

Patrons Preference and Difficulties while Using Print and Electronic Resources in the Select South Indian Institute of Management (IIMS) Libraries

M. Panduranga Swamy

Research Scholar
Dept. of Library & Inf. Science
Dravidian University, Kuppam.
E-mail: pandumlib@gmail.com

Dr. Avineni Kishore

Assistant Professor
Dept. of Library & Inf. Science
Dravidian University, Kuppam.
E-mail: saikishoresvu@gmail.com

ABSTRACT

Information and Communication Technology (ICT) is progressive and its impacts on publication industry are noteworthy. Most of the libraries are gradually transforming the conventional methods of information collection, storage and retrieval. In this scenario, the libraries are augmenting their collections in electronic format to meet the patron's needs present and future. Patron's demands merits of electronic resources management libraries by spending significant amount on electronic resources. The growth of electronic resources and digital libraries has significant impact on traditional library resources and services. The attitudes of patrons tend towards make use of electronic resources over printed resources. The study reveals major difficulties pertaining to print and electronic resources in the selected Indian Institute of Management (IIMs) libraries in South India.

Keywords: Management libraries, Print resources, Electronic resources, Library collection, Management institutions.

INTRODUCTION

With the help of information technology and its impact most of the libraries are tremendously transforming from print to electronic format due to demands from the patrons, accessibility issues, Research and development (R&D) in all the sectors, space, budget etc. The user community in the management institutes have different information needs as a result of their academic and research needs. In management libraries majority of their budget is investing on electronic resources. In this situation, it is necessary to know the patrons awareness, preference, usage and difficulties while using print and electronic resources in the libraries of selected Indian Institute of Management (IIMs) in South India.

PROFILE OF IIMs LIBRARIES AND ITS COLLECTION

The **Indian Institutes of Management (IIMs)** is a conglomeration of 20 public, autonomous institutes of management education and research in India. They primarily offer postgraduate, doctoral and executive education programmes in Management and related fields. The concept

of starting up of IIMs was the brain child of Jawaharlal Nehru, the first Prime Minister of India. The top business schools in the country such as IIMs and ISB are always making headlines for innovative management concepts and idea generation. They become hub of think tankers in Management, Entrepreneurs and many more. This clearly shows that importance of excellence in education and faculty of business schools. The below table shows the selected IIMs libraries profile and its collection as per 2015-16 academic years:

Table 1: Highlights of IIMs and its library collection

DISCRIPTION	IIM-Bangalore	IIM-Kozhikode	IIM-Trichy
Established	1973	1996	2011
Location	Bannerghatta Road, Bangalore, Karnataka.	Kunnamangalam, Kozhikode. Kerala.	Trichy, Tamil Nadu.
Library Management Software	Visionary Technology Library Solution (VTLS)	LIBSYS	LIBSYS
Digital Library	Dspace	DSpace & Green Stone	00
Internet / Wi-Fi collection	Yes	Yes	Yes
Library Timings	9.00 am to 7.00 pm	9.00 am to 10.00 pm	9.00 am to 9.00 pm
Library Space	55,000 Sq.feet	55,000 Sq.feet	2300 Sq.feet
Seating accommodation	380 members	300 members	50 members
Books	166986	35640	3564
E-Books	884	200000	--
Print periodicals	214	275	32
Online Databases	109	54	19
Audio Video Resources	13440	3974	166
Thesis / Dissertations	1097	10	--
Back Volumes	34846	6119	460

REVIEW OF LITERATURE

There are large numbers of studies available in the research problem. Few important studies are discussed here. **Krishna Naik and Raju Naik (2016)** Studied use and impact of electronic resources by Higher education students and faculty members in Chikkamangalur District. Questionnaire was used for data collection. The results found that 82.22 percent of the respondents are aware of e-resources. 89.18 percent of the respondents were preferred e-journals to seeking information, 95 percent of the respondents were used e-resources for class assignments purpose. 64 percent of the respondents felt that limited number of computer terminals, lack of e-resources knowledge and skill are the major problems while accessing the e-resources. 41 percent of the respondents preferred user education on e-resources and information technology.

