Usage of Commercial and Open Source Digital Resources in Libraries: With Special Reference to Islamic Management Arts & Science Colleges of Tamil Nadu

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Abstract - There are many subscribed resources and open source resources utilized by the Students, Research Scholars and Faculty Members in higher educational institutions. Objective –of this study is to determine the Digital resources usage preferences in Arts & Science college libraries of Tamil Nadu, particularly Islamic Management Arts & Science colleges. This article also examines the usage of e-books, e-journals (both subscribed and open source), Library website and abstracting database. It also deals with the status of the colleges which are subscribing to the digital resources. Research methodology. A systematically designed questionnaire was distributed to the selected colleges and received the data for analysis. Quite a few interesting facts have come out. Findings -Accordingly the data reveals that the undergraduate and postgraduate users preferred opens access resources and Google as their search engine for quick access while on the other hand research scholars insisted that commercial resources are of help and have made a recommendation to increase them. In case of faculty they recommend more number of commercial resources for their study, research and teaching purpose. Suggestions were made by the users to improve the infrastructure facility, regular power connection and a speed increase in the high bandwidth internet connections and to conduct seminars/ workshops/ orientation to the users in order to create awareness to increase the both the category of digital resources.
Keywords: Digital Resources, Commercial Resources, Open Access Resources & Islamic Management Colleges

I. INTRODUCTION

Digital resources play a vital role in higher education. We are witnessing changes in the way higher education is taught and in the way students are learning. Technology has become an integral part of how most people interact, work, learn and re-learn. The new and emerging technology is already having a transformative effect on the entire scenario of the Library services. There are a number of digital resource services provided by the college libraries in Tamil Nadu. There are two types of digital resources available for higher education and research as explained below. There are 34 Islamic Management Arts and science colleges providing higher education in Tamil Nadu. They are subscribing to many type of digital resources for their libraries and also offer free/open source digital resources to their users. Digital resources include electronic journals, electronic books, electronic thesis, and electronics online

databases and abstracting database. In most of the higher educational institutions, electronic resources form an integral part of libraries and act as a significant source of academic resources, facilitate teaching, learning and research activities. Thus digital resources have placed themselves at the top most priority in almost all academic libraries. Srinivasaragavan and Umaiyorubagam (2016) stated that information access through electronic media has a lot of impact on the libraries and library users. Almost all the librarians have been facilitated to develop new strategy for developing and maintaining digital content and digital resources.

A. Open Source Resources / Open Access Resources

These resources are available via internet at free of cost. Many Higher educational organizations, private sector organizations provide Directory of Open access Journals (DOAJ) & Directory of Open Access Books (DOAB).

B. Commercial Resources / Subscribed Resources

These resources are subscribed by paying an annual subscription by the concerned institutions. They are available with certain restrictions like Period of availability, restricted users, contents, individual Log in ID & are IP Based. There are many private organizations providing subscription based electronic database/resources and the Government bodies also provide consortia of electronic resources for an annual subscription.

II. REVIEW OF LITERATURE

Shanthi, S and Nagarajan, M (2017) discussed in their study that 'open Access is an emerging movement with a global presence.' Academic libraries are at the forefront of OA revolution, wishing to control their financial destinies, shifting from the traditional model of scholarly communication to open access is a significant move, perhaps even a revolutionary one. There are numerous ways in which open access might impact an academic library.

Subbulakshmi, R and Santhi, J (2016) argue that that the online journals are accessed by users of aided colleges

affiliated to Alagappa University - among 450 colleges, 45 respondents often using online database and 170 numbers of respondents using conference proceedings frequently. Most of the research scholars and staff are having knowledge about digital resources. Majority of respondents are female in the gender wise distribution. More than 145 respondents use online resources through Google search engine.

III. OBJECTIVES OF THE STUDY

1. To find out the Muslim Management Arts & Science Colleges in Tamil Nadu.
2. To identify the availability of Commercial and Open Source Digital resources in concerned Colleges.
3. To measure the usage level of Commercial digital resources.
4. To find out the usage level of Open source digital resources.

