

**A CASE STUDY ON THE USE OF ICT-BASED SERVICES IN THE ACADEMIC  
LIBRARIES OF ARUNACHAL PRADESH, INDIA**

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## **ABSTRACT**

The present study is the result of an investigation into the use, benefits, satisfaction, and dissatisfaction level of the users. The study also investigates further areas to clarify the reason for dissatisfaction, taking suggestions from respondents about Information Communication Technology (ICT) based services of the libraries. The collected data were analyzed and inferences were made based on standard statistical methods.

The method used in the present study is based on the survey method and a questionnaire is used for collecting primary data, keeping in mind the basic objective of the study. Questionnaires were distributed personally to maximum users and few were through e-mail to collect data from the respondent. Some of the respondents filled out the questionnaire and in spite of repeated reminders, some of them showed great reluctance. A total of 205 questionnaires were distributed out of which 156 responses were received with a response rate of 76.10 %.

Most of the library users are male. The users in the study mark that they visit the library as and when required. The limited ICT resources are the main challenge faced by users.

Moving to ICT-based services in academic libraries is one of the important goals of many institutions in the capital region of Arunachal Pradesh, but due to lack of financial issues and lack of expert staff the libraries are not upto the mark, it may take a few more years to satisfy the ICT based library to users.

### **Keywords:**

Academic Libraries, Library Services, ICT, Frequency of Users, Challenges faced by library users, Benefits of ICTs.

## **1. INTRODUCTION**

ICT is one of the major factors causing changes in the library services to its users. The main goal of using ICT in academic libraries is that the users can communicate, retrieve, use, and disseminate information. The term ICT generally includes any communication device, application, computer network, etc.

ICT-based libraries play an important role in meeting the information needs of the researcher and the institutions. Academic libraries nowadays use E-mail, CD-ROM, machine-readable catalogs, and LAN (local area network) for sharing resources among their users. ICT has designed and impressed the services and systems of academic libraries in Arunachal Pradesh to a great extent.

The present paper is attempted to study the actual scenario of academic libraries and to find out the various ICT-based library services by academic libraries especially the Colleges and Universities under Itanagar Capital Region (ICR), Itanagar, Arunachal Pradesh.

## **2. REVIEW ON RELATED LITERATURE**

Indian college libraries have not reached a high-level ICT infrastructure. Activities of libraries are not automated; some libraries have issues with the budget and lack of skilled manpower. Library professionals have a positive attitude toward the use of ICT-based services, the author also suggests that the professionals need appropriate training to make use of ICT services (**Sampath Kumar and Biradar, 2010**).

The users gave opinions that the existing ICT facilities in their libraries were inadequate. They suggest that ICT was highly significant for their academic and research work. Maximum of the users was not satisfied with the current application of ICT in their libraries. To increase the use of ICT users, respondents suggest that authorities should take appropriate strategies in a systematic manner (Haneefa, 2007).

The role of e-resources is vital in higher educational institutes. With the development of ICT tools libraries should undergo a change to provide services to the users. The study also suggests that, to enhance the access of e-resources and library users the library professionals must implement training and workshop programs regularly (Dhanavandan, S. and Tamizhchelvan M. 2012).

Websites is seen an increasingly reading source. The study also indicate that the university spend a significant amount of time to read newspapers, academic books and browse websites. The differences in gender reveals that male students significantly ready newspapers, browse websites and literature other than the academic books (Karim, N.A. and Hasan, A. (2007).

### **3. OBJECTIVE OF STUDY**

- i. To find out the current scenario of ICT in academic libraries of Arunachal Pradesh.
- ii. To find out the use of ICT-based resources and services provided to users.
- iii. To evaluate user satisfaction regarding the use of ICT services.
- iv. To suggest advanced measures to provide better services and day-to-day information using ICT and modern technology.

