## Impact of Information Technology on Information Seeking Behavior of the Users: An Empirical Study

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## Abstract

The present study examines the impact of information technology on information seeking behaviors of users of selected stated university of Tamil Nadu. A questionnaire was prepared and distribute among the faculty, research scholar students of the sample universities the result of the study provides the information about the respondents opinion recording their information gathering habits, usefulness of training programme, ICT facilities in their library and made of obtaining journal articles for their study and research.

### Keywords

Information technology, information seeking behaviour, electronic dissemination of information, ICT facilities..

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## Introduction

When a need is felt for anything, more often than not, people, take action in order to satisfy that need. Different strategies or modes of action are resorted to. The same applies for the satisfaction of information needs. An individual realizes that he needs information, he knows that in all probability the information will not come to him on its own, therefore he has go to about seeking it.

According to Girja Kumar, "Information seeking behaviour is mainly concerned with who needs what kind of information for what reasons; how information is found, evaluated and used."

T.D. Wilson defines what he calls 'information behaviour' as, "those activities a person may engage in when identifying his or her own needs for information, searching for such information in any way, and using or transferring that information.

#### **Electronic Information Sources**

Electronic publishing can be defined as the publication process where the manuscripts are submitted in electronic format, edited printed and even distributed to the users by employing computers and electronic media. An electronic publication refers to any information source published in electronic (machine readable) form. The electronic publication is the fusion of electronic, computer, digital and communication technologies for publishing. These include sources distributed on magnetic tape, optical disks (such as Compact Disk, DVD) and some other means. Internet is a popular media, through which any kind of information is transmitted through its different utilize such as email, search engines, web portals, discussion forums, groups, web logs etc. Hence, internet is also known as a powerful information source in the modern days. Due to the emergence of computers and internet applications in the library, use of digital information is developed.

#### **Review of Literature**

Haneefa K (2007)<sup>2</sup> presented the results of an investigation in the study "Use of ICT Based Resources and Services in Special Libraries in Kerala, India. The email service was used by the largest percentage of the users. WWW was being

used by 60 per cent of the library users. A good no. of users were not satisfied with the application of ICT in the libraries and indicated 'inadequate ICT infrastructure' as their reason for dissatisfaction. Users proposed a variety of measures of formal orientation and training in ICT based resources and services. Rajput et al (2007)<sup>3</sup> surveyed the internet resources and services of the Institute of Engineering & Science, Indore (India) and the findings in the paper "Internet Resources and Services in Institute of Engineering & Science, IPS Academy Indore: An Exploratory Study". A large number of users were dissatisfied with the infrastructure facilities available in IES, specifically in terms of hardware facilities. Dhanavandan (2012) describes the Use of Digital Library Resources by the engineering professionals in the engineering colleges at Cuddalore District, and investigates the current state-of-the art information through the digital library resources. The 33.7% of users feel that lack of information is the problems with access of digital library resources. The findings of this study would assist the internet browsers to improve their level.

## Statement of the problem

Information technology play a important role in information gathering and seeking behaviour of the users particularly the academic community of universities. Most of information presently available in different types of electronic medium which are greatly impact on the information seeking behaviour of the users of university libraries. In the view of above the present study is to analyze the impact of new information technology on user's information seeking behaviour of Biologist of select state universities of Tamil Nadu.

## **Objectives**

- 1. To findout the respondent's preference to obtain journal articles and reference material for their academic and research need.
- 2. To study the respondent's opinion regarding the impact of electronic dissemination of information on their information gathering habit.

- To collect the respondent's opinion on to gather and use of electronic information sources for their academic achievement.
- 4. To know the respondent's opinion on usefulness of training programme which they attend
- 5. To findout the respondent's opinion on level of usefulness of ICT facilities in their library.
  - To collect the respondent's opinion on impact of information technology on respondent's visit to library

## Methodology

For getting the data on this present field of study, questionnaire survey method are adopted among the PG students, research scholars and teaching staff of Biological department of four select state Universities of Tamil Nadu. i.e. Annamalai University, Bharathidasan University, Bharathiar University, and Madurai Kamaraj University.

University	Question -naires Distributed	Question -naires Received	%
Annamalai University	514	490	69.01
Bharathidasan University	132	105	14.79
Bharathiyar University	93	75	10.56
Madurai Kamaraj University	52	40	5.63
Total	791	710	100

The questionnaire was distributed all the respondents of four universities of Tamil Nadu. Out of 791 total respondents, 710 filled in questionnaire are received back.

