# Utilization of Internet-Based Library and Information Services by the Faculty Members of Engineering College in the Aligarh Muslim University, Aligarh: A Case Study

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*This paper is the outcome of a survey conducted to assess the utilization of internet-based library services available to the faculty members of Z.H. College of Engineering & Technology at the Aligarh Muslim University. Data for the study was colleted by administering an open-ended questionnaire asking for recording of information on the various aspects of the internet-based services , frequency of visit to the library, purpose of visiting the library, Internet usage, purpose of using the internet services, use of popular Search engines, awareness about Internet services, number of E-journal consulted and the behaviors of staff members while using the library facilities. The study reveals besides other points that most of the faculty members utilize the services offered by the college library and emphasizes that the services may be improved further after proper training for familiarity with the latest Information and Communication Technologies and improvement of the existing IT infrastructure.*

**Keywords:**  Library and Information Services, ICT, ZHCET Library

## 1.    Introduction

The advancements in scientific research have led to the growth of new technologies in the field of information and communication. We are now more informed, entertained and educated than in the past. The networking of people through innovative communication and computer technologies is creating boundless opportunities for accessing all available forms of social learning and intelligence. Information technology (IT) has radically changed the perspective of the whole information system, particularly with the emergence of computer applications, telecommunication networks, Fax, CD-Rom, e-mail, optical scanning, hypertext, hypermedia, video text and tele-text, multimedia technology, online database, e-publishing, voice mail service, tele-conferencing, etc. Internet is one of the most important and complex innovations of mankind and the most modern world wide system for storage and transfer of information.

## 2.    Objectives of the Study

1.    To find out the availability of internet services in ZHCET.
2.    To know the purpose for which the internet is being utilized by the faculty members of ZHCET.

3.  To know the most frequently used search engine/websites using the
    faculty members.
4.  To find out the most used internet services.
5.  To find out the problems faced by the faculty members using various
    internet services.
6.  To find out the users view about the different types of online, e-journals.

## 3.    Methodology

Survey method has been adopted to accomplish the study under report. A structured questionnaire seeking information on personal details, level of computer literacy, training and orientation, the role played by the library, etc., was designed and distributed among the teachers of different Departments of Engg. College. Out of 185 teachers, the study conducted on a sample of 60 teachers, 44(66.66%) returned the duly filled in questionnaire in time. The data obtained from the responses were tabulated and interpretations were drawn.

## 4.    Zakir Husain College of Engineering and Technology (ZHCET)

The ZHCET with its foundation stone laid on 21<sup>st</sup> November, 1938 stands today as an epitome in the field of engineering & technology, manifesting quality education to build intellectual competitiveness. This is a prestigious school affiliated with the AMU, in UP, India. It is dedicated in the name of Dr. Zakir Husain, President of India (1967-69). A long standing leader in Science & Engineering, this college has had excellent results in the past.

ZHCET aims to provide knowledge according to the industry standards. The college offers courses in Undergraduate as well as Postgraduate level. There are eight departments in the Zakir Husain college of Engg. & Technology. The college has recently, been identified by the Govt. of India as one of the few institutions in the country to be granted the status of the IITs.

### 4.1    Faculty Members in ZHCET

The total number of Faculty member in the Z.H. College of Engg. and Technology are about 185 approx including 45 Professors, 50 Readers, and 90 Lecturers. The study has been conduct on 60 Faculty members in different departments of ZHCET.

### 4.2    College Library

The College has one of the largest technical libraries of the country.  It holds a technical collection of about one lac and thirty thousand books and  back volumes of journals, which is managed by a qualified

staff. The College has been recognized as one of the Institution of the status of IIT recently. Accordingly, the collection and services are being improved and updated further. In addition to the University library and departmental seminar libraries, there are libraries in the halls of residence for the students which also holds books for the students of all disciplines. The College Library remains open from 8:00hrs to 22:00hrs in general and from 8:00hrs to 24:00 hrs during examination period. The library facility is also available to the students as well as Faculty members. The library has been equipped with latest electronic periodicals section. Apart from that all the departments have the facility of online subscription to desired journals.

### 4.2.1    Library Services

Besides providing traditional library services, a new internet facility has been added to the library which provides access to the WWW for faculty members as well as students. The library facilitates faculty members access to the resources available on Internet such as online journal subscribed by college, Online Bibliography, Online Dictionaries, Current Contents, Encyclopedias, & other Web Pages, etc.

### 4.2.1.1   Table of Content Service

Most of the publishers of e-journals provide table of content services to the users on the internet. Through this service library can provide a list of relevant articles on a particular topic in the forthcoming issues of journals to its users using only the internet. e.g. ISI Philadelphia, provide table of content services to the users through the current content journals (URL: http:// www.isinet.com).

