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Users' Opinion towards the use of ICT in the College Libraries of Assam

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Abstract

The study has investigated the users' opinion towards the use of ICT in the College Libraries of Assam. The questionnaires were distributed to 983 library users of 51-degree college libraries in Assam, out of which total 677 questionnaires have received. The data obtained from the filled up questionnaires is classified, analyzed, tabulated and logically interpreted. The opinion of the users on the use of ICT in college libraries is found satisfactory. Similarly, the impact of ICT on users is also found positive. The study has recommended that library automation and institutional repository should be set up with branded IT equipment. The library should be equipped to have high-speed internet with Wi-Fi facility so that the users can access maximum ICT-based resources.

Keywords: ICT, Library Automation, Institutional Repository, ICT Based Library Services, College libraries, Library User, Assam.

1. Introduction

Information and Communication Technology (ICT) is defined as a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information¹.

United Nations Development Program (UNDP) comprehensively defined “ICT are basically information handling tools that are basically a varied set of goods, applications, and services that are used to produce, store, process, distribute and exchange information. They include the ‘old’ ICT of television, radio and telephone and ‘new’ ICT of computers, mobile phones, satellite, and wireless technologies and the internet. These different tools are now able to work together and combine to form ‘networked world’- a massive infrastructure of interconnected telephone services, standardized computer hardware, the internet, and radio and television, which reaches into every corner of the globe”. The older and more familiar technologies are referred to collectively headings of analogue media while the newer computer and internet based technologies are called the digital media.²

Application of ICT in libraries has brought revolutionary changes in library automation, digital libraries, resource sharing networks, value-added information services as well as capacity building programs. The use of ICT in libraries has enhanced the level of users’ satisfaction. ICT based library services provides a variety of benefits to library users such as speedy access to information, remote access to users, round the access to users, access to unlimited information for different sources, information flexibility to be used by any individuals according to their requirements, increased flexibility, facilitates the reformatting and combining of data from different sources. The libraries also provide various ICT based services to the user community along with the provision of web access to Online Public Access Catalogue (OPAC)s, electronic document delivery, networked information resources, delivery of information to the users, on-line guidance and online reader advisory services.³

The aims of the study have investigated the users’ opinion towards the use of ICT in the College Libraries of Assam including the knowledge of ICT skills, opinion on OPAC, status of institutional repositories, digital resources extended, ICT based services extended, level of users’ satisfaction and impact of ICT on users in the college libraries of Assam.

2. Literature Review

The review of related literature is pertinent to the researcher for planning and carrying out the research work in the right direction. There has been a lot of work done in the field of ICT application in libraries. So few related studies on the use of ICT in libraries have been done before conducting the research.

Haneefa (2007)⁴ study on use of ICT based resources and services in special libraries in Kerala. The main objectives of the study were to identify the basic factors that aid to promote or hinders to use the ICT based resources in the special libraries of Kerala. It is also investigate the level of user satisfaction in ICT based resources. A good number of users are not satisfied with the application of ICT. Inadequate ICT infrastructure is the reason for dissatisfaction to use ICT. The study recommended that formal training and user orientation program should be provided for effective use of ICT based resources and services in the libraries.

Haridasan and Khan (2009)⁵ have carried out a study on the impact and use of e-resources by the social scientist. It determine the usage, performance, degree of user satisfaction and the constraints faced to access the e-resources. The maximum numbers of respondents have been using e-resources to perform research work. The majority of the respondents were happy with the use of e-resource available in the NASSDOC library.

Patil, *et al.*, (2014)⁶ have carried out a study on ICT applications in agriculture university libraries in western India. It is found that two university libraries have completed 100 percent automation work, four university libraries achieved 75 percent automation and remaining two university libraries have achieved 50 percent automation work. All the universities have faced problem due to lack of ICT facilities to meet the demands of the users. It is also found that eighty-eight percent libraries have initiated to create or develop digital library with the funds provided from ICAR.

Singh, *et al.*, (2014)⁷ have carried out a study on the use of ICT based library resources and services and its impact on users: a case study of University of Allahabad. The aim of the study was to examine the use of ICT based resources and services and its impact on users. The study has determined the satisfaction level of users regarding online services, favorite search engine and the problems faced by the users in using the ICT in libraries.

