

# Review and Evaluation of Wi-Fi Services and Information Seeking Behavior among Library Users

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## Abstract

*The role of the library has always been to provide the best possible service to all its patrons, possibly, at all time. ICT came up with the facility to enhance the library services. Wi-Fi raised the profile of the library service and met demand for new technologies and services. Using Wi-Fi, library can expand its services and can provide new technology-based services to its users. To analyze the utilization of library facilities among the users a periodic review and evaluation is required. A study is carried out among the users to review the information seeking behavior and usage of library services at UPES, Dehradun. The inputs taken are the types of service, facility, purpose, location, frequency of visits, time spent and type of problems in accessing, among the users of UPES Library.*

**Keywords:** ICT, Library Services, Wi-Fi

## 1. INTRODUCTION

Information and Communication Technology has changed the way to access information. It can transmit information at a greater speed. The recent advances in computer network have the potential to send data to the desired user within a mouse click. Wi-Fi is seen a key part of future ICT delivery and a beneficial area which will assist access for everyone. Wi-Fi stands for Wireless Fidelity and encompasses a worldwide (defacto) standard [1], which allows high-speed wireless computer network transmitted via radio waves with speed of Mbps. The Wi-Fi technology uses 2.4 Ghz. of radio frequency at different channels. The technology came with the revolution in computer network and the services associated with it. The nature of Wi-Fi is that it does not require hard wired PCs to allow network/internet access, means that libraries can save space by storing laptops away whilst not in use.

The current information and statistical data is required for engineering and management studies. Users seek and rely on library services for accurate and timely information. Internet has played a major role in handling and dissemination of information. For this UPES library has provided the Wi-Fi network to its users. The service

will support devices that use the 802.11 b/g/n protocol, which is the main standard used for wireless access on laptops, netbooks, PDA may use different standards, but will work if they have 802.11 nic cards. As it is totally a wireless technology hence users can remain constantly interconnected with library services while roaming within the university campus. Our users are able to login from anywhere, perform a search and can retrieve the relevant information in an aggregated manner.

The UPES library had managed to institute changes to its portfolio, of not only being the 'Knowledge Resource Centre', but also the Knowledge Broker for our University. We are able to provide our users with relevant and authenticated information, which we believe will be the main course for any student or Researcher.

## 2. REVIEW OF RELATED LITERATURE

The earlier studies on the usage of Wi-Fi for library services show a high level of satisfaction among the users, due to its ease of use and excellent performance. Not only the users but also the library and technical IT staff appraised the Wi-Fi technology as there is no maintenance of cables and related computer network equipments.

A survey has also been conducted by British Library, United Kingdom to analyze the needs of the various users and they found it as an overwhelming demand for it [2]. In India the study was also done on the common standards of Wi-Fi technology, 2003-2004 [3]. It projects about the cost involvement and its application in library and information centres. The projects that the users found Wi-Fi services very useful as it provides access of online journals, WebOPAC in any corners of the library premises. It also facilitated library staff through coordination with various sections like circulation, acquisition, technical etc.

A study was also done in 2005-2006 [4], on the issues related to the architecture of W-FI, its characteristics, various factors considered for the planning of Wi-Fi, the complete process of its implementation, in libraries. An online survey was conducted in 2005 at Manmouth University that showed more response for wireless access in library and within the campus [5].

### 3. THE UPES LIBRARY

The University of Petroleum and Energy studies (UPES) is a first of its kind university in the Pan Asian region. It is the first Indian Energy University recognized by UGC under section 2(f) of the UGC Act, 1956 and also accredited by the Energy Institute, UK. University offers 42 specialized programs across Oil & Gas, Power, Transportation, Infrastructure and Logistics Supply Chain Sectors.

The university has a well established library with a total collection of 59,500 volumes. The UPES Library has a subscription of 135 journals, total eight numbers of e-database and a DELNET membership for Inter Library Loan. Library provides reference & information service, CAS, SDI service, reprographic, documentation, ILL service with some technical institutes. UPES Library publishing a fortnightly news bulletin “Energy Digest” to keep readers updated on petroleum sector. The library is using latest IT technologies for library services and circulation is fully computerized. It uses Libsys 4 with a central server on port 7001. The Library has 30 terminals for it services and is connected through wireless local

area network (WLAN). A separate VLAN has been provided for library network services to enable security and dedicated internet link. It uses Ruckus ZF-7363 n series WAPs for 1500 users at three floors with centralized control through Ruckus Zone director 3000.

### 4. OBJECTIVES OF THE STUDY

The aim of the study was to analyze the information seeking behavior and to evaluate the use of Wi-Fi service among the users of UPES library in their research work and studies. The other objectives were:

1. To study the frequency and general purpose to visit library;
2. To study the duration of time spends to access Wi-Fi services;
3. To identify the purpose and influence of Wi-Fi facility;
4. To analyze and identify the benefits and problems faced by the users.

