

## A Study of Difficulties Faced During Information Search Pattern for E-Resources among Students of Management

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### Abstract

*In recent times, the Libraries are transforming from just storehouses of collection of documents to vibrant service centers containing E-resources; rapidly moving towards digital libraries, e-libraries and virtual libraries. Information available in digital form demands latest methods for its handling for both the library professionals as well as users. Hence, there is a steady need for librarians and the students to learn the new skills to cope with the situation.*

*There are several issues pertaining to the awareness and guidance among contemporary students regarding the methods, techniques and mannerisms of using the digital or E resources. The researcher, hereby, aims to study the difficulties that the management students face in various areas like awareness of library services, availability of abstract search, prominently display of e-database in library, technical support, time factor, scattered information and issues related to power supply and backup.*

*Key Words: Library, E-resources, Information Science, Search Pattern, Awareness, Library Facilities*

### Introduction

Information Search in library science or information management area pertains to the process where the identification of information needs may be expressed as an input-process-output model as promulgated by H Girja Kumar (1980)<sup>1</sup>. It propagates three things:

- 1) Problem (existing situation or the task assigned)
- 2) Problem Solving (process to solve the process or to complete the task), and
- 3) Solution (final conclusion leading to know why the information was needed)

Herein, the problem is analysed to decide the information needs. It is inclusively indicative of the state of uncertainty in knowledge.

The model is as given below:



Figure 1.1: Input – Process – Output Model

### **Levels of Information Needs**

In recent times, in Library and Information Science, the need for information has acquired completely different proportions delineating its vast scope. In the context of the present study, the need of an individual for information has been taken into consideration. Studies have shown that knowing the levels of information need has not been a matter of library science but an issue, area or an aspect of psychology and human behaviour. However, most common needs are felt at the following levels:

- 1) Visceral Needs : An actual but unexpressed need for information
  - 2) Conscious Needs : An ill-defined area of decision
  - 3) Formal Need : An area of doubt which is expressed in concrete terms
  - 4) Compromised Need : A need translated into what the resources can deliver
- (Taylor, 1968) <sup>ii</sup>

### **Types of Information Needs**

Information needs for students of higher education like management discipline range from personal to task completion, from social to academic or educational or research. Hence, based upon the purpose of the person and their specific needs for the information, researchers have classified needs in to two sets. They are as follows:

#### **Set 1**

- 1) Social or Pragmatic Information Needs
- 2) Recreational Information Needs
- 3) Professional Information Needs
- 4) Educational Information Needs

Tague (1976) <sup>iii</sup>

#### **Set 2**

- 1) Kinetic Needs : Satisfying a special problem, diagnosed and immediate
- 2) Potential Needs : Satisfying unconscious hidden problem under layers of attitude, Impulses and values

Childers (1975) <sup>iv</sup>

### **Information Search and its Patterns**

#### **Concept and Meaning of Information Search**

Information is searched by individuals at individual levels. However, at the organizational level, there are set patterns of information search. When one needs information, he / she knows it well that in all probability the information cannot be obtained without searching process. So, one needs to be in search of information. It is called the seeking phase in research. This is how, when a person applies some patterns, strategies or processes to search information in order to satisfy his / her information needs, Information Search Patterns come into existence. Information Search Patterns are basically the ways and means used by the individual to satisfy his / her information need. It is all about the decisions the person takes in the process of collecting and receiving information through reading published or online materials, discussing with colleagues, etc.

- 1) According to Ching-Chih-Chen,<sup>v</sup> “Information seeking (search) patterns are the paths pursued by the individual in the attempt to resolve a need.” (Krishna Kumar, 1990)<sup>vi</sup>
- 2) According to Giraj Kumar (1990) information seeking behavior (search pattern) is mainly concerned with who needs what kinds of information for what reasons, how information is found, evaluated and used.
- 3) According to Wilson (1999)<sup>vii</sup> considers “Information behaviours (patterns) are 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.”