# Data analysis and interpretation

# Details of Questionnaires Distributed and Actual Received

Table 1 Respondent's preference to obtain journal articles /reference material

S. No		Print copy	Electronic copy	Both print & Electronic	Total
1	Students	40(11.76)	20(5.88)	280(82.35)	340
2	Research scholar	35(12.28)	85(29.83)	165(57.89)	285
3	Teaching staff	-	5(5.82)	80(94.12)	85
	Total	75(10.56)	110(15.49)	525(73.95)	710

Table 2Respondent's opinion about impact of electronic dissemination of information on information gathering habit

S. No.		Very different (I use completely different sources than I did five years ago)	About the same (I still use the same sources as I did five years ago)	Total
1	Students	328(96.47)	12(3.53)	340
2	Research scholars	285(100)	-	285
3	Teaching staff	85(100)	-	85
	Total	698(98.31)	12(1.69)	710(100)

Table 3 Respondent's opinion on to gather and use of electronic information sources

S. No	Particulars	Students	Research scholar	Teaching staff	Total
1	Easier (I have more time for other tasks)	198 (58.29)	200 (70.17)	72 (84.71)	470 (66.19)
2	About the same (I spend about the same amount of time on information gathering with or without electronic sources)	56 (16.47)	67 (23.51)	13 (15.29)	136 (19.15)
3	More difficult (It takes more time to gather and sort through information)	46 (13.53)	10 (3.51)	-	56 (7.89)
4	Much more difficult (It more to and sort through information)	40 (11.76)	8 (2.84)	-	48 (6.76)
	Total	340	285	85	710

Table 1 explains Out of 340 students respondents under study the majority 82.35 per cent of them preferred both print and electronic copy whereas print copy preferred by only 11.76 of the respondents. It is also noted from the data that only 5.88 per cent students preferred electronic copy respectively. Among the 285 research scholar and 85 Teaching staff, majority 57.89 per cent and 94.21% preferred both print as well as electronic copy. Out of 710 total respondents the majority 73.95 per cent of them preferred both print and electronic copy, only 10.56 per cent respondents preferred print copy alone.

Table 2 showsAmong the 340 students respondents the highest 328 (96.47%) of them

said 'very different' i.e. they use completely different source than they did five years ago, 100 per cent research scholar and teaching staff under the study expressed the same. It is also observed from the table that out of 710 total respondents 698 (98.31%) of them stated as 'very different'. But only 12 (1.69%) of them said 'about the same'.

Table 3 indicates Out of 340 students 58.28 per cent of them felt easy but majority of the research scholar and teaching staff i.e. 70.17 and 84.71 per cent stated the same. A considerable number of respondents from every category stated as 'about the same'. It is clearly seen from the above discussion that more number of respondents in every category stated as gathering and using of electronic information sources are easy.

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Table 4 Respondent's attending formal training programme to search scientific / technical information

S.			Opinion					
No		Yes	%	No	%			
1	Students	54	15.88	286	84.12	640		
2	Research toscholar	168	58.95	117	41.03	285		
3	Teaching staff	24	28.24	61	71.76	85		
	Total	246	34.65	464	65.35	710		

Table 4 shows that formal training programme or orientations attended by the respondents. Among the three different type of respondents nearly 60 per cent of the research scholar and nearly 30 per cent of teaching staff attended the formal training programme to search scientific / technical information whereas only 15 per cent of students attended the same.

Table 5Respondent's opinion on usefulness of training programme

S.		Nu	mbers	
No		Useful	Not useful	Total
1	Students	50	4	54
		(92.59)	(7.41)	
2	Research	148	20	168
	to scholar	(88.10)	(11.90)	
3	Teaching	24	-	24
	staff	(100)		
	Total	222	24	246
		(90.24)	(9.76)	

Table states 100 per cent of teaching staff and 92.59 per cent of the students stated the training programme was 'useful', whereas 88.10 per cent of the research scholars expressed the same.