### 4.2.1.2  Electronic Mail Service

Eectronic mail popular known as e-mail is the most common service on the internet. It facilitates online sending interlibrary loan requested, exchange of data, etc. It is a very popular, cost effective, inexpensive mode of communication for library users. User can create letters electronically and sends it over to the communication. E-mail is received within seconds. The important use of e-mail in the library environment is in document delivery.

### 4.2.1.3 Accessing e- journals and other e- publications

Some of the current journals are very difficult to subscribe or sometimes not available in the form of hardcopy. A number of publishers have agreed to offer their journals electronically to the libraries through INFLIBNET. The internet play a crucial role in the access of these e-journals and other e-publications.

### 4.2.1.4 Document Delivery

It is very important facility of the internet, which has given new meaning to the Inter library loan (ILL) service. Availability of a document can be known by accessing OPACs or, the internet. It has facilitated the speedy delivery of full text articles on the Net. at much cheaper rate.

### 4.2.1.5 Information Service

Information services like Current Awareness Service (CAS) and Selective Dissemination of Information (SDI) services are the most useful services of any good library. Internet is paying a very significant role in providing CAS/SDI services to its users. Application of internet has changed the way of providing these services. Libraries using internet can provide for better information services, much wider in scope at minimum cost and time.

Reference sources like encyclopedia, dictionaries, directories, bibliographies, indexes/abstract, gazetters, maps and atlas, etc are available with up to date information.

### 5. Data Analysis and Discussion

Analysis denotes critical examination of assembled materials, keeping steadily in mind the purpose of the study and its possible bearing a scientific discovery (Young; 1998;p.473) In the present study the investigator structured questionnaire as a tool for collecting pertinent data from the respondents. The collected data under various topics have been scrutinized, tabu lated and reduced for better transparency and understanding.

### 5.1. Frequency of Visit to the Library

| Respondants | Daily | 2-3 times in a week | Once in a fortnight | Once in a month | Percentage |
|---|---|---|---|---|---|
| Prof. /10 | 2(20) | 4(40) | 3(30) | 1(10) | 10(100) |
| Read. /13 | 4(30.76) | 5(38.46) | 2(16.39) | 2(15.39) | 13(100) |
| Lect. /21 | 10(47.62) | 7(33.33) | 3(14.28) | 1(4.77) | 21(100) |
| Total | 16(36.36) | 16(36.36) | 8(18.18) | 4(9.7) | 44(100) |

On assessing the frequency of visit to the ZHCET library, it has been found that out of 44 teachers 2(20%), 4(30.76%) & 10(47.63%) teachers i.e. Professors, Readers and Lectures visit the library daily followed by 4(40%), 5(38.46%), 7(15.39%) teachers 2-3 times in a week. About 3(30%), 2(15.39%), & 3(14.28%) teachers visit once a fortnight while 1(10%), 2(15.39%), & 1(4.7%) teachers visit once in a month. Results show that the majority of the teachers are daily visitors.

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## 5.2    Purpose  of Visiting the Library

| S.No. | Purpose | No. of Respondents | Percentage |
|---|---|---|---|
| 1. | To know about the latest arrivals in the library | 21 | 47.72 |
| 2. | To collect  reading  materials | 15 | 34.1 |
| 3. | To search OPAC or reference  purpose | 4 | 9.09 |
| 4. | To consult  journals | 29 | 65.9 |
| 5. | Any Others | 12 | 27.27 |

**(Figure within parenthesis indicate percentage)**

In order to know the purpose of visiting the library the responses has been classified into 5 different categories. The investigator found 21 (47.72%) of respondents visit the library to know about the latest arrivals in the library, 15(34.1%) of respondents visit to collect reading materials to their subjects discipline. Library does not provide OPAC service 4 (9.09%) respondents visiting the library for reference purpose.

Similarly 29 (65.9%) respondents visit to consult journals, and 12 (27.27%) of respondents visit the library for other purposes.

## 5.3    Frequency of Internet Usage

| S.No. | Frequency | Professors n=10 | Readers N=13 | Lecturers n=21 | Percentage |
|---|---|---|---|---|---|
| 1. | 15 Minutes–One Hrs | 6(60) | 4(30.76 | 5(23.81) | 15(34.1) |
| 2. | 1–2 Hrs. | 2(20) | 3(23.09) | 7(33.33) | 12(27.27) |
| 3. | 2–4 Hrs. | 1(10) | 4(30.76) | 7(33.33) | 12(27.27) |
| 4. | 4–6 Hrs. | 1(10) | 2(15.39) | 2(9.53) | 5(11.36) |

In order to assess the frequency of using the Internet services, the time graph has been classified into four categories in the table. It has been found that 15(34.1%)of faculty members use the internet 15 minute to one hour spend daily, while 12(27.27%) of faculty members use 1–2 hours daily, 12(27.27%) use 2–4 hours daily and at an average majority of users in ZHCET use the internet almost.

