

**USAGE OF INFORMATION AND COMMUNICATION TECHNOLOGY IN LIBRARIES
OF TELANGANA**

Gattagoni Rama Devi Research Scholar in Parul University Faculty of Library & Information Sciences, Indian Institute of Management and Commerce, Khairtabad, Hyderabad - 500004.

rdgattagoni@gmail.com RCID ID: 0000-0002-1034-7417

Dr. Dhaval Bhatt Research Supervisor/Dean/Chief Librarian Faculty of Library & Information Sciences Parul University, Vadodara, Gujarat. dhavalbenbhatt@paruluniversity.ac.in RCID ID:

0000-0002-6470-5101

Abstract:

The utilization of Information and Communication Technology has made a vast amount of data easily accessible at various types of libraries, including academic, special, and public libraries. In this study examined the State Central Library, City Central Library and Branch Libraries in Telangana State with this objective in mind. The purpose of the study was to ascertain the staff members' technological proficiency, including their familiarity with social media and internet access in relation to their subscription to organizational technological resources. Additionally the study sought to ascertain whether recruitment policies were in place in the library and whether training sessions on technological proficiency were offered. Data was obtained through a questionnaire 15 from State Central Libraries, 14 from City Central Libraries, 50 disinformation and Communication Technology Central Libraries and 29 Branch Libraries using a simple random sampling technique. Two statistical methods were used to analyze the data: chi-square and percentages. According to the results (a) 82.4% of library staff members claimed to be knowledgeable about using information and communication technology (b) 74.1% of librarians said they were knowledgeable about using the internet (c) 69.4% of librarians said they were knowledgeable about using - (d) 36.1% of librarians said the libraries subscribe for electronic resources (e) 29.7% of librarians said they were knowledgeable about using electronic resources. (f) 25.9% of respondents the library has a recruitment policy in place (g) 14.8% of respondents libraries offer instruction in information and communication technology. The study finds that over 80% of the participants are familiar with using Information and Communication Technology have knowledge of how to access the internet, and nearly 60% of them are familiar with using social media. The librarians believe that the libraries do not have e-resource subscriptions and are not knowledgeable about how to use e-resources. Information communication technology personnel libraries do not have recruitment policies in place and organizations do not offer training courses on information communication technology use.

The study also found that respondents' opinions regarding knowledge of how to access social networks, possession of internet access knowledge did not significantly differ from those of the institutions. But there are some notable differences between the institutions in terms of e-resource subscriptions, recruitment policies and organization-provided training programs.

Key words:

Knowledge, Information Communication Technology, Social networks, e-resources, training programmes.

Introduction:

The traditional academic library has been significantly impacted by information communication technology. They are compelled to adapt to the latest advancements, especially due to financial constraints. Systems administration of data centers is therefore inevitable. The libraries main objectives are to share data-related frameworks and data assets with its users. Many libraries have re-examined their standard operating procedures and approaches in light of this process, aiming to overcome deficiencies through automation and computerization.

By using computers for library activities, one can avoid taking on separate jobs and save a significant amount of time, money and labor. Additionally, it expedites data management and specialized preparation. Information and Communication Technology has made it possible to provide high-quality administrations. A library performance is enhanced by methodically organizing its presentation and application, which ensures that innovation-based data administrations are controllable. Currently, access to the following resources is available through global libraries and information centers: Online databases available both domestically and internationally, comprehensive statistical databases and content page services and full text information sources with key word searching. Libraries need to constantly update their technology in order to transmit knowledge and create networks. Library workers must be knowledgeable about information communication technology handling procedures and techniques in order to maintain effective services. Hence, in order to stay up to date with emerging technologies and contemporary computer networking experiences, modifications must be made to the LIS curriculum. As per Dr. S.R. Ranganathan, the witticism of any sophisticated library is for its staff to push the right information and make it available to the right person at the right moment. The Internet has become a popular destination for various types of library patrons. The Internet has become more and more useful for particular data distribution due to its various features, such as web-based interfaces and long-distance informal communication venues. Information and communication technologies are the tools and products that enable society to produce, compile, transmit, and combine data for a variety of uses in interactive media environments.