Nnadozie et al. (2015) examined the use of journals in universities and polytechnics academic libraries in Nigeria. Questionnaire was used for data collection. It is focused on type of journals used, purpose of used, subject journals, and problems faced by users while using journals. The results found that majority of the university respondents used the journals

for knowledge on new development in their respective fields, research purpose and academic assignments purpose. Polytechnic libraries respondents used journals to acquire general knowledge and various academic assignments. The university respondents used core/primary journals, professional and academic and peer review journals whereas Polytechnic libraries used multi-disciplinary and trade journals. Majority of the respondents responded that an Index card is the major channels to access point to the journals. Shortage of library staff is the main problem in libraries. Some of the recommendations are made to improve the library services at the end.

Ravinder (2015) author highlighted the problems faced in accessing the electronic resources and its influences in research productivity among the research scholars at Sri Krishnadevaraya University library, Anantpuram. The majority of the respondents 75 percent were aware of UGC- Infonet consortia, 96 percent used e-journals for research work and 61 percent of respondents preferred print format. The majority 73 percent of respondents faced technical problems due of lack of computer terminals, 65 percent of respondents faced problems due to lack of training while 59 percent of researchers faced difficulty with bandwidth and slow internet speed issues. 29 percent of researchers indicated that computers caused irritation to eyes and problems over searching.

Mostofa (2011) conducted a survey on usage and access of internet among 137 business students in DarulIhsan University, Bangladesh, Majority of the respondents use internet for education purpose. Google and Yahoo Search engines are found to be more widely used than other search engines. The majority of the respondents said major problem faced by students in their use of internet included slow access speed and less number of terminals. It was recommended at the end of the article that the internet bandwidth and computer terminals should be increased to overcome the problems.

SampathKumar, and Kumar G T (2010) examined the perception and use of e - resources and the internet by the engineering, medical and management academics in Bangalore City India. The objective of this study was to find out how academics compare e-resources with print resources and how they perceive the advantages of e- resources and problems for accessing them. It further analysed the extent and purpose of internet usage and factors influencing it and informed of the high quality free internet resources and how to access them.

Varaprasad, S.J.D and Madhusudan, S. (2010) in their study “E-journal consortium: it is a success story always?” reveal that internet and telecommunication technology has changed the scenario of libraries. The only way to face these problems is through Library consortium. This case study of CSIR e-journals consortium reviews the need of consortium, types advantages and disadvantages of a consortium, problem faced and possible solutions of some these problems.

Soyizwapi and Hoskins (2009) in their study “Use of electronic databases by postgraduate students in a University based Faculty of Science and Agriculture” dealt with an equivalent study on the usage pattern of postgraduate student sin the faculty of Science and Agriculture at the University of KwaZulu Natal, Pietermaritzburg on the usage of electronic databases. Survey was conducted using questionnaire method for collecting data. It was observed that two thirds of the students used the OPAC, CD-ROM and online databases while other students preferred other sources to find information. It was also found that the students had different patterns of use and faced various problems while using the electronic databases. The study projected the importance of improved service delivery and training of staff and students

in the use of library as well as recommendations for the training of students and staffs for productive use of online databases.

Sinha, Manoj Kumar (2008) Addressed the various issues relating to access and bibliographic control of electronic journals, access problems, policy issues and growth of e-Journals consortium approach to subscribe scholarly peer reviewed journals for their patrons in network environment. It is concluded that in developing countries, number of e-journals is less. Further the e-journals are very costly and there is also an inadequacy of the funds with parent institutions.

Ferguson (2006) examined the change of University of Hong Kong libraries are successfully shifted from print to electronic collection. This change created new technical problems in managing huge number of resources and promoting the e-resources to the patrons. The managing print and electronic version of the resources are complex and time consuming and the necessary importance and cost of technical infrastructure, copy right issues are explained.