### 5. METHODOLOGY

The study was conducted among the PG and UG students who generally use Wi-Fi facility in library premises and visit frequently for information seeking. Total 210 forms were distributed among the students of all the three colleges (College of Engineering Studies, College of Management and Economic Studies, College of Legal Studies) who visited frequently in the library. Dully filled questionnaire were received from 158 respondents only (Table 1). The data collected and analyzed using MS EXCEL 2007 for the study.

**Table 1 Distribution of Respondents**

Sl. No.	Course	Total Questionnaire Distributed	Received
1	PG	105	81
2	UG	105	77
	Total	210	158

### 6. ANALYSIS AND RESULTS

The Figure 1 shows that 53 % respondents marked that they visited the library once in a day followed by 18 % who visited 1-4 times in a day, 19 % visited once in a week and only 10 % users visited once in a month.

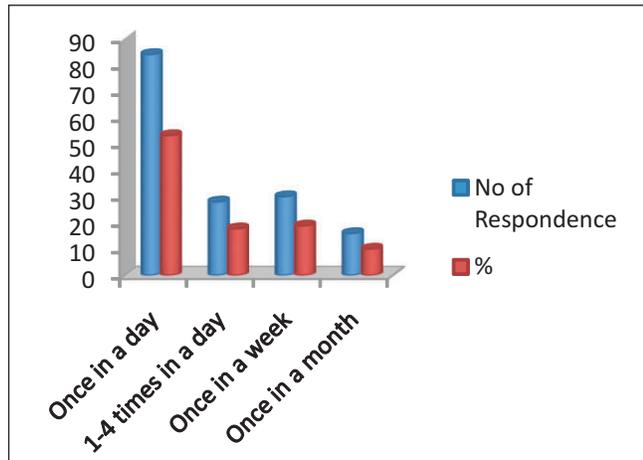


Fig. 1 Visit to the library

The Table 2 depicts that 36 % of users visited library for issue & return followed by 32 % visited to use W-Fi facility, 16 % for reading, 5 % for consultation and 11 % for other services.

Table 2 Purpose of Library Visit

Sl. No.	Purpose	No. of Respondent	%
1	Issue & Return	57	36
2	Reading	25	16
3	Consultation	8	5
4	Use Wi-Fi	50	32
5	Photocopy & Others	18	11

The Table 3 it can be observed that 57 % of respondents made use of this service daily where as 29 % and 14 % of users avail Wi-Fi service monthly and weekly respectively. It is also found that more than 50 % of users avail Wi-Fi services on daily basis.

Table 3 Time Spend to Access Wi-Fi

Sl. No.	Time Spend	No. of Respondent	%
1	Daily	90	57
2	Weekly	22	14
3	Monthly	46	29

It is found from the Figure 2 that all respondents were agree that Wi-Fi facility has influenced their visit to the library and they have started visiting the library more frequently to access online journals such as Westlaw international.

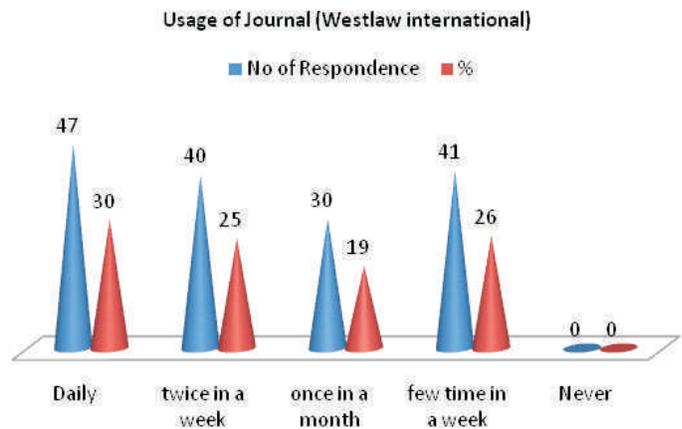


Fig. 2 Usage of online journal

It showed that 30 percent of the visitors are availing W-Fi services daily to access online journals, 26 percent few time in a week, 25 percent twice in a week and only 19 percent in a month.

It is observed from Table 4 that all the respondents were agreeing with the opinion that Wi-Fi facility in the library has benefited their information seeking need. It also showed that the problem is also faced by the users in accessing the Wi-Fi facility. 48% of the respondents were of the opinion that they faced slow speed connection, 27 % respondents faced limited connectivity and 25 % faced the problem of frequent disconnectivity.

**Table 4 Wi-Fi Beneficial and Problem Faced**

Sl. No.	Wi-Fi Beneficial?	No. of Respondent	Problem Faced	No. of Respondent	%
1	Yes	158	Limited connectivity	43	27
2	No	-	Frequent Disconnectivity	39	25
			Slow speed	76	48

## 7. CONCLUSION

This study is an approach to understand the need and information seeking behavior among the users of Wi-Fi in UPES Library. The Wi-Fi facility in library has a beneficial impact on the research scholars, faculty and students. They get easy, quick and timely access to their desired research/study material. But still some limitations like limited access and slow speed has to be improved. Hence study on users information need must be analyzed time to time for improvement and better services. Also new technologies like RFID should be introduced for the complete automation of Library services.

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