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## **IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY ON LIBRARY AND ITS SERVICES OF S. U. PATEL UNIVERSITY LIBRARY**

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### **ABSTRACT**

*The present paper highlights the impact of the ICT services to the users of S.U. Patel Library, Hemchandracharya North Gujarat University. For collecting data, questionnaire method is adopted. ICT based services of the Library are also highlighted. Major findings and conclusion are summarized in a suggestive way to use in providing better services in future to meet the needs of the users.*

**Keywords:** Information communication Technology (ICT), Users Study,  
Hemchandracharya North Gujarat University Library, library services.

### **INTRODUCTION:**

Developments in ICT have made considerable impact on all spheres of human environment. The impact has been rather well-known in case of service activities such as banking, health, transportation, education and libraries. For the Libraries, ICT's has massively changed the Management of Databases or House Keeping Operations as well as the way services are delivered. Information and communication Technology has been considered as the most instrumental factor for endow with a library services. ICT has brought extraordinary changes and reconstruction to academic library and information services, user's services, predictable LIS such as OPAC, reference services, Audio visual services and customer relations can be provided more efficiently and effectively using ICT. The services rendered with the help of ICT are earlier and more valuable.

With the advent of ICT, the world has changes into a "Global Village". Information and communication technology involves essentially the storage and communication of information. The greatest potentiality of ICT, thus, is its ability to serve as a tool to circulate information and to induce a qualitative change in the life of a man.

Wolpert (1999), "academic libraries are cost effective information service and provider of knowledge products to a resident community of scholars".

ICT has impacted on every area of academic library service especially in the form of the library database improvement strategies, library structure and consortium. ICT presents an opportunity to provide value-added information services and access to a wide variety of digital based information resources to their clients. In this lesson we will study how ICT has had impact on delivery of library services.

### **S. U. PATEL LIBRARY: OUTLINE AND RESOURCES AT A GLANCE:**

The library was started along with the establishment of the University in the year 1986. The library was established on 15th January, 1988. Initially it was housed in the Gandhi Memorial Hall. The University received a donation of Rs.51 lacks from Dr. M.S. Patel Trust, Mumbai for the construction of the library building, hence the library is named as Shivabhai Umedbhai Patel Library. The state government had also sanctioned Rs. 25 lacks. Overall Rs. 85, 69,616 has been spent for the construction of the two storied library building. The total built up area of the building is 2486.41 sq. meter. The Rotary Patan City has also donated Rs. 11.50 lacks for library furniture, reading cabinets and books. University Library has 55,900 books; 1893 Dissertation & theses; 1981 back volumes of the Periodicals; 775 Audio/Video cassettes; 123 current periodicals. Its annual budget for purchasing of books is Rupees 3,25,000 and for periodicals is Rupees 75000 (2003-2004) Total Rupees 86,18,168 has been spent for purchasing of the books. The library received the late Dr. B.J.Sandesara's personal library as a gratis. It contains about 3,500 books and some back volumes of literary and indological journals. The collection is very rich in the areas of Gujarati and Sanskrit literature, History, Culture Jainology and Indology. The library is also planning to build up a local history museum and Hemachandracharya a corner. Hemachandracharya was a versatile scholar and a great jainnologist of Patan (also known as Anhilwad Patan) who flourished in the 12th century. The documents are being classified according to D.D.C. and A.A.C.R.-II is followed for cataloguing. The library provides all the traditional services like Reference, Bibliographical, Literature search, User, Education, Inter Library Loan, Photocopy, Audio Visual, Cyber Cafe- Internet, OPAC, Newspaper clipping, CAS, etc. Since last fifteen years the library is also organization weekly discussion group called 'Characha vartula' for students. It meets every Wednesday hence called as Budhavariyum. Average 25-30 students are regularly attending it and discussion on various subjects

UGC has sanctioned Rs. 7.50 lacks under the plan of computerization and networking of University Libraries for the purchase of computer system. Out of this grants the library has acquired necessary equipment as suggested by the INFLIBNET centre. With this system the library has made a beginning in creating database of books using CDS/ISIS software currently data of the 32,190 books have been computerized by using of SOUL Software developed by INFLIBNET. Besides 44 current journals/Periodicals data are also computerized.

### **S.U. PATEL UNIVERSITY LIBRARY IN THE ICT ERA:**

The library is providing various ICT based services to the users free of charge. Such services are made available from 8 a.m. to 10 p.m. on all working days and from 10 a.m. to 10 p.m. on

Sundays. There are 45 Computers in the library. Out of which 33 computers are made available for the use of the clientele. The library provides internet service to the users for browsing information of their choice and it also provides CD-ROM search, OPAC as well as access to networks such as INFLIBNET, Biological Abstracts, Chemical Abstracts, and Physical Abstracts. The LAN of the Library is connected to the Campus Net of the University which is supported by a V-SAT so as to enable the library users to access the databases from their own departments. The entire databases of the library are available on OPAC within the campus. Moreover, the library also has the collections of maps, reading materials in CD-ROM and Diskettes. Earlier the library was subscribing to two E-journals titles. But now the library can access to about 3450 E-journals under the UGC Infonet services.