### 5.4 Purpose of using the internet services

| Purpose | No. of respondents | No of respondents | No of respondents | Total (%age.) |
|---|---|---|---|---|
|  | Prof./10 | Read./13 | Lect./21 | %age |
| Updating Knowledge | 3(30) | 2(15.38) | 5(23.81) | 10(22.73) |
| For the teaching purpose | 1(10) | 2(15.38) | 3(14.28) | 6(13.64) |
| For research purposes | 2(20) | 3(23.08) | 5(23.81) | 10(22.73) |
| E-mail | 4(40) | 6(46.15) | 8(38.1) | 18(40.90) |
| Total | 10(100) | 13(100) | 21(100) | 44(100) |

The purpose of using the internet services, the investigator classified the purpose into four categories out of 44 respondents i.e. 3(30%) Prof. followed by 2(15.38%) Reader, and 5(23.8%) Lecturers are using internet for updating knowledge respectively.

Similarly 2(20%),2(23.08%), & 5(23.81%) teachers are using internet for study research purpose, while 4(40%), 6(46.15%,& 8(38.17%)teachers used E-,ail service.

### 5.5 Use of Popular Search Engine

| S.No. | Category | No. of Respondents | Percentage |
|---|---|---|---|
| 1. | Google | 31 | 70.45 |
| 2. | Altavista | 28 | 63.63 |
| 3. | MSN | 10 | 22.72 |
| 4. | Yahoo | 15 | 34.609 |
| 5. | Scifinder | 17 | 38.63 |

The faculty members used multiple search engines to search your queries. Out of 44 respondents 31(70.45%) of faculty members (i.e. Prof. Reader, & Lect.) used most popular search engine Google respectively.

Similarly 28(63.63%) faculty members search information through Altavista, follwed by 15(34.09%) faculty member search information through Yahoo, and 17 (38.63%) search information through Scifinder. On the analysis result shows that majority of faculty members search in. through Google, Altavista & Scifinder search engine.

### 5.6    Awareness on Internet Services

From the analysis, it is clear that 44 (100%) respondents knows that the library provided internet service. While 18(40.9) respondent used the online searching of database, 2 (4.55%) of respondents used the reference services, 15(34.1%) of respondents used e-mail service, 8 (18.18%) of respondent use the other internet in the ZHCET library services.

### 5.7    Number of e-journal Consulted Online Regularly

Out of the total respondents majority of the users i.e. 24(54.55%) consult more than two electronic journals (e-journal), 13 (29.54%) users consult two e-journals, 5(11.36%) users consult one e-journal, and 2(4.55%) users does not consult any e-journal.

### 5.8    Behaviors of Staff Members in Computer Centre

| S.No. | Frequency of e-mail | No. of Respondent | | | Percentage |
|---|---|---|---|---|---|
| | | Prof./10 | Reader/13 | Lect./21 | |
| (a) | Excellent | 5(50%) | 7(53.84%) | 8(38.09%) | 20(45.45%) |
| (b) | Good | 3(30%) | 3(23.08%) | 9(42.85%) | 15(34.09%) |
| (c) | Average | 1(10%) | 1(7.70%) | 3(14.29%) | 5(11.36%) |
| (d) | Never | 1(10%) | 2(15.38%) | 1(4.77%) | 4(9.10%) |

On the analysis table indicates the behavior of staff members in Z.H. College Library, It is clear that 20(45.45%) out of 44 faculty members expressed their view that staff is of excellent behavior, while 15(34.09%) of faculty members expressed the good behavior of staff, 5(11.39%) express average behavior of staff and 4 (9.1%) of faculty members expressed the never good behavior of Z.H. College Library using Internet.

### 6.    Findings

1.    Maximum percentage of faculty members (Lecturers) are using internet based library & information services.
2.    47.73% faculty members used search option depending upon the queries as shown in table 4.10.
3.    Majority of the users consult online journals regularly.
4.    Majority of the users utilizes the internet  approximately 15 minutes to 1 hours daily, due to in convenience of time.

5. Majority of the users satisfied with the available infrastructure for providing internet services in the ZHCET library.

**7. Suggestions Proposed by The Investigators**

The study puts forward the following suggestions to be implemented for the improvement of internet facilities in the ZHCET library.

1. Internet facility should be provided to each and every departments because in the present era, every academician wants to know about the latest development in the concerned field & internet is the best means for it.
2. Internet facility should be made available round the clock for the entire week.
3. Slow downloading problems in college library can be solved by acquiring integrated services digital networks line for higher speed connectivity.
4. There is a need for extensive training programme for all categories of academic community in utilization of internet resources.
5. New versions of antivirus software should be installed on the server to avoid the threat of virus.

**6. Conclusion**

The study reveals that most of the objectives are met satisfactorily and most of the teachers utilize the available internet services but the ratio of the services used by them vary being depends upon the types of the disciplines of study. The internet being a remedial source for accessing information speedily and exhaustively, the basic responsibility of universities is to provide high speed internet connection with facility of more terminals for access and downloading.

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