Information and Communication Technology Usage in Libraries:

Libraries are caught in the transition from a print to a digital environment. By incorporating particular adjustments and enhancements into the current framework and structure, libraries in future will differ from those in the present (Swanson, 1980). It is improbable that the library of the future will take the form of a physical building like ours; instead, it will most likely be a Web portal that grants access to information (Smith, 2006). Libraries are not fully utilized by users due to inappropriate resources and the integration of information communication technologies. If services are not needed, users will naturally ignore these offerings. However, the integration of information communication technologies at both the front and back ends would enhance users' potential and encourage more young people to focus on these resources (Gould and Gomez, 2010). To begin improving, we should try to identify and understand the problems that libraries are supposed to solve. Different types of libraries have emerged in response to different concerns. It's likely that libraries will keep changing for a very long time. According to Banerjee (1996), employees will have a lot on their plate since libraries and their surroundings are always changing, requiring employees to be highly adaptable and knowledgeable about a wide range of topics. Remote libraries may now access the extensive databases of the biggest libraries in industrialized nations thanks to the advancement of information and communication technology, and they can use or alter the bibliographic data for their own library requirements. Essentially, the process of cataloging and categorization has been entirely transformed by internet catalogs.

Objectives:

- (i) Using of Information Communication Technology
- (ii) Knowledge in using e-resources
- (iii) Knowledge in accessing social networks
- (iv) The organisations have e-resources subscription
- (v) Training programmes for using Information Communication Technology

Literature Review

Anup Singh (2013) studied the Information Communication Technology and its impact on library and information services: A case study of Kendriya Vidyalaya Libraries of Kendriya Vidyalaya Sangthan

all over India. The study outlined and illustrated the main methods for learning about information communication technologies, the goal of utilizing these technologies to support library services, the degree to which users are utilizing these technologies-based resources and services, different facets of Internet usage, preferred search engines, and challenges users encounter when utilizing these technologies in libraries. Additionally, he ascertained the degree of contentment that users had with respect to online database services, infrastructure facilities, and library services.

Raju J. (2014) was utilized to determine a basic understanding of the essential knowledge and skill sets needed by LIS professionals in the contemporary academic setting. The results yielded were helpful in speculating on some of the parameters for the larger study aimed at creating thorough skills statement for South African postsecondary education libraries. Worldwide academic libraries can also benefit from the study presented here.

In South-South and South-West Nigerian university libraries, Achugbue, Iroroavwo Edwin and Igun, Stelle Emuobonuvie (2015) examined librarians' use of information communication technology. The study findings demonstrated a noteworthy correlation between librarians' knowledge and the use of Information and Communication Technology hardware in university libraries, leading to the conclusion that librarians in Nigerian university libraries are knowledgeable about the usage of Information and Communication Technology hardware.

Rexwhite T. Enakrire and Dennis N. Ocholla (2017) examined how academic libraries in South Africa and Nigeria used Information and Communication Technology resources to support knowledge management. The study came to the conclusion that academic libraries should provide a range of options to meet staff and student information needs since information communication technologies have a long history of being used to support information services. Fostering and enhancing comprehension of how librarians oversee the organization in contemporary library operations would be facilitated by this. The authors suggest stepping up staff development to help librarians learn how to deal with new technologies and changes that come with acquiring and promoting modern information services.

Mamathole Margaret Lediga and Madeleine C. Fombad (2018) looked into how information and communication technologies were used in South African public libraries as a means of closing the digital divide. Along with looking at access and use differences, it makes recommendations for how Information and Communication Technologies might be leveraged to close the digital divide. Standardizing the delivery of public library services with respect to the digital divide is necessary for public libraries to serve as a significant instrument in closing the gap.

