

**ICT Infrastructure and Services of the College Libraries in Ratnagiri
Affiliated to Mumbai University : A Study****Mr. Kamalakar Madhukar Sawant**

Librarian , Arts, Commerce and Science College, Lanja

Abstract

Higher education plays an important role in every development of the society. Acquiring and managing print information resources as well as digital, electronic or virtual information resources in the libraries of educational institutions has also been initiated. Thus, academic libraries are able to meet the needs of students, professors and researchers. Better and more effective library services can be ensured through the use of information and communication technology and qualified library staff. The technical aspect of ICT has posed some challenges especially to college libraries in Ratnagiri.

The study is from the Colleges of Arts, Commerce and Science affiliated to the University of Mumbai. Ratnagiri district currently has 27 colleges of arts, commerce and science, out of which 13 are aided and 14 are unaided. Aided colleges were selected for the present study. A total of 13 colleges have been studied.

Keywords:

Information and Communication Technology, ICT, ICT Infrastructure, ICT Based Library Services, Library Services, College libraries, Ratnagiri.

1. Introduction:

Libraries are the heart of every institution which helps faculty, students scholars and researchers to collect, store and disseminate current information. The services provided by the library are important to prove the quality of the educational institution. Academic library is known as the heart of any educational institution. Academic libraries play an important role in improving the knowledge and skills of students in rural and urban communities.

Information technology provides opportunities for libraries to automate traditional relationships, establish effective library collaboration and resource sharing networks, create institutional repositories of digital libraries, provide value-added information services and initiate capacity building programs for library staff and users. ICT can be used in libraries to provide better security services and meet the needs of users according to their needs. They are also used in libraries to develop new information services and improve the productivity and efficiency of library services.

Objectives:

The key objectives of the present study are:

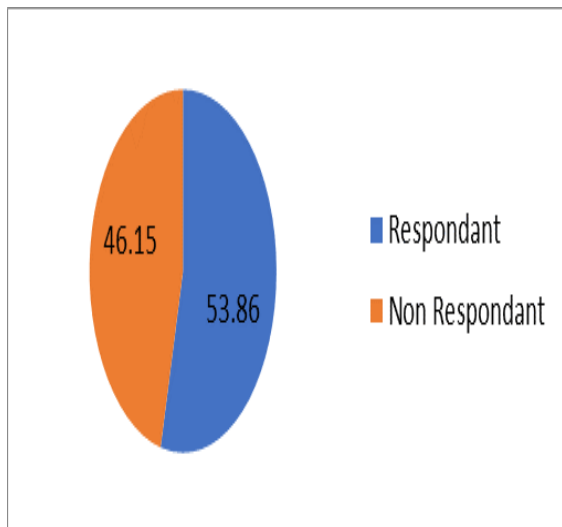
1. To identify the hardware infrastructure facilities in the college libraries in Ratnagiri
2. To identify the software infrastructure facilities in the college libraries in Ratnagiri
3. To identify the availability of ICT based technology in the college libraries in Ratnagiri.
4. To identify the availability of internet facilities in the college libraries in Ratnagiri
5. To identify the ICT based library services performed by the college libraries
6. To Identify the barriers associated with the implementation of ICTs in the college Libraries of Ratnagiri.

Scope And Limitation Of The Study:

The study covers the Arts, Commerce and Science Colleges in Ratnagiri. There are 27 colleges of Arts, commerce and science in Ratnagiri district, in which 13 are aided and 14 are unaided. The total number of colleges covered under the study is 13.

Response rate:

The questionnaires were distributed to 13 colleges out of which 07 colleges have responded and fill up the questionnaire. The percentage of response rate is 53% which is graphically represented in the Fig -1



Analysis :

1. Hardware Infrastructure facilities:

The strength of the hardware infrastructure facility in the college libraries are measured by taking different parameters that have been shown in the Table 1

Table 1: Hardware facility in the library

S.No	Description	Yes	%	No	%
1	Server	6	85.71	1	14.29
2	Desktop	7	100.00	0	0.00
3	Laptop	3	42.86	4	57.14
4	Printer	7	100.00	0	0.00
5	Scanner for general	6	85.71	1	14.29
6	Barcode scanner	3	42.86	4	57.14
7	Barcode Printer	3	42.86	4	57.14
8	Backup devices	7	100.00	0	0.00
9	CCTV	6	85.71	1	14.29
10	Photocopy machine	4	57.14	3	42.86

Table 1 shows that the highest 100% college libraries have the desktop ,Printer, Backup facility followed by 85.71% of the colleges that have Server, Scanner and CCTV. The least 42.86 %libraries have barcode printer; Laptop and Barcode Printer Facility .

2.software infrastructure facilities:

To know the software infrastructure facility in the college libraries of Ratnagiri , the investigator has attempted to collect data relating to software for management of libraries. The data collected from the respondents have been summarized in the Table 2

Table 2 Software infrastructure facility:

S.No	Description	Yes	%	No	%
1	Library Management Software	7	100	0	0
2	Digital Library software or Institutional repository software	6	85.71	1	14.29
3	Anti-virus	7	100	0	0

Table 2 shows that the highest 100% of the college libraries have library management software package and Anti Virus followed by 85.71 % of the libraries that have digital library software or institutional repository software.

3.Availability of ICT based Technologies:

Table 3.: Availability of ICT based Technologies

S.No	Description	Yes	%	No	%
1	Barcode	3	42.86	4	57.14
2	RFID	0	0	7	100
3	Video Conference	0	0	7	100
4	Internet	7	100	0	0

The data collected from the respondents relating to ICT based technologies used by the college libraries have been summarized in the Table 3. It shows that the highest at 100 % of the colleges have internet technology in their libraries and it is followed by 42.86 % of the college libraries that have adopt barcode technology. The least 0 % of the college libraries has RFID Technology and Video Conference.