### **4. SIZE OF THE SAMPLE**

The present study targets the population that consists of faculty members, Graduate and Post Graduate students of different colleges and universities of the Capital Region of Arunachal Pradesh, Itanagar. The total number of faculty members from different college and universities are 78 in numbers. Similarly, 50 postgraduate and 75 graduate students are also included in the sample.

### **5. DATA ANALYSIS**

Analysis of the data which were collected through the questionnaire has been organized and tabulated by using tables, bar charts, pie charts, column charts, etc. The analysis and interpretation are based on the received questionnaire (156). Out of the received questionnaire, 58% were male respondents and 42% were female respondents.

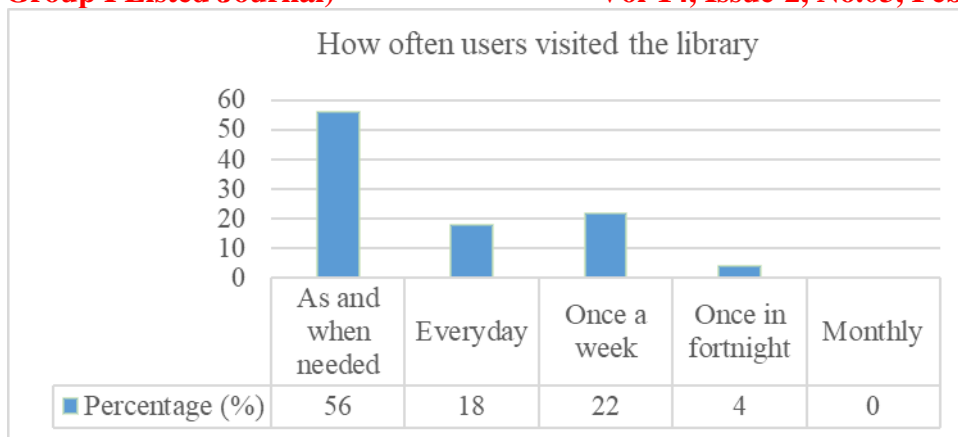
#### **5.1. Frequency of User Visits in Libraries**

The result shows that the majority (56%) of the users visit the library as and when they need some kind of books or other academic materials and 18% of the users are visited the library every day. Moreover, 22% of users share that they visited the library once a week and 4% of the users visited the library once a fortnight.

**Table :1: Frequency of users' visits to the library.**

<b>Sl. No</b>	<b>How often users visited the library</b>	<b>Percentage (%)</b>
1	As and when needed	56
2	Everyday	18
3	Once a week	22
4	Once in fortnight	4
5	Monthly	0

**Figure: 1**



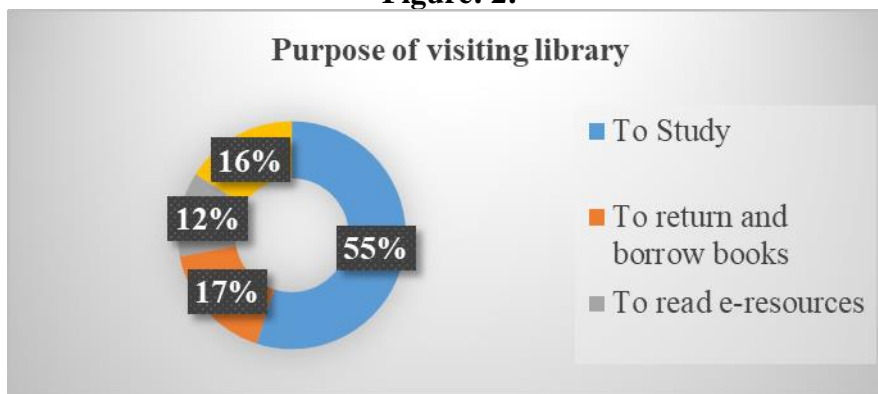
### 5.2. The Purpose of Visiting the Library

The main purpose of the respondents' visiting the library is for updating their subject knowledge and research. The responses were shown in Table 2 and Figure 2. The result shows that 55% of users visited the library for the study purpose of their respective course syllabus, 17% of visit the library to return or to borrow books, 12% of the users shows interest in reading e-resources and 16 % of the users visit the library to read newspapers, magazines and to use internet facilities.

