Impact of Information Technology on Library Usage : A Study in Government Engineering College, Salem

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Abstract

The developments of information technology have made drastic changes the way information is collected, stored, retrieved and distributed. The present study is focused on the attitude towards information technology on library usage of Government College of engineering Salem. A questionnaire was distributed among the male and female students to collect desired data. A total of 129 questionnaires were distributed to collect the primary data out of which 129 engineering students. 70(54.26%) users are using internet to keeping of current developments in their own field.

Keywords

Information Techn ology, OPAC Se rvices, Inte rnet, E-mail.

Electronic access

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Introduction

Information techn ology has em ergence a s a ne w technology f or library a nd o ther fields. Due to t he starting period of Information t echnology and e ven now days it plays a soun d role in the library field. In present day libraries adopting Information technology for effective s ervice to t he users. Library is th e heart of any Educational Institutions. It plays a vital role in modern society and it is the centre of learni ng in higher e ducation. Li braries of t oday a re equipped well an d t hese co nstantly ch ange in t une with th e times an d tech nology. M ost i mportant i nstitutional libraries rece ived the grants from UGC for computerization of t he l ibraries. Te chnology (IT) involves acqu iring, st oring, pr ocessing, and distributing inform ation by electronic m eans including radio, television, telephone, and computers. Information is available in a ran ge of fo rmats including t exts, i mages, an d s ounds. Li braries a re looking toward s inform ation tech nology as a to ol to solve a number of problems encountered in providing library services to users.

Need of the study

Information technology emergence as new techniques to th e lib rary. No w a d ay all wo rks are dep ending information tech nology. Be cause the servi ce of the information tech nology is easy, fast and co nvenient to the users of information technology. Present days all t ype o f lib rary ado pting information te chnology for fun ctioning lib raries fo r b etter serv ices to th e users. Hence, th e n eed for the d etermination of its user's re quirements and sa tisfaction p rompted by information technology of this library users.

Review of literature

Kavitha, T (2 011)[1] evaluated and a nalyzing of use of ICT am ong t he fac ulty members o f health care Institution of Puducherry. Th e relev ant data were analyzed a nd assesse d by em ploying interview schedule m ethod f rom tot al num ber of 7 35 respondents; this study analyzed the use of ICT tools, and electronic health service by the respondents. It is also a nalyzed in this st udy t hat the performance of the various services offered by the Institution library. This st udy i s usef ul fo r t he devel opment of heal th care In stitution of puducherry. Vi ji n air (201 2) [2] studied t he A pplication of I nformation Communication Tec hnology (IC T) i n R esearch a nd Development Organizations Libraries. He pointed out that Inf ormation c ommunication t echnology (IC T)

plays a v ital ro le in enh ancing effici ency in development o f l ibrary se rvice. T his st udy p rovides the appl ication a nd designing of i nformation communication t echnology i n selected res earch a nd development organizations of M.P. Today library are equipped to accomplish the newly inform ation communication technology based services. Finally, in this study we know that, ICT based services fulfil the information needs of the users at the right time in the right place to the right person. Dhanavandan, (2012) [3] founded that majority of the faculty members of all four c olleges visited the l ibrary dai ly and maximum number of reveals spent half an hour to one hour. The respondents visited up to two libraries for th eir information ne eds a nd al so t hey wa nts us e i nternet almost every day . A m aximum num ber of f aculty members use Int ernet. T he res pondents usi ng electronic res ources for their research/ study and communication purpose res pectively. A maximum number o f re spondents are l earned use electronic resources through external course and Guidance from others. T he re spondents are using Google to access the information in the Inte rnet and stated t hat access to current up to date information as a benefit of using electronic resources. T he re spondents stated that too much in formation ret rieved is th e m ain b arrier to access electronic resources a nd they preferre d text books.. The respondents are v isited to the library for the pu rpose of col lecting m aterial for their subject. The respondents stated t hat the arrange ment of reading m aterial in th e lib rary is easy to ac cess and satisfied. Son ia Maan (2 013) [4] co nducted t he st udy Role of I nformation t echnology an d l ibrary's i n today's globlized era. In formation tech nology is currently t aking ce ntre st age an d t ransformed t he whole world into a global co mmunity, which is increasingly dep endent on the creative managem ent and distribution of i nformation. The enorm ous advantages i t has i n easi ng t he delivery o f information ar ound t he world. T his st udy di scusses the ro le of inform ation t echnology a nd l ibraries i n today's global era. It al so di scusses t he pr oblems faced by the L ibrary & Information Service sector i n India and ac hievements over the years using modern information technologies.

Objective of the study

The fo llowing m ajor objec tives are fram ed to examine the Im pact of In formation Techno logy on library usage of Government College of E ngineering Salem.

1. To e xamine the pe rformance o f Information Technology to the library usage.

2. To identify the searching the library collection
3. To id entify t he k eeping abreast of current development whi le using i nformation technology.
4. To find out usage of Information Technology to the library users.
5. To fi nd out f requency of computer usage and internet usage of the respondents.
6. To find out the problem faced by the users while using the internet.
7. To kn ow the satisfaction of the users abo ut information technology.

