Use of Electronic Information Sources by the Academic Community: A Comparative Study

G T Kumar B T Sampath Kumar

Abstract

Electronic Information Sources are becoming more and more popular since they provide multimedia information, full-text searching, reference linking and flexibility in searching and browsing. The purpose of this study was to determine how academic community in various professional colleges uses the electronic information sources for work-related purposes. A total of 300 survey returns indicate that students and faculty use the electronic information in support of their study and teaching. Although majority of students and faulty generally feel that the electronic information sources provide faster and reliable information still they prefer to use print as well as electronic information sources.

Keywords : E-resources, User Study, Information Sources

1. Introduction

The rapid growth of new technologies has changed the communication process between people and reduced the cost of communication for individuals. Electronic information sources can be seen as the most recent development in information technology and it is one of the most powerful tools ever invented in human history. In the modern era it has created the way the people communicate with each other and the way information is accessed. It has rapidly become an established medium of communication and connects people across the globe, removing geographic boundaries and simplifying access to information. The electronic sources of information are becoming more and more important for the academic community in accessing information at the right time and in the right form. The use of resources in an electronic environment becomes more pronounced when information becomes more readily available in electronic formats. This would result in an increase use of CD-ROMs, online databases and the Internet. A substantial body of literature already exists on acceptance and use of electronic information sources in academia.

Many significant authors (Saeed, 2000 [1]; Zhang, 2001 [2]; Jagboro, 2003 [3]; Dong, 2003 [4]; Nicholas, 2003 [5]; Hanauer , 2004 [6]; Mishra,2005 [7]; Robinson, 2005 [8]; Asemi, 2005 [9]; Biradar and Sampath Kumar, 2005 [10]) examined the literature in the fields of library and information science to gather some perspective on students use and faculty expectations of electronic information sources. However the previous studies conducted by above authors focused on the use of internet sources and services, use of search engines, awareness of search strategies of search engines. This situation has given rise to study how users utilize the electronic information sources as whole and also to know the opinion about the electronic information sources, their advantages and also the problem faced in the use of these sources by the students and faculty of Engineering, Medical Science and Management Studies in Bangalore city.

2. Analysis of Data

The study utilized a descriptive survey method and employed a questionnaire as the data collection instrument. Questionnaire was divided into three sections; the first section colleted demographic information such as gender, age and designation; the second section focused on the awareness of electronic information sources and purpose of use of electronic information sources and also method of learning to make use of electronic information sources. The third section provided respondents opinion about EIS, advantages and also the problems in using the electronic information sources.

2.1. Demographic characteristics of respondents

Table-1: Demographic characteristics of respondents

Demography of respondents (n=300)		Counts	Percentage
Gender	Male	150	50
	female	150	50
Age	<25	162	54
	26-35	122	40.67
	>36	16	5.33
Discipline	Engineering	100	33.33
	Medical Science	100	33.33
	Management studies	100	33.33
Designation	Students	169	56.33
	Faculty	131	43.67

The data summarized in the table-1 demonstrates the demographic characteristics of respondents. It shows that equal numbers of male and female respondents (50 each) are selected from Engineering, Medical Science and Management Studies. Equal number (100) of respondents from Engineering, Medical Science and Management Studies are considered for the study. 54% of respondents come under the age group of below 25 years. 40.67% of respondents come under the age group of 26-35 years and 56.33% of respondents are students and 43.67% of respondents are faculty members.

2.2. Awareness of Electronic Information Sources

Table-2: Awareness of Electronic Information Sources

Discipline	Awareness		
	Very Good	Good	Poor
Engg. (n=100)	18 (18)	72 (72)	10 (10)
Med. (n=100)	21 (21)	69 (69)	10 (10)
Mgt. (n=100)	23 (23)	69 (69)	8 (8)
Total (n=300)	62(20.67)	210(70)	28(9.33)

Note: Number given in parenthesis represents the percentage
Engg-Engineering
Med-Medical Science
Mgt-Management Studies

Table-2 summarizes the awareness of electronic information sources among the students and faculty. It is clear from the table that 70% of respondents are aware of electronic sources of information. 72% of Engineering and each 69% of Medical Science as well as Management Studies are aware of electronic information source.