Mahanta and Das (2018)⁸ have identifies the library services that are performed by using ICT devices, ICT infrastructure and extent of use in the college libraries, barriers for implementing ICT in the libraries, ICT based services extended to the users and impact of ICT on the users in the College libraries of Assam. The authors have distributed questionnaires to 189 Colleges where 100 colleges have responded. Again, user study was conducted among 100 students of different colleges. It has found that almost all the surveyed libraries have automated their libraries by using SOUL whereas some of the libraries have initiated the process of developing digital libraries with Dspace. Lack of IT skilled manpower is the main constraint to implement the ICT in the college libraries.

Mahanta(2019)⁹ carried out a study on ICT Infrastructure and Services in the College Libraries of Assam: A Study. The study identifies the availability of ICT infrastructure facilities, ICT based library services performed by the college libraries and the barriers associated with the implementation of ICTs in the college libraries.

3. Objectives of the study

The following are the objectives for the current study:

- a) To identify the level of knowledge of ICT skills of the users in the college libraries of Assam;
- b) To know the users' opinion on OPAC in the college libraries of Assam;
- c) To know the status of institutional repositories in the college libraries of Assam;
- d) To identify the digital resources extended to library users of the college libraries in Assam;
- e) To identify the ICT based services extended to library users of the college libraries in Assam;
- f) To identify the level of users' satisfaction with the use of ICT in the college libraries of Assam; and
- g) To know the impact of ICT on users in the college libraries of Assam.

4. Hypotheses

- a) H_0 -Users' opinions on the use of ICT in the college libraries is not satisfactory.
 H_a -Users' opinions on the use of ICT in the college libraries is satisfactory.
- b) H_a -Impact of ICT on users is found positive.
 H_0 -Impact of ICT on users is not positive.

5. Scope and limitation of the study

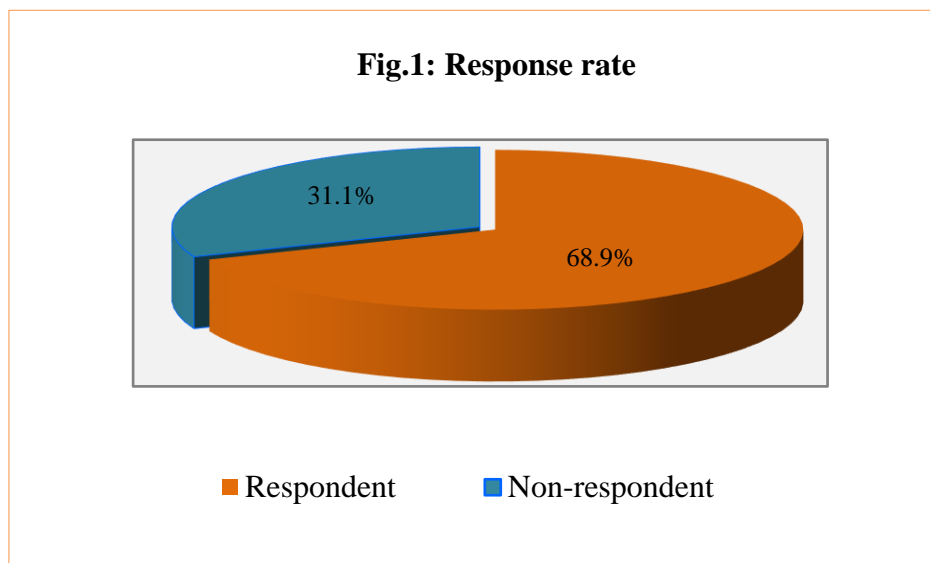
The study has covered the degree college libraries in Assam which have been imparting general education in arts, science and commerce at the graduate level. There are 298 colleges imparting general education in Assam. The study has been made based on the availability of facilities and services such as internet service, library automation and the colleges who have undertaken the initiative of developing institutional repository. The total 51 colleges out of 298 have selected for the study. The colleges imparting technical, medical, management, law and special subject or other colleges related to professional courses are excluded from the study.