**Table: 2: Purpose of Visiting the Library**

Sl. No	Purpose of visiting the library	%
1	To Study	55
2	To return and borrow books	17
3	To read e-resources	12
4	To read newspapers and magazines	16

**Figure: 2:**



### 5.3. User satisfaction level using the library and its ICT-based services

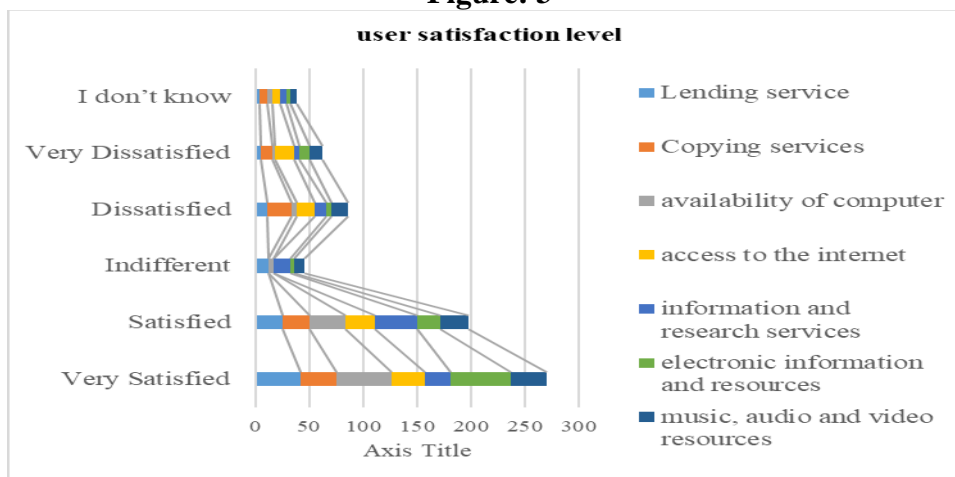
To enquire about the satisfaction level of users; the services of the library are divided into lending services, copying services, availability of computers, access to the internet, information and research services, electronic information and resources, music, audio, and video resources library with the parameter that they are very satisfied, satisfied, indifferent, dissatisfied, very dissatisfied, I don't know.

**Table: 3: User satisfaction level**

	lending service	copying services	availability of computer	access to the internet	information and research services	electronic information and resources	music, audio, and video resources
Very Satisfied	42	34	51	31	23	56	33
Satisfied	26	25	33	27	39	22	26

Indifferent	12	0	5	0	16	3	10
Dissatisfied	11	23	4	17	11	5	15
Very Dissatisfied	5	11	2	18	5	10	11
I don't know	4	7	5	7	6	4	5

**Figure: 3**



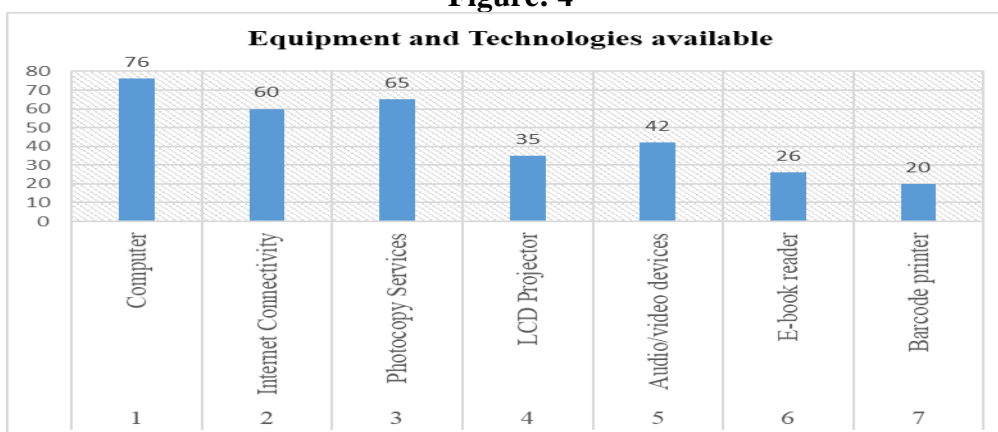
**5.4. Equipment and technologies available in Libraries**