Methodology

This st udy is m ainly b ased on th e primary d ata collected fro m UG stud ents in Gov ernment Co llege of E ngineering, Sal em, t hrough a wel l desi gned questionnaire. Sal em has one government Engineering co llege is selected for th e pur pose of present study. The researcher proposed to select 129 respondents by qu estionnaire sur vey. Ho wever, actual reply was received from 129 respondents. The sampling of the study is based on purposive random sampling.

Data Analysis

The c ollected data a re cl assified a nd tabulated according to the obj ectives stated. First, the data were recorded o n d ata sh eets and th en fed in to the computer personally. In o rder to test the hypotheses, ANOVA t wo way m odel ha ve been ap plied. They are worked out with the help of Excel Package. The general d ata i nterpretation is made with th e h elp of percentages and averages.

Table-1 Gender wise distribution of respondents

Sl. No	Gender	No. of respondents	%
1	Male	102	79.07
2	Female	27	20.93
3	Total	129	100

Table-1 i ndicates t he gen der wi se di stribution of respondents. Out of 12 9 respondents, 102(79.07%) are male and 27 (20.93%) fe male. Majority of t he respondents are males.

Table 2: Department wise Distribution of Respondents

Sl. No	Departments	No. of Respondents	%
1	Mechanical Engineering	59 45	.73
2	Electronic Communication Engineering	14 10	.85
3	Metallurgical Engineering	14 10	.85
4	Civil Engineering	18	13.97
5	Electrical &Electronics Engineering	12 9.	30
6	Computer Science Engineering	12 9.	30
7	Total	129	100

Table-2 Represent the department wise distribution. Including 129 respondents, various disciplines students are responding there are Mechanical 59(45.73%), Electronic Communication Engineering 14(10.85%), Metallurgical 14(10.85%), Civil 18(13.97%), Electrical &Electronics Engineering 12(9.30%), and Computer science Engineering 12 (9.30%) respondents were responding. Among the department wise distribution mechanical department

was the highest amounts of respondents were responding.

Table -3 shows that searching library collections. It could be noted that majority of the respondents searching library collection manually 66.66%, using OPAC 31% and manually & using OPAC 2.34%. It could be seen clearly from above discussion the majority of the respondents searching library collection manually.

Table 3: Searching library collections

SL. No	Searching library collections	No. of Respondent	%
1	Manually	86	66.66
2	Using OPAC	40	31
3	Manually& using OPAC	3 2.	34
4	Total	129	100

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows 1	647	2	823.5	0.908439	0.523988	19
Columns 2	521.5	1	2521.5	2.781577	0.237289	18.51282
Error 1	813	2	906.5			
Total 5	981.5	5				

ANOVA two ways model is applied for searching library collection. At one point the computed ANOVA value is 0.90 which is greater than its tabulated value at 5 percent level of significance.

Hence variation with respect to possession of searching library collection respondents is statically identified as significant. There fore the framed hypothesis is accepted

Table 4: keeping of current development

Sl. No	Keep abreast of current development	No. of Respondents	%
1	Scanning of current issues or print online journals	14	10.85
2	Scanning recent issues of abstracting tools	10	7.75
3 I	nternet /E-Mail	70	54.26
4 Pers	onal communication	10	7.75
5	Scanning of current issues or print online journals and Internet /E-Mail	4	3.12
6	Internet /E-Mail and Personal communication	16	12.4
7 Scanning	recent issues of abstracting tools and Internet /E-Mail and Personal communication	3 2.	32
8	Scanning of current issues or print online journals and Scanning recent issues of abstracting tools and Internet /E-Mail and Personal communication	2 1.	55
9 To	tal	129	100

Table-4 sh ows t hat keepi ng of c urrent de velopment of t he users. It coul d be not ed t hat m ajority of respondents   using I nternet/ E-   mail 54. 26%, Internet/E-mail and pe rsonal com munication 12.4% and sca nning of cu rrent i ssues o r p rinted o nline journals are using 10.85%.

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	1627.938	7	232.5625 0	.850126 0	.582064 3	.787044
Columns	540.5625	1	540.5625 1	.976011	0.20261 5	.591448
Error	1914.938	7	273.5625			
Total	4083.438	15				

ANOVA two ways m odel is ap plied for keeping abreast of current de   velopment. At o ne po int th e computed A NOVA val ue i s 0. 85 which i s great er than its tab ulated v alue at 5   p ercent lev el o f significant. Hence vari   ation   with resp ect to possession of keeping abreast of current development respondents is statically id   entified as si gnificant. There fore the framed hypothesis is accepted

Table-5 sh ows t hat resp ondents a bout el ectronic resources. Out o f 129 r espondents, 53 (41.08%) respondents are saying acces sing electronic source s are m ore easi er. 67(51.93%) re spondents are a gree that the electronic s ources are easy to c onvenient

accessing . out 129 respondents only one respondents saying that the electronic sources are more difficult to using.

