
**Impact of Information and Communication
Technologies on Library Services: A Study of Sri
Venkateswara University, Tirupati**

P. Giri Naidu

Assistant University Librarian
Rashtriya Sanskrit Vidyapeetha
Tirupati-517 507.
Email: pгнаиду123@gmail.com

Abstract

The present study aims to examine the impact of information and communication technologies on Sri Venkateswara University Library Services. It is necessary to examine the impact of ICT on S.V.U. Library services. In this context, The survey method was used in this study. Questionnaire tool was used to collect data from the research scholars. 180 questionnaires were distributed to the research scholars following accidental sampling method. Out of them, 150 research scholars returned the duly fulfilled-in the questionnaire accounting 83.3 per cent response. Majority of the respondents (44%) opined that they access internet in their departments concerned. Nearly one fourth of the respondents (24%) use online information. More than fifty per cent of the respondents use of Google search engine. Nearly one-third of the respondents (31.3%) access to online databases/journals for getting required information in their library.

Keywords

Information Communication Technology; User Study; Library Service; Sri Venkateswara University Library; Tirupati

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1. INTRODUCTION

With the invention of Information and Communication Technology, libraries now use various types of technologies to improve the services they render. Everyday new technological advances affect the way information is handled in libraries and information centres. The impacts of new technologies are felt by libraries in every aspect. Computing technology, communication technology and mass storage technology are some of the areas of continuous development that reshape the way that libraries access, retrieve, store, manipulate and disseminate information to users. The academic library has been from its inception an integral part of institutions of higher learning, rather than an appendix or adjunct. It is supporting learning, teaching and research programmes.

Over the past twenty seven years, academic libraries have been affected by changes in information and communication technology. The rate of changes is still accelerating in this area. The introduction of various information technology (ICT) trends has led to reorganization, change in work patterns, and demand for new skills, job retraining and reclassification positions. Technological advancement of the past twenty five years, such as the electronic database, online services, CD-ROMs and introduction of internet has radically transformed access to information. Rana (2009) opines that ICT holds the key to the success of modernizing information services. Applications of ICT are numerous but mainly it is used in converting the existing paper-print records in the entire process of storage, retrieval and dissemination. ICT has impacted on every sphere of academic library activity especially in the form of the library collection development strategies, library building and consortia. ICT presents an opportunity to provide value-added information services and access to a wide variety of digital based information resources to their clients.

Furthermore, academic libraries are also using modern ICTs to automate their core functions, implement efficient and effective library cooperation and resource sharing networks, implement management information systems, develop institutional repositories of digital local contents, and digital libraries, and initiate ICT based capacity building programmes for library users. Information and Communication Technology (ICT) has brought unprecedented changes and transformation to

academic library and information services, conventional LIS such as OPAC, users services, reference services, bibliographic services, current awareness services, Document delivery, interlibrary loan, Audio visual services and customer relations can be provided more efficiently and effectively using ICT, as they offer convenient time, place, cost effectiveness, faster and most-up-to-date dissemination and end users involvement in the library and information services process. The impact of ICT characterized on information services by changes in format, contents and method of production and contents and method of production and delivery of information products. Emergence of internet as the largest repository of information and knowledge, changed role of library and information science professionals from intermediary to facilitator, new tools for dissemination of information and shift from physical to virtual services environment and extinction of some conventional information services and emergence of new and innovational web based.

2. REVIEW OF LITERATURE

Ivwithreghweta (2013) in their papers explains the application of ICT on library's operations and services in selected academic libraries in Nigeria. Five research questions were raised.. It found that the services and operations in library where ICT are mostly been applied to are in the acquisition of materials and provision of the OPAC services. It was also found that the major benefits derived from using ICTs in the selected libraries are that it increases work efficiency. Meanwhile, the result of this study also shows that the majority of the respondents identified poor funding and power supply as the major problem militating against the use of the ICTs in the selected libraries. The paper concludes by advocating that the government and the private sector should assist academic libraries in the provision of ICTs facilities and the fund to be able to manage them in order to be able to provide speedy information to their clients in the 21st century era. Hussain, Khan and Zaidi (2013) have carried out a study on "The ICT based library and Information services: a case study of B-schools in Delhi and NCR region". The present study examines the purpose of using ICT enabled library services, to assess to what extent users are utilized ICT based library services and facilities, various aspects of Internet usage, favourite search engines, and problems faced by the users in using the ICT in libraries. The study determines the satisfaction level of users regarding research work, online database services and

infrastructure facilities. Suggestions have been given to make the service more beneficial in the library users of B-schools in Delhi and NCR region. Patel and Patel (2012) explore through a study on the impact of Information and Communication Technology on library and its services of S. U. Patel University Library. For collecting data, questionnaire method is adopted. ICT based services of the Library are also highlighted. Major findings and conclusions are summarized in a suggestive way to use in providing better services in future to meet the needs of the users.