Gurudev Singh (2002) Study carried using questionnaire method to know the users views on purpose, frequency, problems faced by the users in using library resources and various aspects. Received 44 respondents from the faculty members. 36.36 percent of the faculty members visit the library for the purpose of making notes for teaching. 27.7 percent of students visit for updating their knowledge in their area. Text books were most frequency used followed by reference books and general books.

OBJECTIVES OF THE STUDY

- To investigate the patrons preference on the print and electronic resources
- To identify the frequency of electronic gadgets used by the patrons
- To find out the difficulties while using the print and electronic resources
- To give appropriate solutions to overcome the difficulties faced by patrons while accessing the print and electronic resources

METHODOLOGY

In order to study the patron's preferences and opinions on print and electronic resources at Indian Institute of Management (IIMs) libraries, the investigator has selected Post-Graduate students, Research Scholars and Faculty Members of three selected IIMs in South India, namely Indian Institute of Management – Bangalore (IIM-B), Indian Institute of Management, Kozhikode (IIM-K) and Indian Institute of Management- Trichy (IIM-T). These libraries have been selected purposefully and simple random sampling technique was used to select the users of libraries for data collection.

The study found that there are 2080 library users in the three IIMs. Among them, 1738 are postgraduate students, 154 are research scholars and 188 are faculty members. A total of 1040 (50%) users have been selected for the study and questionnaire administered to them. Out 1040 questionnaires, 717 (68.95 percent) filled questionnaires were received back. For analysis the raw data, IBM Statistical Package for Social Science (SPSS) version 23 software was used.

ANALYSIS AND INTERPRETATION OF DATA

This part deals with the analysis of data received through questionnaires from postgraduate students, research scholars and faculty members.

Table 1: Distribution of respondents according to institute

Name of the Institution	Respondents	
	In Number	In Percentage
IIM – Bangalore	320	44.63 %
IIM – Kozhikode	282	39.33 %
IIM- Trichy	115	16.04 %
Total	717	100.0

It is evident from the table 1 that out of the total respondents 44.63 percent (320) belongs to IIM-Bangalore, 39.33 percent (282) belongs to IIM-Kozhikode and the remaining 16.04percent (115) respondents are from IIM-Trichy.

Table 2: Distribution of respondents according to gender

Gender	Name of the Institute			Total
	IIM-B	IIM-K	IIM-T	
Male	236 (73.75%)	189 (67.02%)	102 (88.70%)	527 (73.50%)
Female	84 (26.25%)	93 (32.98%)	13 (11.30%)	190 (26.50%)
Total	320 (100.00)	282 (100.00)	115 (100.00)	717 (100.00)

The above table data conveys that 73.5 percent (527) are male respondents and 26.5 percent (190) are female respondents. It is inferred from the classification that there is domination of male respondents in sample composition.

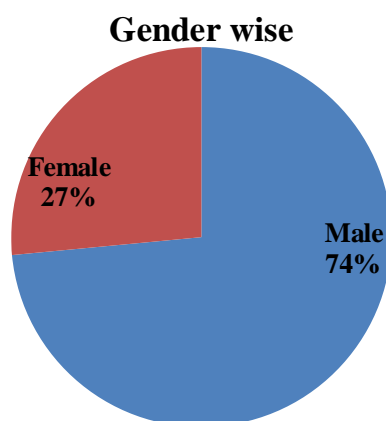


Table 3: Distribution of respondents according to their graduation background

Graduation background	PG students	Research scholars	Faculty members	Total
Engineering	425 (71.67%)	21 (43.75%)	24 (31.58%)	470 (65.55%)
Humanities & Social Sciences	76 (12.81%)	12 (25.00%)	30 (39.47%)	118 (16.46%)
Sciences	92 (15.52%)	15 (31.25%)	22 (28.95%)	129 (17.99%)
Total	593 (100.00%)	48 (100.00%)	76 (100.00%)	717 (100.00%)

Graduation-wise classification of the respondents was observed from the above table that there is domination of engineering students whose percentage share is 65.55. The other two departments such as Humanities & Social Science (16.46%) and Science (17.99%) have lower strength as compared with Engineering.