6. Research Methodology

The questionnaires were distributed to 983 library users, including students and teacher for collecting the primary data. The total of 677 questionnaires, out of 983 have received from the library users. The data obtained from the filled up questionnaires is classified, analyzed, tabulated, and logically interpreted. Well known statistical software package SPSS has been used to find out the frequency, mean and standard deviation of the research objectives. It also used to test the research hypotheses.

7. Results and Discussion

The questionnaires were distributed to 983 users of different colleges, out of which total 677 questionnaires have received. The percentage of the response rate is 68.9%, which is graphically presented in the Figure 1.



a) Objective 1: To know the level of knowledge of ICT skills of the users in the college libraries of Assam.

Level of Knowledge with ICT: Table 1 shows that the highest 348 (51.4%) of the library users have found their level of knowledge of ICT as ‘good’ while 247(36.5%) of the user have found as ‘average’ and the least 82 (12.1%) of the users have found as ‘very good’.

S.No	Level of Knowledge	Response	Percentage
1	Very Good	82	12.1
2	Good	348	51.4
3	Average	247	36.5
Total=		677	100.0

b) Objective 2: To identify the opinions of the users on OPAC in the college libraries of Assam.

Awareness of OPAC: Table 2 depicts the awareness of OPAC by the users. It shows that 383 (56.6%) of library users are aware of OPAC while 109 (16.1%) of users are not aware of the OPAC. The 185 (27.3%) library users indicate that they don’t know about OPAC.

S.No	Awareness	Response	Percentage
1	Yes	383	56.6
2	No	109	16.1
3	Don’t Know	185	27.3
Total=		677	100.0

Frequency of using the online public access catalogue: Table 3 shows that the highest 314 (46.4%) of the users are using OPAC ‘sometimes’ while 294 (43.4%) of the users ‘never’ accessed OPAC and least 69 (10.2%) users access OPAC ‘usually’.

S.No	Frequency	Response	Percentage
1	Usually	69	10.2
2	Sometimes	314	46.4
3	Never	294	43.4
Total=		677	100.0

Instructions to use the OPAC: Table 4 shows that the highest 298 (44.0%) of the users have expressed that the instruction to use OPAC is ‘easy’ to follow while 274 (40.5%) of users have expressed that the instruction to use OPAC is very difficult. The least 105 (15.5%) of users expressed that the instruction is ‘very easy’ to follow.

S.No	Instruction	Response	Percentage
1	Very Easy	105	15.5
2	Easy	298	44.0
3	Difficult	274	40.5
Total=		677	100.0

Satisfaction with the use of OPAC: Table 5 shows the level of satisfaction of users with OPAC. It shows that 298 (44.0%) of the users are satisfied with OPAC while 277 (40.9%) of the library users have found no opinion. The 102 (15.1%) of the users are found not satisfied with OPAC.

Table 5: Satisfaction with the use of OPAC (N=677)			
S.No	Opinion	Response	Percentage
1	Satisfied	298	44.0
2	Not Satisfied	102	15.1
3	No opinion	277	40.9
Total=		677	100.0

c) Objective 3: To know the status of institutional repositories in the college libraries of Assam.

Status of availability institutional repositories: Table 6 shows that 328 (48.4%) of the users expressed the availability of institutional repository while 249 (36.8%) of the users don't know about the availability of institutional repositories. The least 100 (14.8%) of the users expressed that they do not know about the availability of an institutional repository.

Table 6: Status of availability institutional repositories (N=677)			
S.No	Institutional repositories	Response	Percentage
1	Yes	328	48.4
2	No	100	14.8
3	Don't Know	249	36.8
Total=		677	100.0

d) Objective 4: To identify the digital resources extended to library users of the college libraries in Assam.

