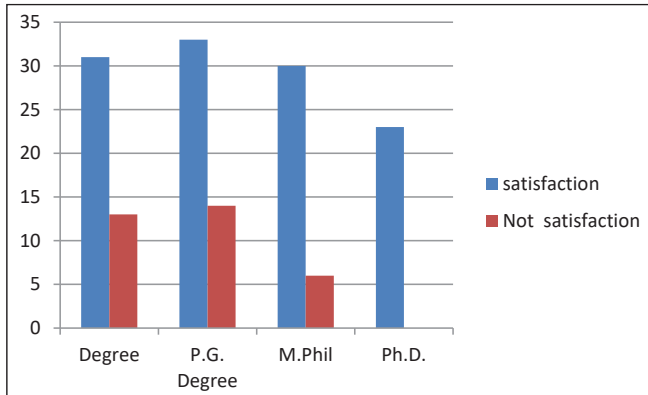


Fig. 9

Table 9 presents the satisfaction of students of different courses for the overall ICT services offered by their libraries. The table depicts that out of 150 respondents, 117 (78.0%) respondents were satisfied and remaining 33 (22.0%) respondents were not satisfied from ICT services provided by their libraries.

Major Outcomes and Implication of the Present Study

- Majority of respondents were male users.
- Majority of respondents who use the library services belong to 18-22 age groups.
- Maximum respondents visit library for the study purpose.
- Most of the students spent less than 1 hour per day for reading electronic resources.
- Most of the students preferred Google search engine.
- Most of the students were not aware of OPAC service and accessed information by the print journal.
- The internet web is mostly used at home through mobile.
- Most of student respondents were satisfied with the ICT services of libraries.

CONCLUSION

The purpose of present study was to examine the impact of web-based information and services on student satisfaction for library service of Udaipur. The university library and its collections of e-resources are the major source of information. It is also seen that the majority of users visited the library when needed but distance is a major factor for not visiting the library more frequently. Majority of the users agreed that there is need for workshop/orientation programmes on the use of web-based resources and services. Therefore, it is quite inevitable on the part of the university authority and the librarian to make the latest e-resources and services available among the users, so that they can explore portend resources quickly, easily and comfortably. Once the trend of using electronic resources become faster, it will surely promote valuable research output.

There is a significant relationship between relative importance of web-based information and services of libraries and its importance for students. It was recognised that most of the students are satisfied with the web-based services offered by their college libraries.

REFERENCES

- Ali, A. (2004). Applications of information technology in the educational media libraries in Delhi. *Proceedings of the XXIATLIS National Conference on Globalization of Library and Information Science Education*, pp. 89-96. University of Madras, Chennai.
- Ali, N., & Hussan, E. (2005). The use of electronic services at IIT library Delhi: A study of users opinion. *IASLIC Bulletin*, 50(2), 91-95.
- Bean, J. P., & Bradley, R. K. (1986). Untangling the satisfaction-performance relationship for college students. *Journal of Higher Education*, 57(4), 393-412.
- Dhanavandan, S., & Tamizhchelvan, M. (2012). Use pattern of digital resources among engineering colleges in Tamil Nadu, India. *International Journal of Library Science*, 5(1), 30-40.
- Haneefa, K. (2007). Use of ICT based resources and services in special libraries in Kerala. *Annals of Library and Information Studies*, 54(1), 23-31.
- Karim, N. A., & Hasan, A. (2007). Reading habits and attitude in the digital age: Analysis of gender and academic program differences in Malaysia. *The Electronic Library*, 25(3), 285-229.
- Lohar, M., & Kumber, M. (2007). Teachers attitude towards library resources and services in aided and unaided first

- grade colleges in Simoga district: A survey. *SERILS Journals of Information Managements*, 42(4), 179-206.
- Mahawar, K. L. (2011). User perception and use of library and information services in the higher research and academic institutions in Lucknow city. *IASLIC Bulletin*, 56(1).
- Moorthy A. L., & Krisiddappa, C. R. (2001). Information infrastructure and use of electronic media in Indian libraries. *Proceedings of the First South Indian Library Conference on Role of University and College Libraries in the Changing Information Scenario* (pp. 148-162). Pooti Sreeramulu Telugu University, Hyderabad.
- Pounder, J. S. (2007). Is student evaluation of teaching worthwhile an analytical framework for answering the question. *Quality Assurance in Education*, 15(2), 178-191.
- Rajput et al. (2007). Internet resources and services in institute of engineering and science, IPS academy Indore: An exploratory study. *Library Progress (International)*, 27(2).
- Kothari, C. R. (2009). *Research methodology: Methods and techniques*. New Age International Publisher.
- Umbach, P. D., & Porter, S. R. (2002). How do academic departments impact student satisfaction? Understanding the contextual effects of departments. *Research in Higher Education*, 43(2), 209-233.
- UNESCO. (2007). *The UNESCO ICT in education programme*. United Nations Educational, Scientific and Cultural Organization (UNESCO): Bangkok, Thailand. Retrieved from www.unescobkk.org/education/ict