Talab and Tajafari (2012) conducted a survey of impact of Information Communication Technology (ICT) on library staff training. Through a questionnaire survey, the study identifies and compares the impact of ICT on training of library human resources in two university libraries each of India and Iran. Descriptive and inferential statistics were used to analyse data. The findings shows that though both Indian and Iranian library staff believe that introduction of ICT in libraries has created a need for training. Library staff from Iran have perceived that effect of ICT on they training needs more than their Indian counterparts. The article concludes that university libraries in both countries have to get their library staff trained in ICT. Krubu and Osawaru (2010) have examined that the Information and Communication Technology (ICT) has brought unprecedented changes and transformation to academic libraries and information services. It revealed that both University Libraries are automated/computerized and that they apply Strategic Library Automation Management (SLAM); only three divisions of the libraries are computerized/automated which are Readers Services Division, Technical Services Division and Collection Development division; the major reason attached to the use of ICT resources was for information storage and retrieval; the ICT resources mostly used are CD-ROM, online database, World Wide Web and the Internet. The study also revealed that ICT has an enormous impact based on its effectiveness. Inadequate training and retraining of staff by management; inadequate funding, epileptic power supply and lack of search skills are the major factors militating against the effective use of ICT in Nigerian University libraries. Amongst others, inadequate funding, capacity building, regular power supply were recommended.

3. OBJECTIVES OF THE STUDY

The present study is undertaken with the following objectives:

1. To find out the purposes of using ICT based services;
2. To bring out the requirements of the users;
3. To check the problems and difficulties while using the services; and
4. To seek suggestions from the users for the improvement of the services.

4. SCOPE OF THE STUDY

The study is undertaken to explore the impact of information communication technology on library services of research scholars and their perceptions on the impact of information communication technology on library services in the surveyed Sri Venkateswara University Library.

5. METHODOLOGY

The survey method was used in this study. Questionnaire tool was used to collect data from the research scholars. 180 questionnaires were distributed to the research scholars following accidental sampling method. Out of them 150 research scholars returned the duly filled-in the questionnaires account 83.3 per cent response. After collecting data required for the study, the data was analysed and interpreted in the form of tables.

6. ANALYSIS AND INTERPRETATION OF THE DATA

The collected data is analysed and interpreted in the following paragraphs.

6.1 Gender

Gender-wise analysis of respondents is presented in table 1.

Table 1: Gender-wise analysis of respondents

Gender	Research Scholars	
	No.	Percentage (%)
Male	122	81.3
Female	28	18.7
Total	150	100

It is clear from Table 1 that majority of the respondents (81.3%) are male members and remaining of them (18.7%) are female members.

6.2 Place of access to Internet

The distribution of respondents according to their place of access of Internet is shown in Table 2.

Table 2: Place of access to Internet

Reply	Research Scholars	
	No.	Percentage %
Library	58	38.7
Departments	66	44
Computer Centres	18	12
Home	8	5.3
Total	150	100

Table 2 reveals that a high percentage of the respondents (44%) opined that they access internet in their departments concerned followed by library (38.7%), computer centres (12%) and home (5.3%).

6.3.Purpose of using ICT based services

The distribution of research scholars according to their purpose of using ICT services is shown in Table 3.

Table 3: Purpose of using ICT based services

ICT based Services	Research Scholars	
	No.	Percentage %
Database Searching	25	16.7
Online Reservation	10	6.7
News Clipping Scanning	15	10
Online Information	36	24
Photocopying	18	12
Online Networking	9	6
Online Searching	30	20
CD-ROM Searching	7	4.7
Total	150	100

It is obvious from the Table 3 that nearly one-fourth of the respondents (24%) use ICT services. It is followed by online searching (20%), database searching (16.7%), photocopying (12%), news clipping scanning (10%), online reservation (6.7%), online networking (6%) and CD-ROM searching (4.7%).

6.4 Use of search engines

The distribution of research scholars according to their use of various search engines is shown in Table 4.