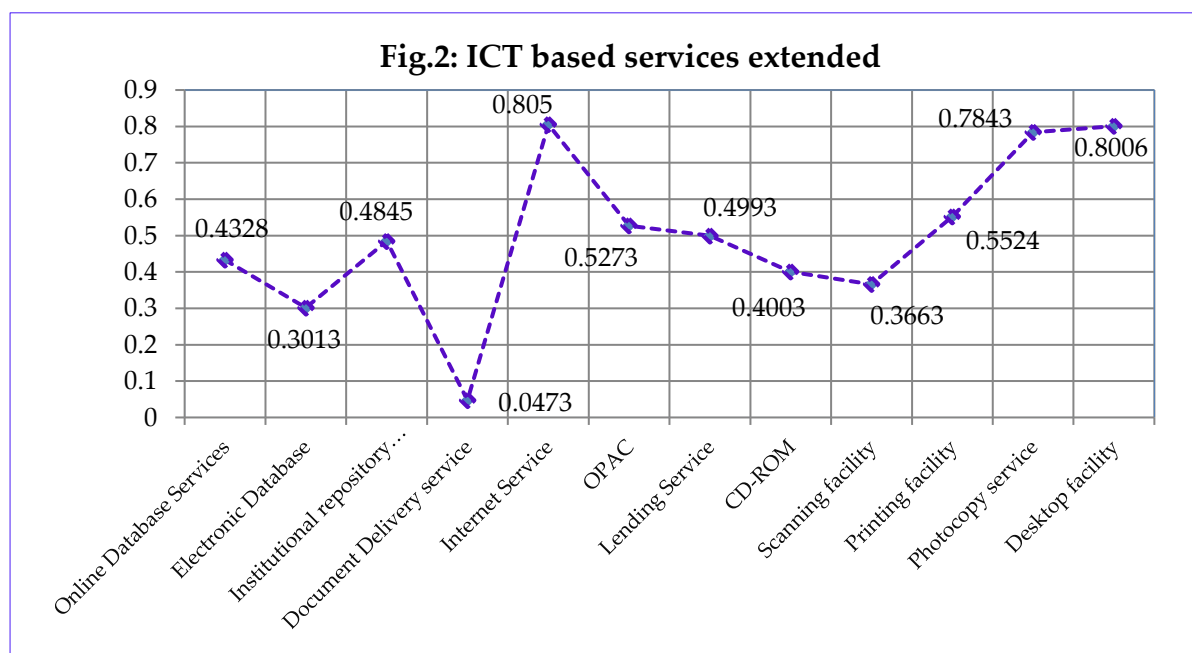
Digital resources extended to users: Table 7 presents the availability of digital resources for the users in the college libraries of Assam. It shows that the highest 262 (38.7%) of the users have been using the digitized magazine while 248 (36.6%) of the users using the digitized book. Subsequently, 225 (33.2%) of the users have been using question papers; 219 (32.3%) users using digitized journal; 148 (21.9%) users using the digitized photo gallery and 140 (20.7%) users using digitized prospectus. The other digitized documents such as theses, dissertation, conference proceeding and leaflet have preferred by 53 (7.8%), 40 (5.9%), 32 (4.7%), and 22 (3.2%) respectively.

Table 7: Digital resources extended to users(N=677)								
S.No	Description	Yes	%	No	%	Rank	Mean	Std.Dv
1	Book	248	36.6	429	63.4	2	.3663	.48216
2	Journal	219	32.3	458	67.7	4	.3235	.46815
3	Magazine	262	38.7	415	61.3	1	.3870	.48742
4	Conference proceeding	32	4.7	645	95.3	9	.0473	.21237
5	Dissertation	40	5.9	637	94.1	8	.0591	.23596
6	Theses	53	7.8	624	92.2	7	.0783	.26882
7	Question paper	225	33.2	452	66.8	3	.3323	.47140
8	Leaflet	22	3.2	655	96.8	10	.0325	.17745
9	Prospectus	140	20.7	537	79.3	6	.2068	.40531
10	Photo Gallery	148	21.9	529	78.1	5	.2186	.41361

e) Objective 5: To identify the ICT based services extended to library users of the college libraries in Assam.

ICT based services extended to library users: Table 8 shows that the highest 545 (80.5%) of the user has expressed the availability of internet services in the college libraries followed by 542 (80.1%) of users availed the desktop facility while 531 (78.4%) users availed photocopy service; 374 (55.2%) users availed printing facility; 357 (52.7%) users availed OPAC service; 338 (49.9%) users availed lending service; 328 (48.4%) users availed institutional repository services; 293 (43.3%) users availed online database services; 271 (40.0%) users availed CD-ROM facility; 248 (36.6%) users availed scanning facility; 204 (30.1%) users availed electronic database services and 32 (4.7%) users availed document delivery service. The ICT based services extended to the library users is graphically presented in Figure 2.