Methodology

The research methodology used in the study is survey-based. A simple random sampling method is used to gather the data. A structured questionnaire on information communication technology usage in Telangana state public libraries were used to gather the data. There are 108 samples in total for the study; 15 of them come from the State Central Library in Afzal Gunj, Hyderabad; 14 from the City Central Library in Chikkadpally, Hyderabad; 50 from the disinformation and Communication Technology Central Libraries and 29 from the Branch Libraries located throughout the disinformation and Communication Technologies of Telangana State. The information thus gathered via the surveys. Appropriate statistical techniques are utilized for data analysis. The results were presented and interpreted based on the data analysis.

Utilizing Technology for Information and Communication

The libraries included in the survey make use of a variety of electronic devices and communication technologies to make sure that library operations run smoothly. The use of Information and Communication Technology in the libraries that were surveyed is displayed in the following table.

Table-1: Utilizing Technology for Information and Communication

<i>Sl. No.</i>	<i>Institute</i>	<i>Yes</i>	<i>No</i>	<i>Can't say</i>	<i>Total</i>
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1.	State Central Library, Hyderabad	13 86.7%	2 13.3%	0 0.0%	15 100%
2.	City Central Library, Hyderabad	14 100.0%	0 0.0%	0 0.0%	14 100%
3.	Disinformation and Communication Technology Central Libraries	40 80.0%	10 20.0%	0 0.0%	50 100%
4.	Branch Libraries in disinformation and Communication Technologies	22 75.9%	7 24.1%	0 0.0%	29 100%
	Total	89 82.4%	19 17.6%	0 0.0%	108 100.0%
Pearson Chi-square: 4.233, df: 3, Sig: 0.237					

Table 1 lists the knowledge of information and communication technology that professional librarians or semi-professional staff members of Telangana state public libraries possess of the fifteen responders employed at the State Central Library in Afzalgunj, Hyderabad Two (13.3%) of them claimed to know nothing about information and communication technology, while 13 (86.7%) claimed to be knowledgeable in its use. All of the participants from Chikkadpally City Central Library, however, indicated that they were familiar with using the internet. Of the fifty respondents in the Central Libraries for disinformation and communication technology, forty (80.0%) are knowledgeable about the use of Information and Communication Technology. Over 75% of Branch Library librarians who specialize in disinformation and communication technologies are knowledgeable users of information and communication technology. For three degrees of freedom, the computed Pearson $\alpha 2$ value of 4.23 is less than the table value of 7.81 at the 0.05 level of significance. Therefore, it can be said that respondents and institutions perspectives on the use of information and communication technology are not significantly different.

Having the ability to access the Internet

In libraries, the Internet is essential. It has enabled communication across distances. It has a big impact on how librarianship is practiced. A survey was conducted to find out if the libraries had any experience with Internet access.

Table 2: Having the ability to access the Internet

Sl. No.	Institute	Yes	No	Can't say	Total
1.	State Central Library, Afzalgunj	9 (60.0%)	5 (13.3%)	1 (6.7%)	15 (100%)
2.	City Central Library, Chikkadpally	11 (78.6%)	3 (21.4%)	0 (0.0%)	14 (100%)
3.	Disinformation and Communication Technology Central Libraries	40 (80.0%)	10 (20.0%)	0 (0.0%)	50 (100%)
4.	Branch Libraries in Disinformation and Communication Technologies	20 (69.0%)	9 (31.0%)	0 (0.0%)	29 (100%)
	Total	80 (74.1%)	27 (25.0%)	1 (0.9%)	108 (100.0%)
Pearson Chi-square: 8.389, df: 6, Sig: 0.211					

The table 2 explains the ability to access the internet for professional librarians or semi-professional employees of Telangana state public libraries. Of the fifteen respondents that work at the State Central Library in Afzalgunj, nine (60.0%) indicated they are knowledgeable about using the internet, five (13.3%) are unsure, and one (6.7%) is unsure, of the 14 responders to the City Central Library in Chikkadpally, 11 (78.6%) were knowledgeable about using the internet, whereas 3 (21.4%) were not. Twenty people (69.0%) have knowledge of branch libraries in misinformation and communication technology, whereas nine people (31.0%) do not know how to use the internet. For six degrees of freedom, the computed Pearson α^2 value of 8.39 is smaller than the table value of 12.59 at the 0.05 level of significance. It follows that there is no discernible difference between respondents' and institutions' perceptions of respondents' knowledge of internet access.

