
RELIANCE ON THE DIGITAL RESOURCES BY THE INFORMATION SEEKERS OF HIGHER EDUCATION AND RESEARCH INSTITUTIONS IN MYSORE : AN ANALYTICAL STUDY

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Abstract

The paper depicts the extent of dependency of information users of educational and research institutions of Mysore on the electronic / digital media. The responses of 1000 users and the critical views of 24 subject experts have been gathered to render valid findings and suggestions. The attempt clearly shows the degree of the use of digital information resources vis-à-vis the conventional print media

Keywords : Digital Resources, Higher Education

1. Introduction

An analytical study has been made in respect of the dependency on digital information resources by the users of higher educational institutions in Mysore. The information users of Engineering colleges, Medical colleges, PG centers and U.G. colleges have been considered for the study. The user groups have been segregated as : Faculty, Researchers and Students. For the purpose of the study, 42 higher education institutions and 3 research centers have been covered. The questionnaire has been used to obtain pertinent data on the subject. In the survey, 1000 users have been covered and 100 users have been closely observed as to their dependency on digital media for their day-to-day academic and research endeavour.

Category-wise Distribution of Respondents.

Category of users	Units / Institutions					Total
	Medical	Engineering	Rec. Res. Centres	Post Graduate	Under Graduate	
Faculty	50	20	—	100	61	231
Researchers	—	—	104	102	—	206
Students	100	54	—	188	221	563
Total	150	74	104	390	282	1000

Before arriving at the findings, 24 subjects experts from the field of Library and Information Science, educationists in higher education, managers of education institutions and research centers have been interviewed. The outcome of the study is depicted in brief.

The data collected through the questionnaire have been tabulated systematically in order to render relevant interpretations. The explanation is given below along with the relevant tables herebelow.

Percentage of respondents who rely upon books and journals with reference to their research

Respondents		Extent in Percentage				
		100%	75%	50%	25%	Nil
All Members		36	28	19	06	11
Faculty		38	28	24	06	04
Researchers		54	29	12	02	03
Students		15	27	21	11	25
Medical	Faculty	46	38	14	02	00
	Students	07	34	36	13	10
Engineering	Faculty	19	23	38	10	10
	Students	21	28	15	13	23
Recognised Research centers	Researchers	46	32	16	03	03
PG Centers	Faculty	54	30	11	04	01
	Researchers	62	25	08	02	03
	Students	23	22	14	09	32
UG Centers	Faculty	32	23	35	07	03
	Students	11	25	18	09	37

The data reveals that 64% of the respondents rely between 75%-100% for research purposes and only 26% rely on books and journals for their research work to the extent of 25% to 50%.

Further, the table shows, the number of researchers from the three research centers who heavily rely upon the hard copies of books and journals. It is indicated that 78% of them heavily depend on the books and journals in the range of 75% to 100%. All the responses from the category of medical faculty have accepted the value of printed books and journals, at different ranges as to the extent is concerned.

This shows that even though the use of digital media such as internet and CDs is on the rise, books and journals are still the significant sources of information to the respondents for their research work.

Information users who rely upon Internet and CDs for their research

Respondents		Extent in Percentage				
		100%	75%	50%	25%	Nil
All Members		41	27	13	10	09
Faculty		45	30	11	11	03
Researchers		55	26	12	06	01
Students		22	24	16	14	24
Medical	Faculty	72	20	08	00	00
	Students	21	34	12	23	10
Engineering	Faculty	14	48	05	24	09
	Students	24	17	23	15	21
Recognised Research Centre	Researchers	51	32	09	05	03

PG Centers	Faculty	59	23	13	03	01
	Researchers	58	20	15	07	00
	Students	31	21	15	05	28
UG Centers	Faculty	34	28	20	16	02
	Students	13	25	14	13	35

It is observed from the table that nearly 41% of the information users depend to the full extent of 100% on internet and CDs for the purposes of carrying out research work, where as only 23% rely upon these sources to the extent of 25% to 50%.

51% of the researchers from research centers and 59% of the PG faculty rely upon the internet and CDs to the maximum extent. To be specific, the researchers representing the recognized research centers have accepted their heavy reliance on these digital media.

It is also important to note that 72% of the medical faculty rely to the extent of 100%. It is only 14% of engineering faculty who have expressed their dependency to the extent of 100%.

The overall analysis indicates that the dependence of the researchers on the information technology based tools is higher than the conventional sources of information.