Maximum of the library is providing computers, internet connectivity, and photocopy services. Few libraries also have LCD projectors, audio/video players. Services of e-book readers were provided by a few libraries and the barcode printer is available only with two libraries.

**Table: 4: Equipment and Technologies available in libraries**

Sl. No	Equipment and Technologies available	%
1	Computer	76
2	Internet Connectivity	60
3	Photocopy Services	65
4	LCD Projector	35
5	Audio/video devices	42
6	E-book reader	26
7	Barcode printer	20

**Figure: 4**



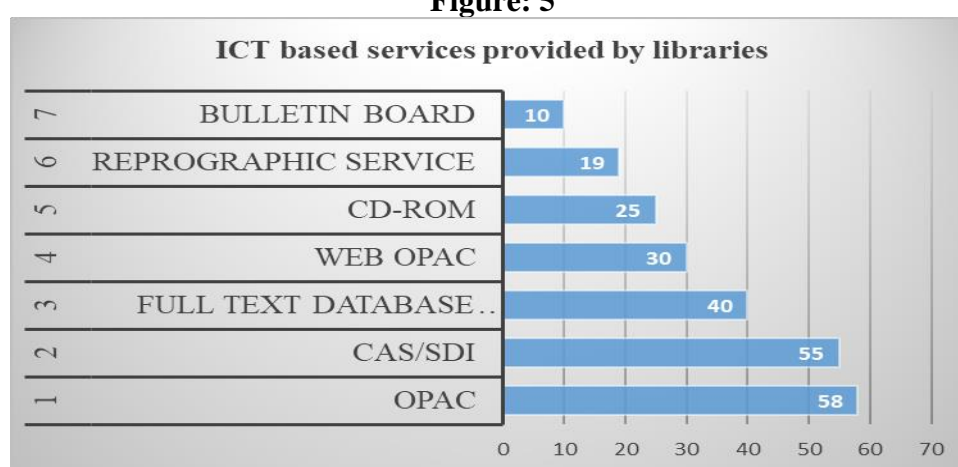
**5.5. ICT based services provided by libraries**

The studies on ICT based services by various libraries revealed that majority of the libraries providing OPAC, CAS / SDI services to their users. Many of them are proving full text database access and WEB OPAC services. Very few libraries providing CD ROM and reprographic services. A few of the libraries give services of bulletin board services for the users.

**Table: 5: ICT based services provided by libraries**

Sl. No	ICT based services provided by libraries	%
1	OPAC	58
2	CAS/SDI	55
3	Full text database access	40
4	WEB OPAC	30
5	CD-ROM	25
6	Reprographic Service	19
7	Bulletin board	10

**Figure: 5**



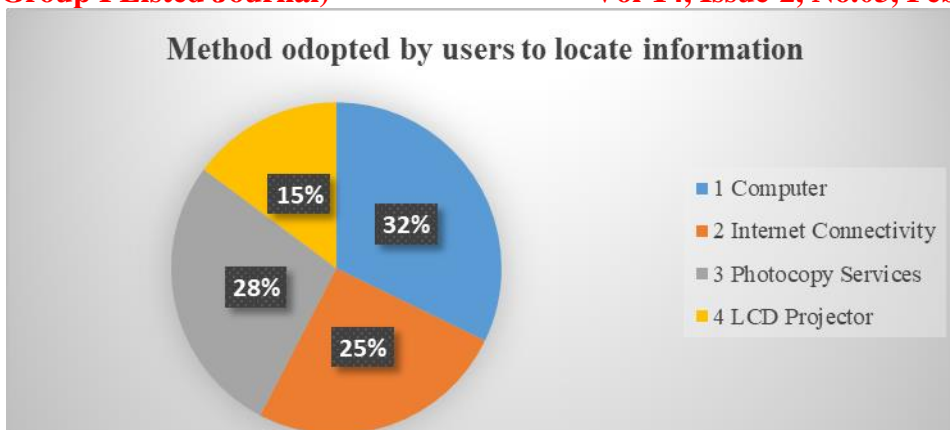
### 5.6. Method adopted by users to locate information