2.3 Purpose of use of Electronic Information Sources

Table-3: Purpose of use of Electronic Information Sources

Discipline	Purpose					
	a	b	c	d	e	f
Engg. (n=100)	45(45)	67(67)	9(9)	29(29)	12(12)	13(13)
Med. (n=100)	32(32)	88(88)	18(18)	30(30)	30(30)	16(16)
Mgt. (n=100)	40(40)	55(55)	31(31)	40(40)	29(29)	22(22)
Total (n=300)	177(59)	210(70)	58(19.33)	99(33)	71(23.67)	51(17)

Note: Number given in parenthesis represents the percentage
Total number is more than 100 percent because multiple choice questions

Engg-Engineering,	a - Teaching	d- Project work
Med-Medical Science,	b- Study	e- Paper presentation
Mgt-Management Studies	c- Research	f- Course work

Six reasons were listed against which respondents were allowed to choose more than one reasons (table-3). The intension here is to know the purpose of use of electronic information sources by the respondents. Users in this study used the electronic information sources in support of their study (70%) and teaching (59%). 33% of respondents used the sources for project work. 88% of Medical Science used electronic information sources for study purpose followed by Engineering (67%) and Management Studies (55%).

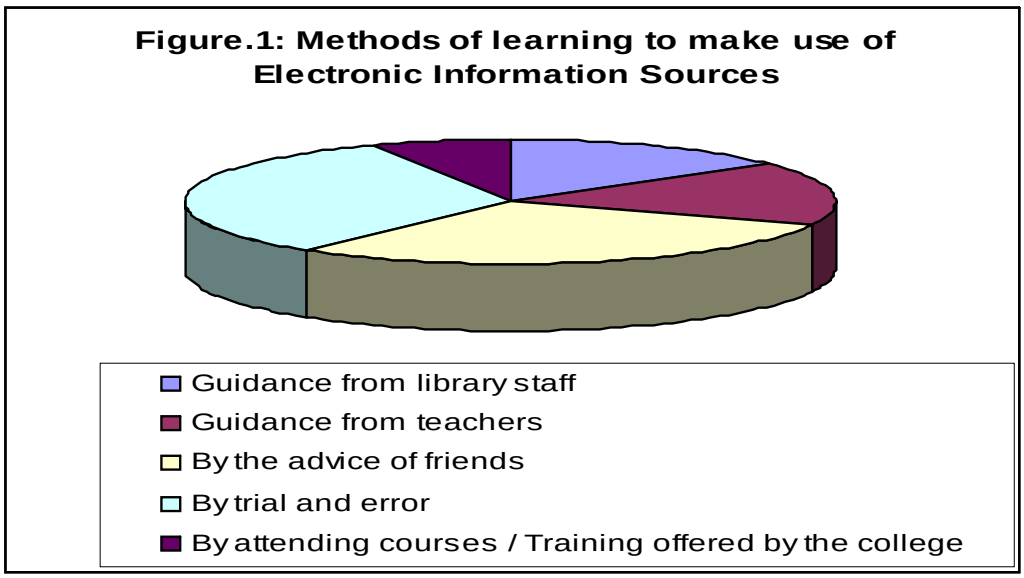
2.4 Methods of learning to make use of Electronic Information Sources

Respondents were asked to indicate the skills used for making use of electronic information sources. The data is presented in the table-4 and it is evident from table that 53.67% of respondents learnt by trail and error method and 50% of respondents learnt by the advice of friends. Methods of learning to make use of electronic information sources are varied from subject to subject. 62% of Medical Science respondents and 49% of Management Studies respondents learnt it by trial and error method. While Engineering respondents (49%) took guidance from the friends.

Table-4: Methods of learning to make use of Electronic Information Sources

Skills	Yes			Total (n=300)
	Engg.(n=100)	Med.(n=100)	Mgt.(n=100)	
Guidance from library staff	28(28)	16(16)	30(30)	74(24.67)
Guidance from teachers	34(34)	19(19)	29(29)	82(27.33)
By the advice of friends	49(49)	49(49)	48(48)	150(50)
By trial and error	48(48)	62(62)	49(49)	161(53.67)
By attending courses / Training offered by the college	9(9)	13(13)	12(12)	35(11.67)

Note: Number given in parenthesis represents the percentage
Total number is more than 100 percent because multiple choice questions
Engg-Engineering Med-Medical Science Mgt-Management Studies



2.5 Comparison of Electronic Information Sources with Print Sources

Table-5 describes the comparison of electronic information sources with print sources. It is clear from the table data that 49.67% of respondents opined that information locating and identifying is most easier while 49.33% respondents opined that accessing information in electronic format is slightly easier. In case of Engineering, 57% of respondents opined that information locating and identifying is most easier while 48% of Medical Science and 57% of Management Studies respondents opined that information locating and identifying is slightly easier.