Opinion of respondents about the use of digital sources compared to the traditional sources with reference to access to recent and accurate information

Respondents		Extent in Percentage				
		100%	75%	50%	25%	Nil
All Members		48	29	17	05	01
Faculty		49	31	17	03	00
Researchers		52	22	17	07	02
Students		44	33	17	05	01
Medical	Faculty	44	33	17	05	01
	Students	44	33	17	05	01
Engineering	Faculty	33	43	19	05	00
	Students	51	28	15	04	02
Recognised Research centers	Researchers	57	13	17	09	04
PG Centers	Faculty	60	27	12	01	00
	Researchers	48	31	16	05	00
	Students	45	35	14	05	01
UG Centers	Faculty	56	25	17	02	00
	Students	41	36	17	04	02

(Values are in %)

The information presented in the above table shows that 77% respondents depend on digital sources in comparison with traditional sources to the extent of 75% to 100% to access recent and accurate information. About 23% of the respondents depend on digital sources for the said purposes to a moderate extent of 25% to 50%. 60% of PG faculty and 57% of the researchers from the recognized research centers depend fully on digital sources for current and accurate information.

Thus, access to recent and accurate information is also the reason for the information users to depend on digital sources. The extent of dependency is indicated at the higher range by the majority of the respondents.

Opinion of respondents on the use of digital sources compared to the traditional sources as digital sources can supplement the existing printed materials

Respondents		Extent in Percentage				
		100%	75%	50%	25%	Nil
All Members		35	24	28	09	04
Faculty		40	24	27	07	01
Researchers		36	21	30	09	04
Students		29	28	27	10	06
Medical	Faculty	44	24	20	12	00
	Students	22	28	33	16	01
Engineering	Faculty	05	33	52	10	00
	Students	28	23	32	08	09
Recognised Research centers	Researchers	38	19	29	09	05
PG Centers	Faculty	57	19	17	05	02
	Researchers	34	23	31	08	04
	Students	32	24	26	09	09
UG Centers	Faculty	55	20	21	03	01
	Students	34	32	22	07	05

(Values are in %)

Above table shows that 59% of the respondents studied are of the opinion that digital sources supplement the existing printed medium to the extent of 75% to 100%. About 37% of the respondents are of the view that the digital sources supplement the existing sources only up to the extent of 25% to 50%. However, in the institution-wise statistics, 57% of PG faculty and 55% of the UG faculty uphold the view to the extent of 100%.

It is one of the important issues in the study. The data in the table exhibits more persistence of responses in the extent column of 100%. A very small percentage of responses are indicated in the extent column of 25% and Nil. This helps to arrive at the pertinent inference that the information users, by and large, support the contention, the digital sources supplement the existing printed materials to a very great extent and quite a number of experts and academicians on this contention have provided positive opinions. They have clearly said that the digital media is a value added tool for academicians and researchers working in the institutions of higher learning.

Information users expressing their future needs on subscription to on-line journals.

Respondents		Extent in Percentage				
		100%	75%	50%	25%	Nil
All Members		37	32	22	06	03
Faculty		43	31	21	05	00
Researchers		43	31	16	06	04
Students		24	35	28	07	06
Medical	Faculty	64	28	06	02	00
	Students	19	38	29	10	04
Engineering	Faculty	19	33	43	05	00
	Students	30	26	30	08	06
Recognised Research centers	Researchers	40	31	20	05	04
PG Centers	Faculty	50	32	16	02	01
	Researchers	45	31	11	08	05
	Students	32	33	20	05	10
UG Centers	Faculty	40	32	18	10	00
	Students	17	44	31	05	03

(Values are in %)

Table shows that nearly 69% of the respondents depend on electronic journals to the extent of 75% to 100% to fulfill their future needs, whereas 28% of them depend on online journals between 25% to 50% range. Again 64% of the medical faculty subscribe to the contention to the full extent of 100%.

This indicates that the future of access to information is mainly online journals and they shall naturally have the potential to fulfill the future needs of information users in this digital age.

Extent of Reliance on Internet for Various Purposes

Purpose	Percentage of Respondents who Relied on Internet	Extent of Reliance in the highest Range of 75% to 100%
E-Mail	94%	71%
Journals	93%	39%
Encyclopedias	78%	25%
Relay chatting	74%	31%
Book shops & Bibliographic databases	70%	25%
Yellow pages and directories	56%	16%
Discussion forums	53%	22%
Digital libraries	52%	17%
Teleconferencing	41%	10%

The table exhibits the consolidated statistics projected in the study. It is clear now, the respondents representing all the categories of information users rely upon internet facility for the purpose of accessing information, contacting experts and communicating with fellow professionals / friends.

The data reveal that 95% of the respondents have relied on internet for availing e-mail facility in the highest range. 71% of the respondents have indicated the reliance to the extent of 75% to 100%. Again, 93% of the respondents relied on internet for accessing online journals. In the highest range, and there are 39% of the users in this segment.