### **OBJECTIVE OF STUDY:**

The present study is undertaken the following objectives. To find out the purposes of using ICT based services; to bring out the requirements of the users; to check the problems and difficulties while using the services; and to seek suggestion from the users for the improvement of the services.

### **METHODOLOGY:**

The library is one of the most modern and busiest libraries of the North Gujarat. At present, the circulation, the periodicals, stacks, general administrative office and internet terminals are accommodated in the ground floor. Sections like acquisition, processing, textbooks, reference and technical section room are accommodated in the 1st floor, and on second floor have reading room and department of Library and Information Science with the modern facilities. The first floor will be fully air conditioned and sufficient number of browsing points will be provided for the users. The floor will also provide facility for interaction and tele-conferencing. The library is planning to install RFID and to upgrade the speed of the internet.

The study has been made by surveying the different user groups of the Shivabhai Umedbhai University Library by distributing questionnaires 110 Questionnaires were distributed, out of which 80 users returned the duly filled in questionnaires making 72.72 percent response. It is happy to know that all the respondents have the knowledge of computer handling as well as they are using the ICT based services in the library.

### **REVIEW OF LITERATURE:**

There are many studies on the impact of ICT. This review presents some of studies on ICT in libraries.

Mohamed, Haneefa (2007): This study was investigated the application of information and communication technologies (ICT) in special libraries in Kerala, India. Conclusion on this study most of the libraries were hampered by lack of funds, infrastructure, and skilled professionals to embark on automation of all library management activities and application of ICT. A good number of the library users were not satisfied with the application of ICT in their libraries and indicated "inadequate ICT infrastructure" as their major reason for dissatisfaction. They

proposed several of actions of formal orientation and training on ICT to become more effective library users.

Krubu and Osawaru (2011): The primary purpose of the study is to ascertain the impact of ICT on Nigerian academic libraries. The research work highlights the advantages or merit associated with ICT on academic libraries in Nigeria. The inevitable conclusion that the researchers have arrived at in this study is that ICT has fulfilled its promise in academic libraries, there is remarkable rise in the use of ICT. This has led to the speed on library operations. ICT has also help to rub the problem of information explosion in this information era.

Murugesan and Balasubramani (2011): The main objective of the study is to survey the use and application of Information and Communication Technology in research and development libraries in Tamil Nadu. The study suggested the Research & Development institutions to give priority to consortia based subscription and boost the funds and recruitment of information technology trained staff for better ICT based services and products to their library users.

### ANALYSIS OF DATA

Analysis has been done according to the serial number of the questionnaire. Simple statistical calculations and tables have been used in analyzing the collected data. Analysis of the impact of ICT on the users is provided under the following heads.

**Table 1: Personal Identification**

User Category	Male (%)	Female (%)	Total Percentage
No. of Respondent	48 (60%)	32 (40%)	80(100%)

The Personal Identification table above shows that out of the total number of respondents from S.U. Patel University libraries, 48 (60%) were male while 32 (40%) were female in PG Student, Research Scholar & Teachers.

**Table 2: Purpose of using ICT based Services**

ICT based Services	No. of Respondents	In Percentage (%)
Circulation Services	70	26.71
E-Based Reference Services	49	18.7
CD- Rom Search facility	40	15.27
Electronic Document Supply	60	22.9
Digital Library	33	12.6
For Virtual Library	10	3.82
<b>Total</b>	<b>262</b>	<b>100</b>

Table 2 reveals that S.U. Patel library is provides ICT based services to their clientele. The table shows that the details of the purpose of using ICT based services. The highest 26.71% of them use of circulation services for borrow of books. Second highest services 22.9% of them use of

electronic document supply, and next are 18.7% use of e-based reference services and other services minimum use like that CD-Rom search facility, digital library and virtual library.

**Table 3: Types of search engines and other tools used**

<b>Use of Search Engines</b>	<b>No. of Respondents</b>	<b>In Percentage (%)</b>
Google	74	32.46
Yahoo	71	31.14
AltaVista	35	15.35
Rediff	45	19.74
Other	3	1.31
<b>Total</b>	<b>228</b>	<b>100</b>

Table3 shows that which are search engines/tools most like from user, in that reply 32.46% use of Google search engine, 31.14% use of yahoo search engine, 19.74% use of Rediff search engine, 15.35% use of Alta vista search engine and 1.31% answered use of other search engine. From the table analysis that the majority use of search engine are Google and Yahoo.