Table 4: Preference of format

Format	Academic wise			Total
	PG Students	Research Scholars	Faculty members	
Print	77 (12.98%)	12 (25.00%)	13 (17.11%).	102 (14.23%)
Electronic	189 (31.87%)	18 (37.50%)	19 (25.00%)	226 (31.52%)
Both	327 (55.14%)	18 (37.50%)	44 (57.89%)	389 (54.25%)
Total	593 (100.00%)	48 (100.00%)	76 (100.00%)	717 (100.00%)

The above table shows that majority of the respondents (54.25%) are using both formats print as well as electronic for getting the information. It is also clear that 14.23 percent of the respondents use print format and remaining 31.52 percent prefer electronic format.

When asked the user's preference for print format, one third of the respondents replied that print format is easier to read than computer screen, and more easily to exchange than electronic format without any copyright and license issues. Print resources have longer life than electronic resources without any viruses and do not damage the technological devices.

Table 5: Opinion on difficulties while using print resources

Opinion	Academic wise			Total
	PG Students	Research Scholars	Faculty members	
YES	519 (87.52%)	42 (87.50%)	61 (80.26%).	622 (86.75%)
No	74 (12.48%)	6 (12.50%)	15 (19.74%)	95 (13.25%)
Total	593 (100.00%)	48 (100.00%)	76 (100.00%)	717 (100.00%)

Table 5 explain that 86.75% respondents are facing difficulties while using print resources and remaining 13.25 percent respondents not facing any difficulties with print resources.

Table 6: Reasons for facing difficulties while using print resources

Reasons	Academic wise			Total (N=622)
	PG Students (N=519)	Research Scholars (N=42)	Faculty members (N=61)	
Print resources are missing	99 (19.08%)	6 (14.29%)	18 (29.51%).	123 (19.77%)
Difficult to locate the books on shelves	146 (28.13%)	13 (30.95%)	33 (54.10%)	192 (30.87%)
Staff are not available always	88 (16.96%)	10 (23.81%)	14 (22.95%)	112 (18.01%)
Most of the books are old dated	91 (17.53%)	7 (16.67%)	5 (8.20%)	103 (16.56%)
International editions are not available	129 (24.86%)	8 (19.05%)	20 (32.79%)	157 (25.24%)
Standard publications books are not available	99 (19.08%)	9 (21.43%)	14 (22.95%)	122 (19.61%)
Multiple copies are not available	295 (56.84%)	20 (47.62%)	30 (32.79%)	345 (55.47%)

(Multiple answers were allowed to cite more than one difficulty)

The study was carried out to find the difficulties encountered while using the print resources by the patrons. The respondents were allowed to cite more than one problem. Table 6 reveals that majority of the respondents (55.47%) replied that multiple copies are not available is the major difficulty while using print resources followed by 30.87 per cent difficult to locate the books on shelves, 25.24 percent International editions are not available, 19.77 percent print resources are missing from the shelves, 19.61 percent standard publications books are not available, 18.01 percent staff are not available always and 16.56 percent of the respondents states that most of the books are old dated were the major difficulties noted while accessing the print resources.

Table 7: Frequency usage of various electronic gadgets

E-Gadgets	PG Students			Research Scholars			Faculty Members		
	A	S	R	A	S	R	A	S	R
Desktop	93 (15.68)	182 (30.69)	318 (53.63)	3 (6.25)	14 (29.17)	31 (64.58)	13 (17.11)	28 (36.84)	35 (46.05)
Laptop	418 (70.49)	129 (21.75)	46 (7.76)	22 (45.83)	13 (27.08)	13 (27.08)	59 (77.63)	16 (21.05)	1 (1.32)
Mobile phone / Smart phone	183 (30.86)	170 (28.67)	240 (40.47)	10 (20.83)	25 (52.08)	13 (27.08)	7 (9.21)	35 (46.05)	34 (44.74)
Nook tablet / I-Pod/ Kindle	0 (0.00)	139 (23.44)	454 (76.56)	8 (16.67)	16 (33.33)	24 (50.00)	0 (0.005)	20 (26.32)	56 (73.68)

(Multiple answers were allowed) A = Always S = Sometimes R = Rarely)

Table 7 reports that distribution of the respondents according to frequency usage of electronic gadgets. It is observed from the table that majority of the respondents are not frequently using desktop because laptop replaced its place. There is high frequent use of mobile phones among PG students as compared with faculty members and Research Scholars. No PG students and Faculty members are using tablet/ipod/kindle, only 16.67 percent Research Scholars were using the same. It is underlined from the study that electronic formats are widely used by the academicians for the academic development.