It is clear from the table, that most of the information users of higher education rely upon internet for communication, accessing journals and encyclopedic information. Quite a good percentage of users also rely upon internet for the purpose of relay chatting and bibliographic databases (including books shops on internet). A moderate percentage of users depend for accessing yellow pages / directories, digital libraries and discussion forums.

It can be inferred from the table that a huge number of respondents are exposed to the use of e-mail and relay chatting. However, their extent of skill and proficiency vary. Finally, no respondent from the category of engineering faculty has expressed unfamiliarity with the use of e-mail facility. Very few post graduate faculty have been found unfamiliar with e-mail facility. This segment account for only 2% of the entire population of respondents.

As regards the opinion, whether digital media facilitate quick access to information, a moderate number of respondents amounting to 55% fully subscribe to the view. 31% accept the view out of their experience to the extent of 75%. Considering both the groups, 86% of the respondents accept that they rely upon digital resources for quick access to information. Hence, it is certain that the information users heavily depend upon digital facilities for getting quick access to information.

Digital Media vis-à-vis Conventional Media. The extent of dependency on them for various needs

Purpose/Need	Media	% of Positive Responses	% of dependency in the highest range of 75% to 100%
Education	Internet and CDs	90	64
	Printed books and journals	97	78
Research	Internet and CDs	91	68
	Printed books and Journals	89	64
Recreation	Internet and CDs	79	43
	Printed books and Journals	78	30

The important findings of the study is that the information users of higher education in Mysore City, heavily rely upon conventional books and journals on one hand, and digital resources: internet and CDs on the other. It is inferred from the data that a huge percentage of respondents, as users of information, depend on both the media. Almost an equal number of users are there in both the alternatives. However, as regards, greater extent of dependency, the observed responses show a marginal degree of variation.

- To satisfy the educational needs, 97% of the respondents rely upon printed media, whereas reliance on digital media shows 90%.
- To meet the research needs, 91% of the respondents rely upon digital sources, whereas reliance on printed media show 89%.

- Regarding the recreational needs, it is quite interesting because, there is slight variation in the percentage of dependency in the highest range of 75% to 100%. There are 43% of the respondents with high inclination towards digital media, whereas 30% prefer printed media in the highest range for satisfying their recreational needs.

2. Summary of Findings From Delphi Study

The establishment of "IT CITY" in Bangalore by the Government of Karnataka has direct impact on Mysoreans. The information expectations are to be served on table. Digital Information / ICT is one such avenue. The publishers and aggregators are now at creating on-line databases and means of providing access to full text. This conspicuous change has increased the user expectations. Day-by-day, more and more users expect to be able to find everything on-line, full text!

The advancement of digital technology is a boon for accessing current and primary data, anywhere and anytime, in an economical way. 83.3% of the subject experts are of the opinion that there is high impact / influence of digital technology on information users of higher education in Mysore. It is true as per the same respondents that the electronic resources will supplement the conventional printed media in getting precise, relevant, and timely information.

Print medium in libraries continue to grow and be central to missions of the academic libraries. The book still effectively serves a variety of needs better than any alternative. Digital books are rather hard to read and strainful to navigate the lengthy text. Digital technology is a value added tool for information users. This perspective has been supported by 94.3% of the subject experts.

People in the academic and research environment rely mostly on books and journals in order to up-date knowledge, to derive pleasure from reading and for longer hours of concentrated studies. They also rely upon web links for current information / facts / statistics. This is more so in scientific and technological disciplines according to 83.3% of the expert opinion. The experts have indicated several reasons for inadequate ICT facilities. They mainly come under the following:

Financial inadequacy	-	83.3 %
Apathy on the part of management /authority	-	33.3 %
Lack of knowledge about ICT	-	27.7 %
Lack of training and exposure	-	44.4 %

For quicker and effective implementation of digital facilities, orientation and training is to be organized on regular basis. Awareness should be brought right from the management to lower staff members. The resource sharing / cooperative programmes through consortia will reduce the expenditure of individual institutions according to 83.3% of the expert views.

The users in the age group of 50 to 70 years, are rather reluctant to use ICT facilities because of various psychological and traditional reasons. Only 66.6% of the experts agree with this view. According to 33.3% of the opinions of the experts age is no barrier to aspire and exploit digital technology. Youngsters certainly grasp effectively and relay more. However, age only cannot be the criterion for inadequate and under utilization of digital facilities.

The higher education without the knowledge of electronic information sources and ICT enabled facilities is like existing in "coma". When people unaware of technology are using ICT for their day-to-day activities, there is need for all participants of the higher education system to undergo a change and infuse the concept of digital technology

With large population base and less infrastructure facilities, there is lot to be done to bring the digital revolution existence. The change in attitude and acceptance should happen at every level, right from students to the professionals / faculty / librarians, irrespective of age.

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