Table 6 Respondent's opinion on level of usefulness of ICT facilities

S.			Stude	ents		Research scholar				Teaching staff			
No.		Very Useful	Useful	Not useful	Total	Very Useful	Useful	Not useful	Total	Very Useful	Useful	Not useful	Total
1	Computer / Servers	225 (66.17)	110 (32.35)	5 (1.47)	340	210 (73.68)	75 (26.32)	ı	285	70 (82.35)	15 (17.65)	-	85
2	Telecommunication & its facilities	128 (37.65)	116 (34.12)	96 (28.24)	340	116 (40.70)	121 (42.45)	48 (16.85)	285	60 (70.58)	20 (23.53)	5 (5.88)	85
3	Photocopying	340 (100)	ı	ı	340	285 (100)	ı	ı	285	60 (70.58)	25 (29.42)	-	85
4	Microfilm / Microfiche	-	-	340 (100)	340	-	-	285 (100)	285	-	-	-	ı
5	Internet / Intranet	210 (61.76)	100 (29.41)	30 (8.82)	340	220 (77.19)	65 (22.81)	ı	285	80 (94.12)	5 (5.88)	-	85
6	Online database/E-archive/Journals	110 (32.35)	75 (22.06)	155 (45.58)	340	205 (71.93)	80 (28.07)	ı	285	80 (94.72)	5 (5.88)	-	85
7	Digitization	202 (59.41)	58 (17.06)	80 (23.53)	340	190 (66.67)	90 (31.57)	5 (1.75)	285	55 (64.71)	30 (35.29)	-	85
8	Satellite / Modem	168 (49.41)	108 (31.76)	64 (19.41)	340	160 (56.14)	85 (29.82)	40 (14.04)	285	75 (88.24)	10 (11.76)	-	85
9	Video conferencing / Video text / Tele text	56 (16.47)	110 (32.35)	174 (51.17)	340	120 (42.11)	80 (28.07)	85 (29.08)	285	50 (58.82)	35 (41.18)	-	85
	Total	1439 (47.03)	697 (22.12)	946 (30.85)	3060	1506 (58.71)	596 (23.24)	463 (18.05)	2565 (100)	530 (77.94)	145 (21.32)	5 (0.74)	680

S. No		Opin	ions	Level of impact				
		Yes	No	25%	75%	100%		
1	Students	286(84.12)	54(15.88)	25(8.74)	156(54.55)	38(13.28)	67(23.43)	
2	Research Scholar	260(91.23)	25(8.77)	62(23.85)	112(43.07)	20(7.69)	66(25.38)	
3	Teaching staffs	85(100)	-	15(17.65)	28(32.94)	30(35.29)	12(14.12)	
	Total	631(88.87)	7911.13)	102(16.16)	296(47.23)	88(13.95)	145(22.98)	

Table 7 Respondent's opinion about impact of information technology on respondents visit to library / information centre

As per table 6 more number of respondent's from three categories stated the computer / servers, telecommunication & its facilities, internet, digitization and satellite are very useful for their seeking of information in the electronic environment. It is also observed from the table 100 per cent of students and research scholar stated photocopy is very useful.

Table 7 shows that respondent's opinion about impact of information technology on respondents visit to library / information centre. Out of 340 students 84.12 per cent of them, out of 285 research scholar 91.23 per cent of them and 100 per cent of teaching staff agreed the statement that information has technology affected their visit to library / information centre. Regarding the level of impact, majority 54.55 per cent students and 43.07 per cent research scholar's level of impact were 50 per cent whereas in teaching staff majority of them affected by 75 per cent level.

#### **Findings**

- Majority of the students, research scholars and teaching staff preferred both print and electronic copy of journal articles / reference materials for their academic need.
- Majority of the research scholars attended training programme / orientation programme to search scientific / technical information than students and teaching staff.
- Majority 90% of the respondents opinioned as the training programme attended by them were 'useful'
- Majority of the students, research scholars and teachings staff stated as the computer, telecommunication and its facilities, internet and digitalization are very useful for their information seeking in the electronic environment.
- 100 per cent of teaching staff and majority of research scholar and students are agreed the

statement that information technology affected their visit to library.

#### Conclusion

The study provides the findings of impact of new information technology on the user's information seeking behaviour. The study reveals that most of students, research scholars and teaching staff are impacted by new information technology in their information seeking and gathering behaviour. Electronic resources have changed the information seeking and retrieval method of the respondents. Internet and telecommunication are most important and useful medium for retrieval of information from the vast information available in the world. It is also found from the study that training programme offered by the institution are much utilized by the research scholars of the universities than others.

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