Table-5: Comparison of Electronic Information Sources with Print Sources

Discipline		Most Easier	Slightly Easier	Slightly Difficult	Most Difficult	Not Responded
Engg. (n=100)	1	57(57)	33(33)	9(9)	1(1)	0
	2	47(47)	43(43)	9(9)	0	1(1)
	3	51(51)	37(37)	10(10)	1(1)	1(1)
Med. (n=100)	1	44(44)	44(44)	10(10)	2(2)	0
	2	43(43)	48(48)	9(9)	0	0
	3	44(44)	41(41)	14(14)	1(1)	0
Mgt. (n=100)	1	48(48)	39(39)	13(13)	0	0
	2	37(37)	57(57)	6(6)	0	0
	3	39(39)	50(50)	11(11)	0	0
Total (n=300)	1	149(49.67)	116(38.67)	32(10.67)	3(1)	0
	2	127(42.33)	148(49.33)	24(8)	0	1(0.33)
	3	134(44.67)	128(42.67)	35(11.67)	2(0.67)	1(0.33)

Note: Number given in parenthesis represents the percentage
Engg-Engineering
Med-Medical Science
Mgt-Management Studies
1- Information locating and identifying is
2- Accessing Information is
3- Using Information is

2.6 Opinion about Electronic Information Sources

Respondents were asked to express their opinion about the electronic information sources and the data is summarized in the table-6. It is evident from table that, 70.33% of respondents agreed that electronic information sources provide more comprehensive information. It is surprise to note that 64.67% of them prefer still access to print as well as electronic information sources. 58% of respondents agreed that they can now do better research because of availability of electronic information resources. Equally good number of respondents related to Engineering (59%), Medical Science (58%) and Management Studies (57%) opined that they can do better research because of availability of electronic information sources.

Table- 6: Opinion about Electronic Information Sources

Discipline		Opinion					
		A	b	c	d	e	f
Engg. (n=100)	1	36 (36)	20(20)	7(7)	9(9)	26(26)	14(14)
	2	59(59)	49(49)	28(28)	28(28)	58(58)	72(7)
	3	2(2)	26(26)	56(56)	46(46)	10(10)	9(9)
	4	3(3)	5(5)	9(9)	17(17)	6(6)	5(5)
Med. (n=100)	1	37(37)	25(25)	8(8)	3(3)	21(21)	15(15)
	2	58(58)	57(57)	31(31)	34(34)	69(69)	70(70)
	3	4(4)	15(15)	55(55)	47(47)	9(9)	11(11)
	4	1(1)	3(3)	6(6)	16(16)	1(1)	4(4)
Mgt. (n=100)	1	37(37)	22(22)	3(3)	3(3)	15(15)	16(16)
	2	57(57)	65(65)	35(35)	38(38)	67(67)	69(69)
	3	4(4)	11(11)	54(54)	48(48)	14(14)	12(12)
	4	2(2)	2(2)	8(8)	11(11)	4(4)	3(3)
Total (n=300)	1	110(36.67)	67(22.33)	18(6)	15(5)	62(20.67)	45(15)
	2	174(58)	171(57)	94(31.33)	100(33.33)	194(64.67)	211(70.33)
	3	10(3.33)	52(17.33)	165(55)	14(4.67)	33(11)	32(10.67)
	4	6(2)	10(3.33)	23(7.67)	44(14.67)	11(3.67)	12(4)

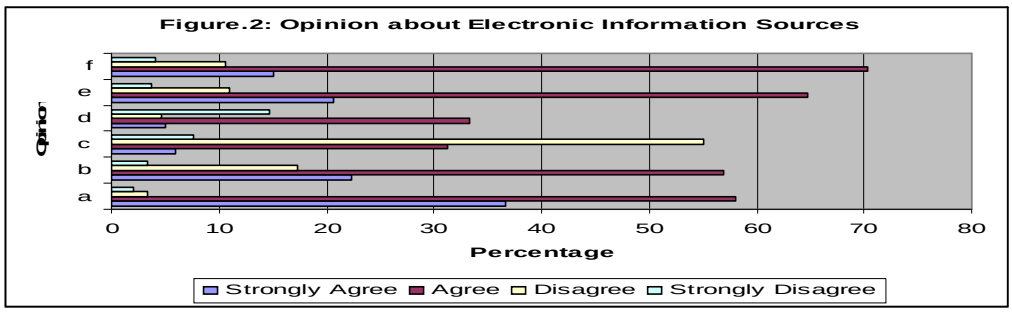
Note: Number given in parenthesis represents the percentage

Total number is more than 100 percent because multiple choice questions

a- I can now do better research because of availability of electronic information resources
b- Some of the research information in need is now only available online
c- It is more difficult to find needed Information while using online resources
d- I have to rely on others more when searching electronic information resources
e- I would still prefer access to print as well as electronic information resources
f- More comprehensive information is available