5. To Analyse the distribution of respondents in the usage of digital resources.
6. To measure the level of satisfaction of Commercial and Open Source resources.

IV. METHODOLOGY

The researcher has listed out the available Islamic Management Arts & Science colleges in Tamil Nadu. There were 33 Arts & Science colleges. Among this 10 colleges were selected and taken into account for the study. A systematic questionnaire was designed for the data collection. For each college 100 Questionnaires were distributed for the data collection. Thus a total of 1000 Questionnaire were sent and among them 864 questionnaires were received back which works out to 86.4%. The received questionnaires were verified once again and taken for the data analysis. For data analysis SPSS software version 2.0 was utilized.

V. ANALYSIS AND DISCUSSION

TABLE I DISTRIBUTION OF QUESTIONNAIRES AND RESPONSES AMONG THE ARTS & SCIENCE COLLEGES

S. No.	Name of Institution(s)	No. of Questionnaire Distributed	No of Questionnaire Received	Percentage
1	The New College (Autonomous), Chennai	100	89	89
2	Mohamed Sathak College of Arts and Science, Kanchipuram	100	84	84
3	Islamiah College (Autonomous), Vaniyambadi	100	90	90
4	Jamal Mohamed College (Autonomous), Tiruchirappalli	100	87	87
5	Dr.Zakir Hussain College, Sivagangai	100	88	88
6	C.Abdul Hakeem College (Autonomous), Vellore	100	85	85
7	M.M.E.S Women Arts and Science College, Vellore	100	89	89
8	M.S.S.Wakf Board College, Madurai	100	79	79
9	Mazharul Uloom College, Ambur	100	89	89
10	Sadakathullah Appa College (Autonomous), Tirunelveli	100	84	84
	Total	1000	864	86.4

TABLE II FREQUENCY OF VISIT TO LIBRARY

Frequency	No. of Respondents	%
Every day	626	72.6
Once in a week	152	17.5
Twice a week	42	4.8
Once in a Month	33	3.8
Rarely	11	1.3
Total	864	100

The data presented in the table II shows institution wise respondents' frequency of using library and access to library resources. Among the 864 respondents 72.6 % (626) in the colleges visit the library every day.

It is observed from the table III that maximum of 48.72% (421) of respondents opined that they access internet from their libraries. Next to this, 24.65% (213) of respondents

opined that they were able to access internet at browsing centres'. 14% (121) of respondents opined that they access internet at any place according to their convenience. In an average 46 percent of the respondents are of the opinion that they are accessing internet at library shows the positive sign of using library resources.

TABLE III PLACES OF ACCESS TO INTERNET

Place of Accessing Internet	No. of Respondents	Percentage
At Library	421	48.72
At Home	69	7.98
At Department	40	4.62
At Browsing Centre	213	24.65
Any place according to convenience	121	14.00
Total	864	

TABLE IV SEARCH ENGINES PREFERRED TO USE

Search Engines being used	No. of Respondents	%
Google	699	80.90
Yahoo.com	85	9.83
Ask Jeeves.com	24	2.77
Bing.com	13	1.50
Alta vista.com	21	2.44
Lycos.com	18	2.08
Excite.com	4	0.48
Iwon.com	-	
Total	864	100

Table IV depicts search engines preferred by respondents. 80.9% (699) were using Google as their search Engine. Next to this, 9.83% (85) were of the opinion that they prefer yahoo as their search engine.

It is observed from the table V that maximum of 26.5% (229) of respondents were aware that their college is having INFLIBNET-NLIST resources for access. Next to this 17.4% (150) of respondents knew that their college library is having DELNET Resources. On the other hand 10.4 % (41) acknowledged that Proquest is available in their college.