### **Review of Literature**

Chaya Devi (1997)<sup>viii</sup> assessed the attitudes users of the National Ship Design Research Center (NSDRC) towards online information search and retrieval. The researcher was intended to find out: the pattern of access to information (manual/online); whether online retrieval method is preferable over the manual method and knowledge of any difficulties with online search; formulation of search tactic; use of databases and types of databases used. The questionnaire was used for data collection, which were distributed to 40 employees of NSDRC, India. The results of the study were: 1. Majority of the end users preferred to search the information through online than that of manual method due to the reasons of immediate and worldwide accessibility to information. 2. Most of the end users had the earlier experience in the use of online technology. 3. The end users prefer to search the information by subject, keywords and natural language search was preferred more than restricted vocabulary. 4. Most of the respondents opined that bibliographic databases were most suitable source to access to information and. 5. Majority of the end users agree that the experience with the time made them expert in getting access to information through online. The investigator satisfied the study with the suggestion that the end users should be trained the search pattern and the use of restricted vocabulary to make the online search process easier.

The use of Internet resources and services in Gulbarga town was studied by Maheswarappa and Ebmazar (2003).<sup>ix</sup> The objectives of the study were to identify the: 1. Demographic background of Internet users such as environment, occupation, educational qualifications, age and gender. 2. Computer background of Internet users such as knowledge of computers, place of access to computers, type of computers that they were using, operating system and the software's that they were familiar with and the purposes of using computers. 3. Use of Internet resources and services in Gulbarga city, specifically to know: since how long they place's of accessing Internet and how often they access; the time spend, the purpose, the frequency of use of resources and tools and places of access; the subjects on which they

search websites and the web pages/home pages created by them (if any) the search engines most often used and the steps taken after accessing and retrieving Information; the opinion about Internet facility and the extent of its usefulness as a tool communication and as a source of information; and the difficulties in accessing and using the internet. Data were collected through questionnaire from one hundred and twenty three internet users in private and public sectors covering forty seven users from cyber cafes and seventy six users from university and college environment. The results of the study were: 1. Most of the respondents used computers at work place, nearly all using Pentium systems and familiar with windows 98 and MS office. 2. Majority using internet since last six months and half of them have an average ability. 3. Ninety three percent of the respondents were using internet for sending e-mails followed by visit to websites (78.1 percent). 4. Most frequently used resources and tools of internet were e-mail (55.3 percent), web browser (22.8 percent) and search engines (10.6percent). 5. Majority of the respondent was frequently using document file formats. 6. The subject areas of web sites visited are diverse. 7. WWW.Yahoo.Com, WWW.Rediff.com, WWW.Use.Com and WWW.Hotmail.Com is the most used websites. 8. Most frequently used search engines are Yahoo, reify, msn and Lycos. 9. Majority of the respondents prefers to read instantly on the monitor and search the internet on their own. 10. Seventy percent of the respondents have not received any instructions in the use of internet and felt the need for training. 11. A large majority (69.9percent) was not satisfied with the facilities available for surfing internet in Gulbarga city and 12. Slow accessibility, getting connectivity and lack of training were the main difficulties faced in the use of internet.

Kumbar and Shirur (2003)<sup>x</sup>conducted a study to draw opinions from the users of Seer Jayachamarajendra College of Engineering (SJCE) to find out: the purposes for which the academic community in SJCE was using the internet; the relation between prior computer experience and the use of internet in SJCE; how far internet services has been utilized; from which channels users were getting latest information about websites /search engines; most used internet services; the problems faced by the users using various internet services; the satisfaction level of users regarding working hours, infrastructure facilities etc. The data were collected through questionnaire method, which were distributed among 100 internet users of SJCE, Mysore out of which 79 members have responded. The study reveals that: 1. Most of respondents had started using internet for more than one year.2. Thirty percent of academic community used the internet 2-3 times in a week (students 33.33 percent, researchers 20.83 percent and faculty members 45.83 percent). 3. Most of the users (39.24 percent) learned

internet through the assistance of colleagues and friends. 4. Ninety seven percent internet users indicated that they were using internet for e-mail service, while 55.7 percent used obtain copies of articles. 5. Out of seventy- nine respondents' 44.3 percent of users acquainted with the search engines through colleagues and friends followed by 17.7 percent through professional books and journals. 6. Fifty three percent users have got sufficient results at the time of searching the information on internet. 7. Thirty nine percent of the respondents indicated that they were facing difficulties in browsing the internet, and thirty six percent of the respondents indicated that they were not facing any problems in internet use.