Familiarity with social network access

Social networks make it possible for experts to communicate synchronously through conversation, debates, storytelling, and other activities. This allows experts to share their tacit knowledge and expertise. Through informal networks, professionals may communicate with non-experts and trainees, increasing the organization's competence. There will be an increase in spontaneous, practical, widespread, freed, and comfortable SM use, leading to greater contacts, reach, engagements, and productivity. The information is summarized below based on data gathering methods to determine the level of access knowledge among library professionals.

Table 3: Familiarity with social network access

<i>Sl. No.</i>	<i>Institute</i>	<i>Yes</i>	<i>No</i>	<i>Can't say</i>	<i>Total</i>
1.	State Central Library, Afzalgunj	9 (60.0%)	6 (40.0%)	0 (0.0%)	15 (100%)
2.	City Central Library, Chikkadpally	9 (64.3%)	5 (35.7%)	0 (0.0%)	14 (100%)
3.	Disinformation and Communication Technology Central Libraries	38 (76.0%)	12 (24.0%)	0 (0.0%)	50 (100%)
4.	Branch Libraries in disinformation and Communication Technologies	19 (65.5%)	10 (34.5%)	0 (0.0%)	29 (100%)
	Total	75 (69.4%)	33 (33.6%)	0 (0.0%)	108 (100.0%)
<i>Pearson Chi-square: 2.030, df: 3, Sig: 0.566</i>					

In Table 3 shows the proficiency with which professional librarians or semi-professional employees of Telangana state public libraries can access social networks. Nine (60.0%) of the respondents from the State Central Library in Afzalgunj stated that they are familiar with using -, while six (40.0%) indicated they are not. Of the 14 respondents surveyed by City Central Library in Chikkadpally, 9 (64.3%) were aware of how to access -, whereas 5 (35.7%) were not. Regarding branch libraries located in disinformation and communication technologies, 38 respondents (76.0%) know how to access -, while 12 respondents (24.0%) do not know how to access -. Of the respondents working branch libraries in disinformation and communication technologies, 19 (65.5%) know how to access social media, and 10 respondents (34.5%) do not know. For three degrees of freedom, the computed Pearson α^2 value of 2.03 is smaller than the table value of 7.81 at the 0.05 level of significance. Therefore, it can be said that respondents' perceptions of their level of familiarity with using and other social networks and those of the institutions do not differ much.

Any kind of library's conventional print collection cannot compete with the state-of-the-art information technology. Libraries should create electronic resources in addition to print items to draw in customers

and improve services. In light of this, the researcher gathered information on e-resource subscriptions at public libraries that were assessed during the study period. The following table displays the findings.

Table 4: The organization's subscription to electronic resources

<i>Sl. No.</i>	<i>Institute</i>	<i>Yes</i>	<i>No</i>	<i>Can't say</i>	<i>Total</i>
1.	State Central Library, Afzalgunj	4 (26.7%)	11 (73.3%)	0 (0.0%)	15 (100%)
2.	City Central Library, Chikkadpally	8 (57.1%)	6 (42.9%)	0 (0.0%)	14 (100%)
3.	Disinformation and Communication Technology Central Libraries	10 (20.0%)	40 (80.0%)	0 (0.0%)	50 (100%)
4.	Branch Libraries in disinformation and Communication Technologies	18 (62.1%)	11 (37.9%)	0 (0.0%)	29 (100%)
	Total	40 (36.1%)	68 (63.0%)	0 (0.0%)	108 (100.0%)

Pearson Chi-square: 23.184*, df: 6, Sig: 0.001

The table 4 explains the professionals employed by State Central Library, Afzalgunj, claim that the library has not responded very much to requests for public libraries to subscribe to electronic resources. Merely 26.7% of the participants said that their library had access to electronic materials, and 20.0% of the experts at Disinformation and Communication Technology Central Libraries shared the same opinion. In contrast, 62.1% of branch libraries in the field of disinformation and communication technologies and 57.1% of librarians at Chikkadpally City Central Library said that their organizations subscribed to three resources. At the 0.05 level of significance, the computed Pearson 2 value of 23.18 for six degrees of freedom is more than the table value of 12.59. Thus, it may be said that there is a big gap between e-resource subscriptions and institutions.