TABLE V SUBSCRIBED DIGITAL RESOURCES AVAILABLE IN LIBRARIES

Digital Resources	No. of Respondents	%
DELNET	150	17.4
INFLIBNET	229	26.5
PROQUEST	90	10.4
SCOPUS	41	4.7
MEDLINE	32	3.7
SPRINGER	19	2.2
ELSIEVIER	45	5.2
IEEE	41	4.8
NPTEL	128	14.8
OTHERS	89	10.3
	864	100
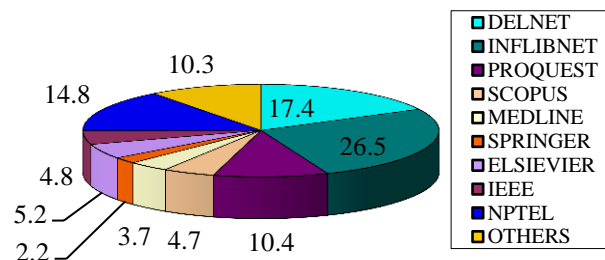
Fig.1 Digital Resources available in the libraries

TABLE VI EFFECTIVENESS OF USAGE OF E-ACCESS OF LIBRARY

	1	2	3	4	5
Online Public Access Catalogue	417 (48.2%)	160 (18.5%)	117 (13.5%)	100 (11.5%)	70 (8.1%)
E-Books (subscribed)	210 (24.3%)	157 (18.1%)	136 (15.7%)	165 (19%)	196 (22.6%)
E-Book (Open source)	226 (26.1%)	219 (25.3%)	206 (23.8%)	118 (13.6%)	95 (10.9%)
E-Journals (Subscribed)	205 (23.7%)	126 (14.5%)	119 (13.7%)	267 (30.9%)	157 (18.1%)
E-Journals (Open source)	418 (48.3%)	140 (16.2%)	115 (13.3%)	100 (11.5%)	91 (10.5%)
Library Website	147 (17%)	162 (18.7%)	156 (18%)	292 (33.7%)	107 (12.3%)
Abstracting Database	165 (19%)	219 (25.3%)	147 (17%)	182 (21%)	151 (17.4%)

1. Very Important 2. Important 3. Somewhat important 4. Not very important 5.Not at all important
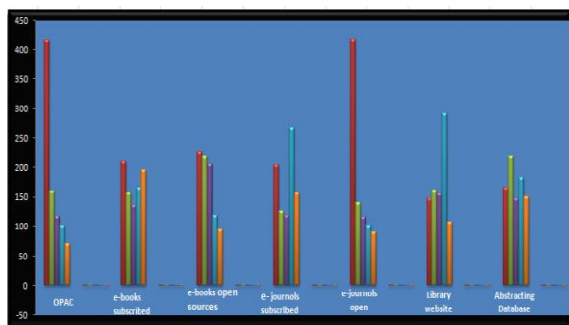

Fig. 2 Effectiveness of Usage of e-access in Library

Data presented in table VI and Fig. 2 explains the effectiveness of usage of library by respondents from Arts and Science Colleges. With reference to usage of Online Public Access Cataloguing system (OPAC) provided by libraries, maximum of 48.2% (417) of respondents were of the opinion that this service is very important and 18.5% (160) of them were of the opinion that it is important for searching the bibliographical details of the book. On the opinion regarding e-books subscribed through libraries, maximum of 24.3% (210) of them were of the positive opinion that it is very important. While considering the e-books available through open source, maximum of 26.1%

(226) of respondents were quite happy and that they were giving more importance to e-books available through open source. Subscribed e-journals were much more important was the opinion held by 23.7% (205) of respondents. It is also viewed positively by 48.3% (418) of respondents that Open Access e-journals were more important for their academic and research usage. It is inferred from the analysis that open access resources were highly useful for respondents.
(Chi square value: 89.91 df:36 Significant P<0.05)

The chi square test is applied for further discussion. The computed chi square value 89.91 is greater than its tabulated value at 5% level of significance. Hence there is a significant difference between the various types of resources and its importance. It is evident from the table that respondents with different types of e-resources do differ in using them from various types of institutions since the chi square value is significant at 0.05 levels.