Mgt-Management Studies
Engg-Engineering
Med-Medical Science

1-Strongly Agree
2- Agree
3- Disagree
4- Strongly Disagree



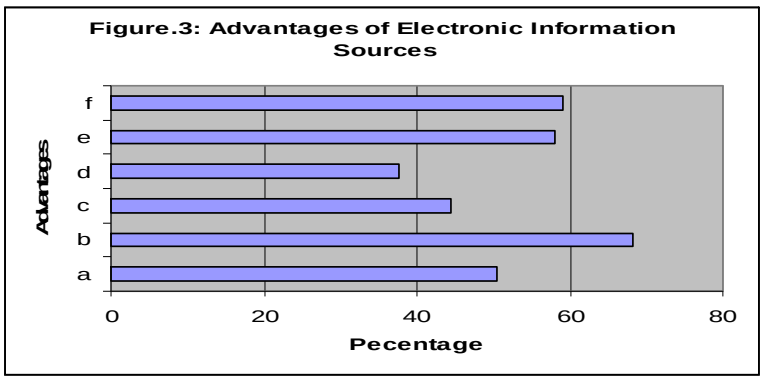
2.7 Advantages of Electronic Information Sources

The survey listed six possible advantages of electronic information sources and students and faculty were requested to indicate all advantages which they consider relevant. It evident from the table-7 that 68.33% respondents expressed that electronic information sources provides faster and reliable communication. Whereas 59% of respondents opined that electronic information sources provides easier access to information within a few minutes and equally good number of respondents (58%) opined that electronic information sources provide access to a wide range of information.

Table-7: Advantages of Electronic Information Sources

Discipline	Advantages					
	a	b	c	d	e	f
Engineering (n=100)	58(58)	65(65)	40(40)	33(33)	44(44)	54(54)
Medical (n=100)	52(52)	71(71)	42(42)	41(41)	67(67)	61(61)
Management (n=100)	41(41)	69(69)	51(51)	39(39)	63(63)	62(62)
Total (n=300)	151(50.33)	205(68.33)	133(44.33)	113(37.67)	174(58)	177(59)

Note: Number given in parenthesis represents the percentage
Total number is more than 100 percent because multiple choice questions
a- Multiple choice of formats (PDF, PS, RTF, DOC, HTML,
b- Provide faster and reliable communication
c- Multi user access
d- User sitting on their desktop can access electronic information resources
e- Access to a wide range of information
f- Easier access to information within a few minutes



2.8 Problems for Accessing Electronic Information Sources

Regarding the problem faced by the students and faculty for accessing electronic information sources the majority of respondents indicated that problems with accessing suitable software (44.67%), lack of information about how to use electronic information resources (35.67%). Few respondents (34%) also expressed the problems with accessing suitable personal computers (table-8).

Table-8: Problems for accessing Electronic Information Sources

Discipline	Problems				
	a	b	c	d	e
Engineering (n=100)	27(27)	44(44)	31(31)	21(21)	13(13)
Medical Sciences (n=100)	32(32)	45(45)	32(32)	25(25)	19(19)
Management Studies (n=100)	43(43)	45(45)	44(44)	18(18)	18(18)
Total (n=300)	102(34)	134(44.67)	107(35.67)	64(21.33)	50(16.67)

Note: Number given in parenthesis represents the percentage
Total number is more than 100 percent because multiple choice questions
a- Problems with accessing suitable personal computers
b- Problems with accessing suitable software

c- Lack of information about how to use electronic information resources
d- Lack of time to acquire skills needed to use electronic information resources
e- Lack of support from the library staff

3. Conclusion

From the above discussion it is very clear that the use of electronic information sources expected to increase in future. The students and faculty who participated in this survey are aware of electronic information sources and majority of them used these sources in support of their study and teaching and they are adept at using these sources. Even though majority of academic community use electronic information sources still most of the students and faculty prefer print sources as well as electronic information sources. This shows that the traditional resources will continue to be necessary components of the academic community. Many of the students and faculty learnt about the electronic information sources either by trial and error methods or by the advice of friends. So it is necessary that the academic library professionals should be proactive in working with academic community to develop training program aimed at enabling them to use electronic information sources more effectively.

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About Authors

Mr. G T Kumar, Librarian, Sri Krishna Devaraya Institute of Technology, Hesaragatta Main Road, Bangalore - 560090.

Dr. B T Sampath Kumar, Lecturer, Department of Library and Information Science, Kuvempu University, Shimoga, Karnataka
Email: Sampathbt_2001@rediffmail.com