The following data is given in a tabular format to ascertain the library professionals' knowledge of electronic resources, computer access, and usage of electronic resources (both quantity and frequency) accessible at the Public Libraries of Telangana.

Table 5: proficiency using electronic resources

<i>Sl. No.</i>	<i>Institute</i>	<i>Yes</i>	<i>No</i>	<i>Can't say</i>	<i>Total</i>
1.	State Central Library, Afzalgunj	7 (46.7%)	8 (53.3%)	0 (0.0%)	15 (100%)
2.	City Central Library, Chikkadpally	11 (78.6%)	3 (21.4%)	0 (0.0%)	14 (100%)
3.	Disinformation and Communication Technology Central Libraries	8 (16.0%)	39 (78.0%)	3 (6.0%)	50 (100%)
4.	Branch Libraries in disinformation and Communication Technologies	6 (20.7%)	23 (79.3%)	0 (0.0%)	29 (100%)
	Total	32 (29.7%)	73 (67.6%)	3 (2.8%)	108 (100.0%)

Pearson Chi-square: 34.830, df: 6, Sig: 0.000

The table 5 describes the knowledge in using e-resources by professional librarians or semi-professional staff of public libraries the respondents from the State Central Library in Afzalgunj, 7 (46.7%) reported knowing how to use e-resources, while 8 (53.3%) did not know how to do so. Of

the 14 responders to the survey at the City Central Library in Chikkadpally, 11 (78.64%) had experience accessing e-resources, whereas 3 (21.4%) had no experience at all. Regarding branch libraries located at misinformation and communication technologies, 6 (20.7%) respondents said they were familiar with using e-resources, 23 (79.3%) said they were not, and 8 (16.0%) who worked at city central library's said they were familiar with using e-resources. For six degrees of freedom, the computed Pearson α^2 value of 34.83 is greater than the table value of 12.59 at the 0.05 level of significance. Therefore, it can be said that there is a big difference in how e-resources are used in institutions compared to other ways.

The presence of a recruitment policy inside the library or organization

A library's recruiting and selection procedure should be clearly defined, consistent, and openly accountable in order to pick the most competent and qualified candidates. This is the goal of the recruitment policy. The researcher displayed the views of library professionals on the hiring practices implemented in their individual libraries in the following table.

Table 6: The presence of a recruitment policy inside the library or organization

<i>Sl. No.</i>	<i>Institute</i>	<i>Yes</i>	<i>No</i>	<i>Can't say</i>	<i>Total</i>
1.	State Central Library, Afzalgunj	4 (26.7%)	10 (66.7%)	1 (6.7%)	15 (100%)
2.	City Central Library, Chikkadpally	2 (14.3%)	10 (71.4%)	2 (14.3%)	14 (100%)
3.	Disinformation and Communication Technology Central Libraries	9 (18.0%)	41 (82.0%)	0 (0.0%)	50 (100%)
4.	Branch Libraries in disinformation and Communication Technologies	13 (44.8%)	16 (55.2%)	0 (0.0%)	29 (100%)
	Total	28 (25.9%)	74 (68.5%)	3 (2.8%)	108 (100.0%)