Table 8: Awareness of online databases

ONLINE DATABASES	Academic wise									Total (N=717)		
	PG Students (N=593)			Research Scholars (N=48)			Faculty members (N=76)					
	Aware	Not sure	Not Aware	Aware	Not sure	Not Aware	Aware	Not sure	Not Aware	Aware	Not sure	Not Aware
ACM Digital Library	279 (47.05)	86 (14.50)	228 (38.45)	45 (93.75)	0 (0.00)	3 (6.25)	63 (82.89)	2 (2.63)	11 (14.17)	387 (53.97)	88 (12.27)	242 (33.75)
Ebsco Host	432 (72.85)	55 (9.27)	106 (17.88)	45 (93.75)	1 (2.08)	2 (4.17)	66 (86.84)	7 (9.21)	3 (3.95)	543 (75.73)	63 (8.79)	111 (15.48)
Emerald	369 (62.23)	129 (21.75)	95 (16.02)	46 (95.83)	1 (2.08)	1 (2.08)	70 (92.11)	3 (3.95)	3 (3.95)	485 (67.64)	133 (18.55)	99 (13.81)
Jstor	271 (45.70)	133 (22.43)	189 (31.87)	46 (95.83)	0 (0.00)	2 (4.17)	67 (88.16)	5 (6.58)	4 (5.26)	384 (53.56)	138 (19.25)	195 (27.20)
Proquest	338 (57.00)	134 (22.60)	121 (20.40)	44 (91.67)	2 (4.17)	2 (4.17)	62 (81.58)	9 (11.84)	5 (6.58)	444 (61.92)	145 (20.22)	128 (17.85)
Sage Collection	205 (34.57)	181 (30.52)	207 (34.91)	41 (85.42)	3 (6.25)	4 (8.33)	52 (68.42)	12 (15.79)	12 (15.79)	298 (41.56)	196 (27.34)	223 (31.10)
Science Direct	285 (48.06)	93 (15.68)	215 (36.26)	43 (89.58)	2 (4.17)	3 (6.25)	68 (89.47)	1 (1.32)	7 (9.21)	396 (55.23)	96 (13.39)	225 (31.38)
Others	250 (42.16)	169 (28.50)	174 (29.34)	45 (93.75)	1 (2.08)	2 (4.17)	48 (63.16)	16 (21.05)	12 (15.79)	343 (47.84)	186 (25.94)	188 (26.22)

(Numbers in parenthesis indicate percentages)

The study intends to examine the awareness level of online databases. The respondents are asked to reckon the known databases. It is clear from the table 8 that among the total respondents, faculty members and research scholar are much aware of all the listed databases than PG Students. The reason may be the PG student's not using databases much more than the research scholars and faculty members.

Table 9: Opinion on difficulties while retrieving electronic resources

Opinion	Academic wise			Total
	PG Students	Research Scholars	Faculty members	
YES	522 (80.03%)	45 (93.75%)	68 (89.47%)	635 (88.56%)
No	71 (11.97%)	3 (6.25%)	8 (10.53%)	82 (11.44%)
Total	593 (82.70%)	48 (6.69%)	76 (10.60%)	717 (100.00%)

It is evident from Table 9 that 88.56 percent of the respondents are facing difficulties while accessing the electronic resources and remaining 11.44 percent respondents said they are not facing any difficulty for the same