Table 4: Use of search engines

Use	Research Scholars	
	No.	Percentage %
Google	89	59.3
Yahoo	36	24
MSN	12	8
Alta Vista	2	1.3
Rediff	11	7.3
Total	150	100

Table 4 elucidated that majority of the respondents (59.3%) use Google search engine followed by Yahoo (24%), MSN (8%), Rediff (7.3%) and Alta Vista Search engine (1.3%).

6.5 Access to ICT based Databases

The distribution of research scholars according to their access to various databases is shown in Table 5.

Table 5: Access to ICT based Databases

Access	Research Scholars	
	No.	Percentage %
OPAC	36	24
Local Network Database	12	8
Theses & Dissertations	27	18
Online database/ Journal	47	31.3
Open Archives & E-Resources	19	12.7
Web Database	9	6
Total	150	100

Table 5 portrays that nearly one-third of the respondents (31.3%) access to online databases/journals for getting required information in their library followed by access to OPAC (24%), Theses & Dissertations (18%), open archives/e-resources (12.7%), local network database (8%) and web database (6%).

6.6. Access to the electronic modes of information

The distribution of research scholars according to their access to various electronic modes of information is shown in Table 6.

Table 6: Access to the electronic modes of information

Electronic modes	Research Scholars	
	No.	Percentage %
CD-ROM	6	4
E-Books	18	12
E-Journals	36	24
Fee based online database	16	10.7
Free open archives & E-resources	23	15.3
Free Web Database	17	11.3
Web OPAC	9	6
Internet	20	13.3
Library Consortium	5	3.3
Total	150	100

It is evident from Table 6 that one-fourth of the respondents (24%) are accessing to E-Journals for research purpose followed by free Open Archives and E-Resources (15.3%), Internet (13.3%), E-Books (12%), Free Web Databases (11.3%), Fee based Online Databases (10.7%), Web OPAC (6%), CD-ROM (4%) and Library Consortium (3.3%).

6.7. Level of satisfaction of the users with ICT services

The distribution of research scholars according to their satisfaction with ICT services is shown in Table 7.

Table 7: Level of satisfaction of the users with ICT services

Level of satisfaction	Research Scholars	
	No.	Percentage %
Fully Satisfied	87	58
Partially satisfied	49	32.7
Uncertain	8	5.3
Not satisfied	6	4
Total	150	100

It is evident from Table 7 explains that majority of the respondents (58%) are fully satisfied with ICT services in their library, nearly one third of them (32.7%) are partially satisfied, (4%) are not satisfied and the remaining (5.3%) of them are Uncertain about their level of satisfaction.

6.8.Problems in using ICT

The distribution of research scholars according to the problems faced in using ICT is shown in Table 8.

Table 8:Problems in using ICT

Problems faced	Research Scholars	
	No.	Percentage %
Insufficient Computers	42	28
Lack of Software	19	12.7
Lack of Training	18	12
Lack of Awareness	17	11.3
Lack of Time	36	24
Lack of Technical Knowledge	18	12
Total	150	100

Table 8 presents that over a fourth of the respondents (28%) replied that insufficient computers is the main problem faced by the users while using Information Communication technology services in their library. The other problems faced by research scholars in using ICT are lack of time (24%), lack of software (12.7%), lack of technical knowledge (12%), lack of training (12%) and lack of awareness (11.3%).

7.FINDINGS OF THE STUDY

The major findings of the study are:

- Majority of the research scholars (81.3%) are Male members.
- A high percentage of the respondents (44%) opined that they access internet in their departments concerned.
- Nearly one fourth of the respondents (24%) use ICT services for online information.
- More than fifty per cent (59.3%) of the respondents use of Google search engine.
- Nearly one third of the respondents (31.3%) access to online databases/journals for the getting required information.
- Nearly one fourth of the respondents (24%) are accessing E-Journals for their research work.
- Majority of the respondents (58%) are fully satisfied with ICT services available in their library.
- Over a fourth of the respondents (28%) replied that insufficient computers is the main problem faced by them in using ICT Services.

8.SUGGESTIONS

1. More than fifty per cent respondents are not accessing internet in their departments concerned. Hence, every department is to be equipped with internet connectivity. The university authorities should take necessary steps to provide internet connectivity to every department.
2. All research scholars should be trained in using e-resources for their research work and equip with latest knowledge.
3. Hence, more number of computer systems should be provided in the departments concerned and in the library, so that the research scholars can access ICT services.
4. A significant number of research scholars (36.7%) are either partially or not satisfied with ICT services available in S.V.U.Library. Hence, the library authorities should take necessary steps to provide better ICT services in the S.V.U.Library. A link to be provided in the library website to access open access resources.

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