Table 5: Nature of Electronic Sources

Sl.no	Nature of electronic sources	No. of respondents	%
1 Mo	re easier	53	41.08
2 Easier		67	51.93
3 D	ifficult	8	6.22
4	More difficult	1	0.77
5 To	tal	129	100

ANOVA						
Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Rows	1496.375	3 4	98.7917	0.87437 0	.542638 9	.276628
Columns	1770.125	1 1	770.125 3	.102987 0	.176364 1	0.12796
Error	1711.375	3 5	70.4583			
Total	4977.875	7				

ANOVA t wo ways m odel i s ap plied for nature of electronic s ources. At one point the c   omputed ANOVA value is 0 .87 which is g reater th an its tabulated value at 5 perce nt l evel of si gnificance. Hence variation wi th res pect t o posses sion of nat ure of electronic sources   respondents is statically

identified as significa nt. There fore t he framed Table-6 shows that frequency of u sing internet. Out of 1 29 r espondents, 49 (37.98%) respondents are using i nternet fi ve t o si x ho urs per week a nd 45(34.88%) respondents are using t ow to four hours

Table 6: Frequency of Using Internet

Sl.No	Amount of time spend on internet per week	No. of respondents	%
1 2	-4hours	45	34.88
2 5	-6hours	49	37.98
3 1	0-20hours	27	20.93
4	over 20 hours	8	6.21
5 To	tal	129	100

Table-7 sh ows t hat sat isfaction o f I nformation Technology se rvices. T he q uestion was a sked, are you satisfied with th e p resent inform ation technology? The answe r wa s very positive, because 56(43.86%) r espondents ar e an swering it is g ood,

hypothesis is accepted.

per w eek,27(20.93%) r espondents ar e u sing ten to twenty ho urs a week an d 8 (6.21%) res pondents ar e using over twenty hours a week. Totally all are using internet simultaneously.

Table 7: Satisfaction of Information Technology Services

Sl.No	Satisfaction with IT services	No. of res-pondents	%
1 G	ood	56	43.41
2 Satisf	ied	54	41.86
3 No	commands	17	13.17
4	Not Satisfied	2	1.56
5 To	tal	129	100

54(41.86%) respondents are satisfied with the present information tech nology. Only to w respondents are not satisfied with present information technology and 17(13.17%) resp ondents

Table 8: Problems of Using Internet

Sl.No	Problem encountered while using internet	No. of Respondents	%
1 Slow	access speed	63	48.83
2	Difficulty in finding relevant information	14	10.90
3	Over load of information on the internet	16	12.40
4	It takes to long to view/download	5	3.87
5	Difficulty in finding relevant information and Over load of information on the internet	2 1.	55
6	Difficulty in finding relevant information and It takes to long to view/download	3 2.	32
7	Slow access speed and Over load of information on the internet 1		0.77
8	Slow access speed and Difficulty in finding relevant information	5	3.87
9	Slow access speed and It takes to long to view/download	15	11.62
10	Slow access speed, Over load of information on the internet and It takes to long to view/download	3 2.	32
11	Slow access speed, Difficulty in finding relevant information and It takes to long to view/download	2 1.	55
12 To	tal	129	100

Table-8 de scribes p roblem enco untered w hile usi ng internet. Out of 1 29 r espondents 6 3(48.83) respondents answering slow access speed , 14(10.90%) r espondents ar e say ing difficulty i n

finding r elevant i nformation, 16(12.40%) respondents are answering over load of information

on the internet and 5(3.87%) respondents answering It takes to long to view/download.

Findings

1. Males are majority of the user community.
2. Mechanical Engineering students are majority of the respondents.
3. Maximum numbers of users are manually searching the library collection and minimum numbers of users are using OPAC while searching the library collections.
4. Internet and E-email is mostly used for knowing current developments of their own field and others.
5. From this study satisfaction of information technology is good and well.
6. Majority of the users using Internet 5-6 hours a week. And all are using internet minimum 2 hours in a week.
7. Majority of users are frequently using internet.
8. Slow access speed is the major problem while using Internet.

Conclusion

The major findings are many students are using computer daily. It indicates it is very useful to their studies and other works. Telephone, fax, mobile, E-mail is the information communication devices. Among 129 respondents all are having one are more than one communication devices. It indicates that is all are helping to their communication from one to another.40 (31%) Students are using OPAC while searching the library collections out of 129 respondents and 86 (66.66%) respondents are searching manually. somebody's searching both manually and using OPAC. This is indicates most of the users are can not aware of OPAC. 70 (54.26%) users are using internet to keeping of current developments in their own field.

In this study the result was find out, which was slow access speed, is one of the most problems to using internet. Other problems are over load of information,

difficulty in finding relevant information and to long to view / download. Some times more than one are two problems are facing the users like both slow access speed and over load of information difficulty in finding relevant information and to long to view / download . From this study, large number of people says internet is very important to life and limited respondents are says important and few are saying not important and undecided. This study was very clearly shows that the information technology is very useful. And in the government college of engineering the impact of information technology is good.

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