S.No	Description	Yes	%	No	%	Rank	Mean	Std.Dv
1	Online Database Services	293	43.3	384	56.7	8	.4328	.49583
2	Electronic Database	204	30.1	473	69.9	11	.3013	.45917
3	Institutional repository services	328	48.4	349	51.6	7	.4845	.50013
4	Document Delivery service	32	4.7	645	95.3	12	.0473	.21237
5	Internet Service	545	80.5	132	19.5	1	.8050	.39648
6	OPAC	357	52.7	320	47.3	5	.5273	.49962
7	Lending Service	338	49.9	339	50.1	6	.4993	.50037
8	CD-ROM	271	40.0	406	60.0	9	.4003	.49032
9	Scanning facility	248	36.6	429	63.4	10	.3663	.48216
10	Printing facility	374	55.2	303	44.8	4	.5524	.49761
11	Photocopy service	531	78.4	146	21.6	3	.7843	.41158
12	Desktop facility	542	80.1	135	19.9	2	.8006	.39985

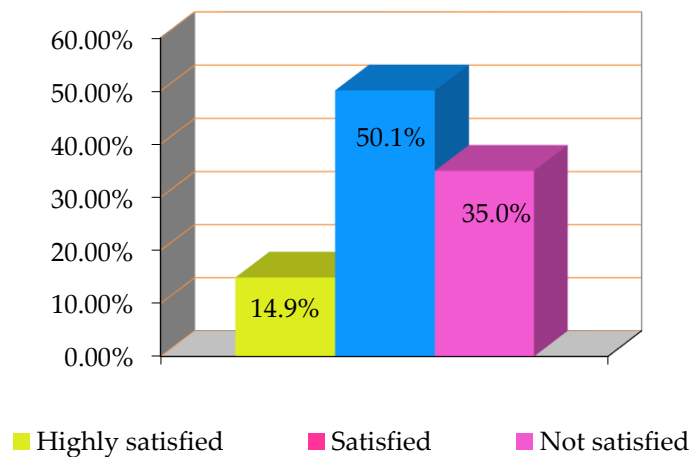


f) Objective 6: To identify the level of users' satisfaction with the use of ICT in the college libraries of Assam.

Level of users' satisfaction with the use of ICT: Table 9 shows that 399 (50.1%) of the users have expressed 'satisfied' with the use of ICT in their college libraries while 237 (35.0%) users expressed that they are 'not satisfied' and only 101 (14.9%) users expressed that they are 'highly satisfied' with the use of ICT. The level of satisfaction with the use of ICT by the users of different colleges in Assam is graphically presented in the Figure 3.

S.No	Level of satisfaction	Response	Percentage
1	Highly satisfied	101	14.9
2	Satisfied	339	50.1
3	Not satisfied	237	35.0
Total=		677	100.0

Fig.3: Level of satisfaction with the use of ICT



g) Objective 7: To know the impact of ICT on users in the college libraries of Assam.

Impact of ICT on users in the college libraries: Table 10 shows the highest 604 (89.2%) of users agreed that they have positive impact on ICT in the form of 'It helps to access up-to-date information' followed by 599 (88.5%) users agreed that ICT 'Provided quickly access the required information'. Subsequently, 528 (78.0%) of users agreed that ICT 'it saves space and reduces paper'; each of 516 (76.2%) users agreed that ICT 'Enhanced the quality of library services' and 'Access to new range of electronic services not possible before'; 512 (75.6%) users agreed that ICT 'saves the time and effort'; 504 (74.4%) users agreed that ICT 'It helps to create a positive attitude'; 470 (69.4%) users agreed that ICT 'provided flexible and comprehensive retrieval of information' and 446 (65.9%) users agreed that 'utility of ICT in my institute is good'.