**Table 4: Access to OPAC**

<b>Access to OPAC</b>	<b>No. of Respondents</b>	<b>In Percentage (%)</b>
Access to OPAC	66	22.22
Access to Local Network Database	54	18.18
Access to Theses & Dissertation	61	20.54
Access to Online database/ Journal	38	12.80
Access to Open Archives & E-Resources	37	12.46
Access to Web Database	41	13.80
<b>Total</b>	<b>297</b>	<b>100</b>

Table 4 shows that analysis of which type of access database for the searching information by users. The respondents asked 22.22% access to OPAC systems for the searching of information in their library, 20.54% access to Thesis & Dissertation for the study, 18.18% access to Local Network Database for the information, 13.80% access to Web Database for the study, 12.80% access to Online Database/ Journal and 12.46% access to Open Archives & E-Resources for the searching of information.

**Table 5: Access to the electronic modes of information**

<b>Electronic Modes of Information</b>	<b>No. of Respondents</b>	<b>In Percentage (%)</b>
CD-ROM	56	13.21
E-Books	59	13.92
E-Journals	62	14.62
Fee based online database	41	9.67
Free open archives & E-resources	36	8.49
Free Web Database	35	8.25
Web OPAC	26	6.13
Internet	64	15.1
Library Consortium	45	10.61
<b>Total</b>	<b>424</b>	<b>100</b>

The above table 5 shows that access to electronic modes of information, 15.10% of the respondent access to Internet information. In the case of online access to materials, 14.62% of the respondent access to E-Journals, and 13.92% access to E-Books. 13.21% of the respondents access to CD-Rom and 10.61% access to library consortium information, while 9.67% access to fee based inline database, 8.49% access to free open archives & e-resources information. 8.25% access online free web database and 6.13% use of web OPAC. From the table it can be defined that the majority of the respondents access to electronic modes of information with Internet and E-journals.

**Table 6: Level of satisfaction of the users with ICT services**

<b>Satisfaction of the users from ICT services</b>	<b>No. of Respondents</b>	<b>In Percentage (%)</b>
Fully Satisfied	59	73.75
Partially satisfied	11	13.75
Uncertain	5	6.25
Not satisfied	5	6.25
<b>Total</b>	<b>80</b>	<b>100</b>

Users were asked to indicate to what extent they were satisfied with ICT services in their libraries. It is seen from the table that, 73.75% of them fully satisfied and 13.75% of them are partially satisfied, 6.25% of them uncertain and same percentage reply are not satisfied about the use of ICT services.

**Table 7: Identification of problems/ difficulties in the use of ICT services**

<b>Problem in the use of ICT services</b>	<b>No. of Respondents</b>	<b>In Percentage (%)</b>
Shortage of Computer	60	25.32
System is not User Friendly	38	16.03
Insufficient of E-journals	33	13.92
Insufficient knowledge of consortium	34	14.35
Information is not updated	37	15.61
Insufficient of ICT base trained staff	35	14.77
<b>Total</b>	<b>237</b>	<b>100</b>

The table 7 shows the main problems faced by the users while using Information Communication technology services in their library. As defined above data 25.32% of them face problem of shortage of computers, 16.03% of them faced problem of system is not user friendly, 15.61% were asked problem of information is not update, 14.77% of them faced problem of insufficient of information communication technology base trained staff without good experienced, 14.35% of them faced problem lack of knowledge about consortium, 13.92% asked e-journal are not sufficient in their library.

#### **FINDING AND SUGGESTIONS:**

- The male respondents were more than the female respondents in their library.
- Circulation services and electronic document supply services are most use in their ICT based services.
- Majority of the respondents are use of Google and Yahoo search engine.
- The library users most are to access for the OPAC and Theses & Dissertation for the information.
- The result also found that the entire respondent most of access to Internet, E-Journals, E-Books and CD-ROM services in the electronic modes of information.
- Most of respondents are satisfied of ICT Services.
- Shortage of computer, System is not user friendly, Information not updated etc results found that in problems of the use of ICT services.
- An arrangement should be made for regular ICT awareness program to all the departments/institutions so that every user will be able to take the advantages of ICT services.
- Computerization of all activities of the library should be made so as to cope with the new challenges.
- Regular internet service should be made available.

- More e-journals should be provided and the full text of the documents should be made available to the users.

### **CONCLUSION:**

The major findings of the present impact study can be concluded as, therefore it is concluded that most of the respondents face problems because most of the respondent do not get a proper services to use the electronic resources, access to web database, WEB OPAC, online journals in the library.

The study pointed out that greater part of the users working in this university has shown positive preference toward application of ICT based services. This library is using standards to create internal databases, which are used for information retrieval purposes. The study recommended to give priority to consortia based subscription and increase the funds and recruitment of information technology trained staff for better ICT based services.

ICT is changing the work of libraries and information centers. More than ever, the S.U. Patel University library needs this technology. An increased number of users, a greater demand for library materials, an increase in the amount of material being published, new electronic formats and sources, Insufficient of ICT base trained staff, Insufficient of E-journals, and e-database are some of the reasons for the growing need for ICT in university library. Librarians, library patrons and supporters, and, above all must help develop ICT-based library to meet the changing demands of the users.

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