Pearson Chi-square: 27.818, df: 9, Sig: 0.001

The table 6 explains the views of Telangana state public library librarians and semi-professional employees over the implementation of a hiring policy. Just 4 (26.7%) of the State Central Library's respondents confirmed the existence of a recruiting policy, while 4 (26.7%) were unaware of it and 1 (6.7%) was unable to comment. Of the 14 respondents surveyed by City Central Library in Chikkadpally, 10 (71.4%) said "no," 2 (14.3%) responded "yes," and 2 (14.3%) indicated they were unsure. Regarding branch libraries located in misinformation and communication technologies, 13 (44.8%) respondents answered in the affirmative, 16 (55.2%) in the negative, 9 (18.0%) respondents who worked at city central libraries in the positive, and 41 (82.0%) respondents who were unsure. At the 0.05 level of significance, the computed Pearson 2 value of 27.82 for six degrees of freedom is more than the table value of 12.59. Thus, it can be said that the institutions and the recruiting policies differ significantly from one another.

Training programs offered by the organization in information and communication technology

As per Ranganathan, librarians have to push the right information and make it accessible to the right person at the right time, which is the motto for any modern library. The World Wide Web has emerged as effective sources for various types of library users. The training programme is potentially very powerful in giving working librarians the opportunity to update their skills and to broaden their professional horizons at a time when another major programme is introducing PCs into all public

libraries. The following table gives the library professionals opinions on Information Communication Technology Training programmes provided by the organization.

Table 7: Training programs offered by the organization in information and communication technology

<i>Sl. No.</i>	<i>Institute</i>	<i>Yes</i>	<i>No</i>	<i>Can't say</i>	<i>Total</i>
1.	State Central Library, Afzalgunj	4 (26.7%)	11 (73.3%)	0 (0.0%)	15 (100%)
2.	City Central Library, Chikkadpally	1 (7.1%)	11 (78.6%)	2 (14.3%)	14 (100%)
3.	Disinformation and Communication Technology Central Libraries	3 (6.0%)	43 (86.0%)	4 (8.0%)	50 (100%)
4.	Branch Libraries in disinformation and Communication Technologies	8 (27.6%)	21 (72.4%)	0 (0.0%)	29 (100%)
	Total	16 (14.8%)	86 (79.6%)	6 (5.6%)	108 (100.0%)

Pearson Chi-square: 23.640, df: 9, Sig: 0.005

The table 7 presents the views of Telangana state public library librarians and semi-professional employees about the training courses offered by various organizations. Of the State Central Library's responses, just 4 (26.7%) stated that their organization offers information and communication technology training programs, whereas 11 (73.3%) stated that such programs exist. Of the 14 respondents surveyed by City Central Library in Chikkadpally, 11 (78.6%) responded "no," 1 (7.1%) said "yes," and 2 (14.3%) indicated they were unsure. About branch libraries located near disinformation and communication technologies, only 3 (6.0%) respondents answered in the affirmative, 43 (86.0%) in the negative, and 4 (8.0%) in the "can't say" category.

Findings

- (a) Overall, 82.4% of respondents claimed to be knowledgeable about utilizing information and communication technology.
- (b) It is discovered that 74.1% of the librarians who responded are knowledgeable about using the internet.
- (c) Research indicates that 69.4% of librarians are proficient at using social media.
- (d) It was discovered that just 36.1% of librarians said their institution subscribes to e-resources for the libraries.
- (e) It is discovered that just 29.7% of librarians are proficient in the use of electronic resources.
- (f) It was discovered that 25.9% of the respondents believed the organization or library had a recruitment policy in place.
- (g) It was discovered that a mere 14.8% of the participants acknowledged the existence of information and communication technology.

Based on the aforementioned data, it can be inferred that over 80% of the participants are aware of and knowledgeable about the use of Information Communication Technologies. Additionally, approximately 60% of them have experience using social media. The librarians believe that because libraries do not have e-resource subscriptions and do not know how to use them, they are not utilizing them. The institution or a library employing person in information and communication technology does not have a recruiting policy, and neither do they offer training courses on information and communication technology use.

The survey also found that respondents attitude of knowledge of how to access social networks, ownership of internet access knowledge and knowledge of how to access other social networks did not significantly differ from those of the institutions. But there are also notable differences across the institutions in terms of e-resource subscriptions, recruiting policies, and organization-provided training programs.

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