S.No	Description	Agree	%	Disagree	%	Rank	Mean
1	Provided quickly access the required information	599	88.5	78	11.5	2	.8848
2	Enhanced the quality of library services	516	76.2	161	23.8	4	.7622
3	It helps to create a positive attitude	504	74.4	173	25.6	6	.7445
4	It helps to access up-to-date information	604	89.2	73	10.8	1	.8922
5	It saves time and effort	512	75.6	165	24.4	5	.7563
6	Provided flexible and comprehensive retrieval of information	470	69.4	207	30.6	7	.6942
7	It saves space and reduces paper	528	78.0	149	22.0	3	.7799
8	Access to new range of electronic services not possible before	516	76.2	161	23.8	4	.7622
9	The utility of ICT in my institute is good	446	65.9	231	34.1	8	.6588

a) Hypothesis 1:

H₀-Users' opinions on the use of ICT in the college libraries is not satisfactory.

H_a-Users' opinions on the use of ICT in the college libraries is satisfactory.

Level of satisfaction	Response(N=677)	%	Overall %	z-test
Highly satisfied	101	14.9%	65.0%	Mean=.66 SD=.475 Z=10.961** p=0.000
Satisfied	339	50.1%		
Not satisfied	237	35.0%	35.0%	
Total=	677	100.0		

*z= significant at 1% level

Result: The above table shows the difference of satisfaction level with the use of ICT. Out of 677 respondents, 101 (14.9%) are reported highly satisfied, 339 (50.1%) are satisfied, overall 65% of the respondents are satisfied and 35% are not satisfied with the use of ICT. The mean value = 0.66, SD=.475, z=10.961 indicates that the difference between satisfied and not satisfied users to be found significant at 1% level. Hence, we can accept that the maximum numbers of users are satisfied with the ICT use and hence the null hypothesis is rejected.

b) Hypothesis 2:

H_a- Impact of ICT on users is found positive

H₀- Impact of ICT on users is found positive

Description	N	Normal Parameters		Z	p-value
		Mean	Std.Dv		
Provided quickly access the required information	677	.8848	.31952	13.739**	.000
Enhanced the quality of library services	677	.7622	.42606	12.071**	.000
It helps to create a positive attitude	677	.7445	.43649	12.052**	.000
It helps to access up-to-date information	677	.8922	.31039	13.453**	.000
It saves time and effort	677	.7563	.42964	12.089**	.000
Provided flexible and comprehensive retrieval of information	677	.6942	.46107	11.522**	.000
It saves space and reduces paper	677	.7799	.41461	11.977**	.000
Access to new range of electronic services not possible before	677	.7622	.42606	12.292**	.000
The utility of ICT in my institute is good	677	.6588	.47447	10.412**	.000
Overall ICT impact	677	6.7843	1.53582	6.007**	.000

****Significant at 1% level**

Result: The above table depicts the impact of ICT on users in college libraries of Assam. The positive impact of the college library users responded as agreed and negative impact as disagreed. The scores defined as 1 for agreed and 0 for not agreed. The mean scores compared the impact in positive and negative ways. The z value has determined the level of significance along with the p-value. The impact of all the ICT reported by the users found to be positive and significant at 1% level. Hence, the impact of ICT on users in college libraries is found to be positive can be accepted.

8. Conclusion

The study was conducted to know the users' opinion towards the use of ICT in the college libraries of Assam. The level of knowledge with ICT by the users has found good. Half of the respondents have awareness of online public access catalogue and nearly half of the respondents using OPAC sometimes. Half of the users have expressed that they have availed the facilities of institutional repository services in their college libraries. The maximum respondents have used the internet as ICT based services. It is found that half of the respondents have satisfied with the use of ICT. The highest numbers of respondents have mentioned that they have a positive impact on ICT in the form of 'it helps to access up-to-date information'.

From the statistical analysis, users' opinion on the use of ICT in college libraries is found satisfactory. It is also found that the impact of ICT on users is found positive. The study has suggested that library automation and institutional repository should be set up with branded IT equipment. The hardware and software facility in the libraries should be regularly upgraded to improve the additional features while delivering library services. The library should be equipped to have high speed internet with Wi-Fi facility so that the users can access maximum ICT based resources.

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