On retrieval of information the present study examines that 37% of the users were searching information through OPAC. It is also revealed that 24% of the user's taken guidance from library staff, 16% users used relevant internet sites, 14% took assistance from their concerned faculty members, 9% users taken reference books for locating information, the record and responses were given in table 5.

**Table: 6: Method adopted by users to locate library information**

Sl. No	Methods adopted to locate information	%
1	OPAC	37
2	Guidance from library staff	24
3	Internet sites	16
4	Guidance from faculty members	14
5	Reference books	9

**Figure: 6**



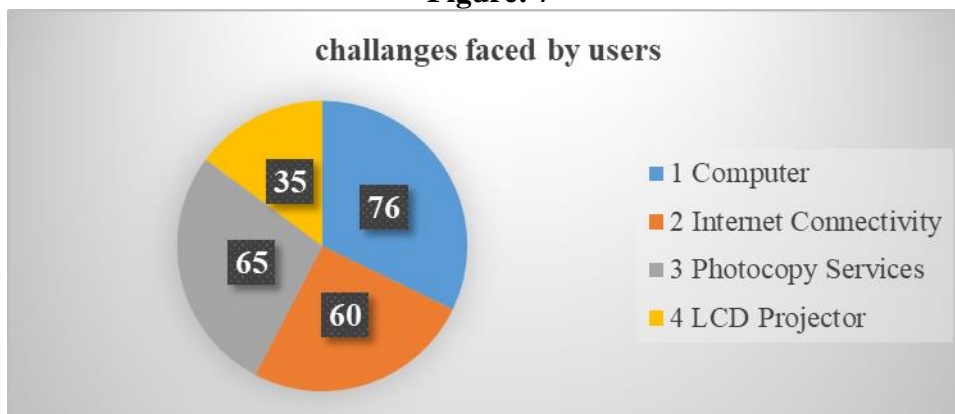
### 5.7. Challenges faced by users using ICT based services

The study on challenges faced by users using ICT based services shows that a lot of benefits are derived, there are many challenges addressed by users. 37 % share that library have limited ICT based resources, followed by other problems such as shortage of ICT skills staff 28 %, poor maintenances 25%, erratic power supply 10%

**Table: 7: Challenges faced by users using ICT based services**

Sl. No	Challenges faced by users	%
1	Limited ICT resources	37
2	shortage of skill staffs	28
3	Poor maintenances	25
4	Erratic power supply	10

**Figure: 7**



### 6. MAJOR OUTCOMES OF THE STUDY

- Most of the library users are male.
- Majority of the users visit library as and when required.
- Most of the users visit library for study purpose.
- Maximum of the library is providing computer services.
- Majority of the users are using OPAC services of the library.
- The challenges faced by users while searching information was the limited resources.

### 7. SUGGESTIONS AND CONCLUSIONS

Based on the study and suggestions given by the respondents, it has been stated that the use of ICT based services is almost satisfactory. However, the libraries need to take some more steps to maximize the use of ICT. Adequate training should be given to the staff of the library. The library authority should be taken users feedback to understand the problems. Maximum of the users suggest that the

library should organise workshop, Seminar, training of user time to time to solve the challenges faced by users. Supply of electricity is the major issues which needs to take care by the library authority during library hours. In the age of computer, the ICT based services cannot be ignored and delayed. The overall ICT based services must be taken in importance and, this will lead to overall development of library system and it will also improve the educational systems.

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