4.Availability of Internet facilities in the library:

Internet Connectivity:

Table 4: Internet connectivity

S.No	Description	Yes	%	No	%
1.	Internet connectivity in the library	7	100	0	0

Table 4 shows that 100% of the college libraries have internet connectivity .

5.Type of internet service provider:

Table 5:Type of internet service provider

S.No	Description	Yes	%	No	%
1	BSNL	5	85.71	2	14.29
2	Airtel	6	100	1	0
3	Reliance Jio	5	71.43	2	28.57
4	Other	1	14.29	6	85.71

With respect to the service provider of internet connection in the college libraries, 100% libraries have subscribed internet service from Airtel , 85.71% libraries have subscribed internet service from BSNL service provider while 71.43 % of the libraries have subscribed Reliance Jio and 14.29% of each library have subscribed from other service provider.

6.ICT based Services performed by the Libraries:

Table 6: ICT based Service performed by the libraries

S.No	Description	Yes	%	No	%
1	Online Database Services	6	85.71	1	14.29
2	Electronic Database	6	85.71	1	14.29
3	Institutional repository	4	57.14	3	42.86
4	Document Delivery service	3	42.86	4	57.14
5	Internet Service	6	85.71	1	14.29
6	OPAC	6	85.71	1	14.29
7	CD-ROM	5	71.43	2	28.57
8	Scanning facility	6	85.71	1	14.29
9	Printing facility	6	85.71	1	14.29
10	Photocopy service	4	57.14	3	42.86
11	Desktop facility	6	85.71	1	14.29

Table 6 depicts that the highest 85.71% libraries provide Online Database Services , Electronic Database , Internet Service , OPAC , Scanning facility , Printing facility Desktop facility . followed by 71.43 % libraries facilitates CD Rom while 57.14 Institutional Repository and Photocopy

Servises . 42.86% Provides Document Delivery Service .

7.Barriers associated with the implementation of ICT:

Table 7: Barriers associated with the implementation of ICT)

S.No	Description	Yes	%	No	%
1	Inadequate training in ICT	6	85.71	1	14.29
2	Lack of IT infrastructure and network facility	5	71.43	2	28.57
3	Lack of support from authorities	3	42.86	3	42.86
4	Lack of budget for ICT	3	42.86	3	42.86
5	Lack of Co-ordination among library Staff	1	14.29	7	100
6	Non availability of consultation services	6	85.71	1	14.29
7	Lack of interest for learning ICT application	4	57.14	3	42.86
8	Overload of work	2	28.57	5	71.43
9	Erratic Power supply	6	85.71	1	14.29
10	Lack of IT skilled manpower	5	71.43	2	28.57

Table 7 shows that the highest 85.71% of the college libraries are facing problem due Inadequate training in ICT , Non availability of consultation services , Erratic Power supply followed by 71.43% of the libraries for Lack of IT infrastructure and network facility , Lack of IT skilled manpower while 57.14% of the libraries are faced problem caused by Lack of interest for learning ICT application ; 42.86% of the libraries for Lack of support from authorities , Lack of budget for ICT . 28.57% of each libraries faced the Problem of Overload of work . 14.29 % of the libraries for Lack of Co-ordination among library Staff .

Conclusions:

The interpretation and analysis of the study, it has been noticed that the availability of the hardware and software infrastructure facility in the college libraries of Ratnagiri has reached a good

condition. most all the college libraries have internet connectivity in functional status and most of these libraries have been subscribing internet service from BSNL service provider. Majority of the college libraries in Ratnagiri have internet technology. Almost all the college libraries in Ratnagiri have been providing photocopy and internet services.

The college libraries in Ratnagiri have faced many problems in the implementation of ICT. The main problems are caused by the lack of IT skilled manpower and inadequate training in ICT applications. The college authorities should allocate maximum funds to overcome the difficulties faced by the libraries. The authority should take initiative to recruit qualified library staff with IT skills as per the UGC norms. The librarians as well as library staff should join ICT based training programs organized by different agencies to cope up with the latest technologies.

References:

1. Atonring, R. (2015). ICT (Information and Communication Technology) in the university libraries of Tamil Nadu: Perspectives from Library Professionals. *Journal of Advances in Library and Information Sciences*, 14-20.
2. Egoze, F., Mishra, S., Akman, I., & Ricardo C. (2014). An Evaluation of ICT Infrastructure and Application in Nigeria Universities. *Acta polytechnic Hungarica*, 115-129.
3. Mondal, A. K. and Bandyopadhyay, A. K. (2014). Availability of ICT infrastructure in the university libraries of West Bengal, India. *International Research: Journal of Library and Information Science*, vol. 4, no. 2(June), 287-295.
4. Mahanta, P. K. (2013). Information and Communication Technology infrastructure in the college libraries of Barpeta district: A study (pp. 140-152).Sivasagar:LISPA.
5. Patil, K., Lihitkar, S. R. and Lihitkar, R. S. (2014). ICT applications in Agriculture University Libraries of western India: A Study. *International Journal of Emerging Technologies in computational and applied sciences (IJETCAS)*, 8(4), 300-305.
6. Walmiki, R.H., and Ramakrishnegowda, K.C (2009). ICT infrastructure in university libraries of Karnataka. *Annals of Library and Information studies*, vol.56 (December), 236-241.