### Objectives of the Study

- To identify difficulties faced by management students during information search
- To study difficulties faced by students based on their graduation and demographic variables like age, qualification, etc.

### Research Methodology

**Type of Research:** Descriptive research design was used for the study of current research.

**Sources of Data:** The secondary data was collected for generating list of management institutions and reviewing the literature. Magazines, journals, books, internet and newspapers among many were formed part of the same. The primary data was collected and used for analyzing the difficulties faced by management students during information search. .

**Data Collection Method:** Questionnaire was used to collect the primary data.

**Sampling Plan:** A total of 567 respondents finally considered during the research. Originally the questionnaire was circulated to the 630 respondents. However, 63 were rejected on account of various types of errors and omission encountered. It was administered at nine different management institutions to management students.

### Data Analysis

For data analysis Ms-Excel and SPSS Software 16.0 were used.

**Table – 1.1 – Frequency Distribution – Demographic Variables**

<b>Gender</b>	<b>Age Group</b>	<b>Qualification</b>
<b>Male</b>	<b>20-25yrs.</b>	<b>BBA</b>
308 (54.3%)	526(92.8%)	236 (41.6%)
<b>Female</b>	<b>26-35yrs</b>	<b>B.Com</b>
259 (45.7%)	41 (7.2%)	136 (24.0%)
		<b>BCA</b>
		20 (3.5%)
		<b>B.Sc</b>
		66 (11.6%)
		<b>B. Tech</b>
		95 (16.8%)
		<b>B. Pharm</b>

14 (2.5%)

From the above table it can be inferred that male and female students comprised of the 54.3% and 45.7% respectively. As evident, 92.8% of respondents are in the age group of 20-25 years with some 7.2% exceptions recorded in favor of higher age group.

**Table – 1.2 – Frequency Distribution – Difficulties Faced by Management Students**

	Difficulties faced by students	Least Difficult	Less Difficult	Neutral	More Difficult	Highest Difficult
Library/General/Technical	Use of Computers	530	13	24	0	0
	Use of Internet	524	19	24	0	0
	Use of Intranet	451	80	36	0	0
	Downloading Article	359	123	85	0	0
	Searching through OPAC	346	197	24	0	0
	Using Search Engines	387	167	13	0	0
	Lack of Training	199	294	74	0	0
	Lack of awareness of Library Services	155	277	135	0	0
	Abstract search are not Available	116	187	216	48	0
	E-Database not prominently displayed	124	192	159	92	0
	Lack of Technical Support	150	212	149	56	0
	Unwilling to provide information	212	231	76	48	0
	Lack of time	81	198	208	68	12
	Information is too scattered	71	203	176	117	0
	Power supply and backup	95	303	145	24	0
	Language barriers	71	387	85	24	0
	Information explosion	148	258	69	92	0
Barcode Reader	259	252	46	10	0	
Speed of Access	269	266	20	0	12	

**Table – 1.3 – Frequency Distribution – Difficulties Faced by Management Students Having Commerce and Science Graduation / Qualifications**

Difficulties Faced by Student During Search		Commerce/Management Students (372)					Science Students (195)				
		Least Difficult	Less Difficult	Neutral	More Difficult	Highest Difficult	Least Difficult	Less Difficult	Neutral	More Difficult	Highest Difficult
Library/General/Technical	Use of Computers	335	13	24	0	0	195	0	0	0	0
	Use of Internet	330	18	24	0	0	194	1	0	0	0
	Use of Intranet	257	79	36	0	0	194	1	0	0	0
	Downloading Article	211	76	85	0	0	148	47	0	0	0
	Searching through OPAC	253	95	24	0	0	93	102	0	0	0
	Using Search Engines	258	101	13	0	0	129	66	0	0	0
	Lack of Training	127	181	64	0	0	72	113	10	0	0
	Lack of awareness of Library Services	62	198	112	0	0	93	79	23	0	0
	Abstract search are not Available	29	153	142	48	0	87	34	74	0	0
	E-Database not prominently displayed	41	132	136	63	0	83	60	23	29	0
	Lack of Technical Support	102	162	81	27	0	48	50	68	29	0
	Unwilling to provide information	115	159	62	36	0	97	72	14	12	0