TABLE VII PROBLEMS FACED WHILE ACCESSING E-RESOURCES
(Mean values)

Problem	Mean	Rank
Accessing suitable personal computers	3.29	5
Accessing suitable software	2.97	6
Lack of Information about how to use digital resources	3.74	1
Lack of time to acquire skills	3.62	2
Lack of support from Library staff	3.53	3
Other reasons	3.52	4

The above table depicts the problems faced while accessing and using e-resources by respondents. It is inferred from the table that respondents were having the foremost problem as lack of information about how to use digital resources ranked in first place with the mean value of 3.74. Lack of time to acquire skills (3.62) is at the second position in the list of problems faced in accessing and using e-resources.

VI. FINDINGS

1. The average response rate is 86.4 percent. It is found from the table that six colleges namely, The New College, Chennai, Islamiah College, Vaniyambadi, Jamal Mohamed College, Tiruchirappalli, Dr.Zakir Hussain College, Sivagangai, M.M.E.S Women Arts and Science College, Melvisharam and Mazharul Uloom College, Ambur provided more than 86 percent of the responses from its users, which is more than the average response rate.
2. It is observed from the analysis that 80% (699) of respondents were using google as their search engine.
3. It is found from analysis that 26.5 % respondents were aware of the fact that their college is having INFLIBNET-NLIST resources for access. Next to this 17.4% that is 150 respondents stated that their college library is having DELNET resources.

4. The observations show that the e e-books available through open source, maximum of 26.1% (226) of respondents were quite happy and that they were giving more importance to e-books available through open source.
5. In case of Subscribed e-journals were much more important was the opinion held by 23.7% (205) of respondents.
6. It is also viewed positively by 48.3% (418) of respondents that Open Access e-journals were more important for their academic and research usage.
7. Overall analysis expose that open access resources were highly useful for respondents

VII. SUGGESTIONS

1. As to the barriers in accessing the electronic resources, 24.3% (210) of them commented that they need more equipment and internet access points.
2. Suggestions were made to increase infrastructure facility and the respondents insisted that they need high band-width internet connectivity and regular power supply.
3. It is inferred from the data analysis that the respondents were having the foremost problem as lack of information about how to use digital resources ranked in first place with the mean value of 3.74.
4. Lack of time to acquire skills was at the second position as the problem in accessing and using e-resources.
5. It is observed from the analysis that most of the colleges are not subscribing Proquest, Springer, Science direct etc., It is also noted that most of the respondents mentioned Google as their first preference for search of e-resources.
6. It is also observed from the study that some of the colleges are not having membership in National Digital Library (NDL) and National Programme on Technology Enhanced Learning (NPTEL).
7. Suggestions were given to conduct user awareness / Orientation programmes to the Library Professionals, Faculty Members is different subject discipline, Research scholars and students in order to access the e-resources effectively.

VIII. CONCLUSION

Availability and Accessibility of Digital resources are the main criteria in Higher Education and Research. This study was undertaken by questionnaire based survey method and the researcher tries to find out the success level in implementation of the digital resources and satisfaction among its users. It is observed from the analysis that most of the research scholars have given preference to Google search engine, due to unavailability of enough subscribed resources in the colleges and also the lack of awareness about the INFLIBNET-NLIST and DELNET resources is one of the main reasons for depending on only one open resource. Low band width internet connection and irregular power supply is also one of the reasons for not using the

subscribed resources. Initiatives by the Management and the Librarians are important to create awareness among the users of the library. In general, the awareness among the users of digital resources is to be made with 'open sources' initially and then the required specific resources can also be accessed through initiatives of Government of India such as INFLIBNET- NLIST and DELNET - a boon for the libraries to start with digital open archives. Awareness about the National Digital Library and NPTEL Programme is to be created on a larger scale. Apart from the Orientation Programmes, Refresher courses are to be given to the Library. Professionals at regular intervals in order to update the knowledge and enhance their information processing skills so that in turn they can impart these skills to the actual users.

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