Lack of time	24	172	149	15	12	57	26	59	53	0
Information is too scattered	24	158	136	54	0	47	45	40	63	0
Power supply and backup	48	267	45	12	0	47	36	100	12	0
Language barriers	24	302	46	0	0	47	85	39	24	0
Information explosion	97	212	49	14	0	51	46	20	78	0
Barcode Reader	152	196	24	0	0	107	56	22	10	0
Speed of Access	163	197	0	0	12	106	69	20	0	0

From the Tables 1.2 and 1.3, it is clearly visible that students face difficulties while searching for information about E-Resources. Students are not having difficulties in areas such as use of computer, use of internet, use of intranet, downloading articles, searching through OPAC, using search engines. Students are having difficulties in various areas as the respondents have rated for neutral, more difficult or highest difficult. Areas in which students face difficulties while information search are lack of awareness of library service (24%), abstract search are not available (47%), E-Database are not prominently display in library (45%), Lack of technical support (36%), Lack of time (51%), information is too scattered (52%) and Power supply and backup (30%).

It is clearly visible from above table that science students face less difficulties in most of the area compare to commerce/management students. However for power supply and backup, language barriers, information explosion, barcode reader and speed of access, science students face more difficulties than commerce/management students. Data also indicates that there is vast difference for difficulties faced by students for downloading articles, lack of training, lack of awareness of library services, abstract search are not available, E-Database are not prominently display in library. Clearly, the data indicates that science students do not face difficulties in general area compare to commerce / management students.

## Hypothesis Testing

### Hypothesis 1

H1: There is a significant relationship between age and difficulties faced by management students during using information search

**Table – 1.4 (a) Cross Tabulation between Age Groups and Difficulties Faced by Students**

AGE Group	In Year	Use of search engines			Total
		1	2	3	
20-25	Count	351	162.0	13.00	526.0
	Expected Count	359.0	154.9	12.10	526.0
26-35	Count	36.00	5.00	0.00	41.00
	Expected Count	28.00	12.10	0.90	41.00
Total	Count	387.0	167.0	13.00	567.0
	Expected Count	387.0	167.0	13.00	567.0

**Table 1.4 (b) Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.958	2	0.019
Likelihood Ratio	9.888	2	0.007
Linear-by-Linear Association	7.786	1	0.005
N of Valid Cases	567		

The P value for the chi-square test is 0.019 which is less than 0.05. So, it can be inferred that there is a significant relationship between age group of students and difficulties faced by them for information searches.

### Hypothesis 2

H1: There is a significant relationship between qualifications i.e. background of UG (Programme) and difficulties faced by management students for information search.

**Table – 1.5 (a) Cross Tabulation between Graduation Degree / Qualification and Difficulties Faced by Students**

Crosstab						
	Programme		Use of Computer			Total
			1	2	3	
Qualification	BBA	Count	212	0	24	236
		Expected Count	220.6	5.4	10.0	236.0
	B Com	Count	123	13	0	136
		Expected Count	127.1	3.1	5.8	136.0
	BCA	Count	20	0	0	20
		Expected Count	18.7	.5	.8	20.0
	B Sc	Count	66	0	0	66
		Expected Count	61.7	1.5	2.8	66.0
	B Tech	Count	95	0	0	95
		Expected Count	88.8	2.2	4.0	95.0
	B Pharm	Count	14	0	0	14
		Expected Count	13.1	.3	.6	14.0
	Total	Count	530	13	24	567
		Expected Count	530.0	13.0	24.0	567.0

**Table – 1.5 (b) - Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	76.217	10	.000
Likelihood Ratio	80.537	10	.000
Linear-by-Linear Association	21.329	1	.000
N of Valid Cases	567		

The P value for the chi-square test is 0.000 which is less than 0.05. So, it can be inferred that there is a significant relationship between Qualification (UG Programme) and difficulties faced during information searches.

## Conclusion

The study clearly shows that students do face difficulties in various areas like awareness of library services, availability of abstract search, prominently display of e-database in library, technical support, time factor, scattered information and issues related to power supply and backup.

Institute should focus on these areas for more improvement. Especially institutes/university can focus more on commerce / management graduates as they are facing more difficulties compared to science graduates. The research also reveals that age of the students has significant impact on difficulty face by students while using search engine for information searches. Also qualification of the students has significant impact on difficulty face by students while using computer for information searches.

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