Table 10: Reasons for facing difficulties while retrieving electronic resources

Reasons	Academic wise			Total (N=635)
	PG Students (N=522)	Research scholars (N=45)	Faculty members (N=68)	
Internet connection is slow while using e-resources	69 (13.22%)	14 (31.11%)	18 (26.47%)	101 (15.91%)
Limited computer terminals in the library	67 (12.84%)	11 (24.44%)	13 (19.12%)	91 (14.33%)
Problems with back issues of the periodicals	61 (11.69%)	5 (11.11%)	9 (13.24%)	75 (11.81%)
Staffs are not available always	108 (20.69%)	10 (22.22%)	22 (32.35%)	140 (22.05%)
Too much information retrieved	230 (44.06%)	19 (42.22%)	39 (57.35%)	288 (45.35%)
Lack of knowledge for effective retrieve the e-resources	188 (36.02%)	23 (51.11%)	43 (63.24%)	254 (40.00%)

(Multiple answers were allowed to cite more than one difficulty)

Table 10 confirm that the various difficulties that the patrons faced while accessing the electronic resources. Among them, majority of the respondents (50.09%) replied that too much information retrieved is the major difficulty while accessing the electronic resources followed by 44.17 percent lack of knowledge for effective retrieve the e-resources, 24.25 percent staff are not available always, 17.57 percent Internet connection speed slow, 15.83 percent limited computer terminals in the library and 13.04 percent problems with back issues of the periodicals were the major difficulties noted in the study.

Findings: The major findings of the study are: -

- 44.63 percent of the respondents were belongs to IIM-Bangalore, 39.33 percent belongs to IIM-Kozhikode and the remaining 16.04 percent respondents are from IIM-Trichy.
- 73.5 percent (527) are male respondents and 26.5 percent (190) are female respondents.
- There is domination of engineering students whose percentage share is 65.55, when we see graduation background wise classification of the respondents.
- Majority of the respondents (54.25%) are using both formats print as well as electronic for getting the information.
- 86.75% respondents are facing difficulties while using print resources.
- Majority of the respondents (55.47%) replied that multiple copies are not available is the major difficulty while using print resources.
- Majority of the respondents are not frequently using desktop because laptop replaced its place. There is high frequent use of mobile phones among PG students as compared with faculty members and Research Scholars.
- Among the total respondents, faculty members and research scholar are much aware of all the listed databases than PG Students.
- 88.56 percent of the respondents are facing difficulties while accessing the electronic resources.
- Majority of the respondents (50.09%) replied that too much information retrieved is the major difficulty while accessing the electronic resources.

CONCLUSIONS:

The study observed that publication industry is forcing the academic libraries and library authorities to develop their collection from printed version to electronic format. At the same time due to ICT development and its tools and techniques, patrons and authorities felt that information acquisition, maintenance, dissemination, archiving and usage is simple as well as effective. In other way, the printed resources have its own merits. Printed resources have not been replaced completely in the electronic or digital format. Therefore, the libraries have to continue their function in a hybrid environment. Library professionals have also to develop their skills in handling the electronic resources along with print resources.

In the digital environment, for the library professionals acquiring and subscribing the various documents and online databases is one task but other hand information dissemination, creating awareness, marketing the subscribed databases and other products is a very challenging role. The study suggests the library authorities have to conduct regular orientations and hands on training programme with dynamic marketing strategies to attract the patrons to increase the utilisation of library resources as well as facilities. In this context, the library staff can approach the product marketing executives and subject experts to explain about the product to the patrons. At the same time, library authorities should also work in partnership with faculty members in promoting the subscribed databases and other products. Library staff should prepare the library manuals and distribute them to all the patrons. At the same time they should provide the user manuals of the subscribed databases in the library webpage for quick reference.

Before summer project and placement time the library should encourage the post graduate students to get aware about information literacy, library collection, library subscribed various online databases, factual databases, plagiarism software, and reference manual tools. It is necessary to market the information products and services using different marketing tools i.e., conducting surprise online quiz programmes, e-mail alerts, know about your library, library exhibitions, databases seminars, library week events etc. The library authorities should highlight the subscribed online databases, timing and mode of accessing point, and the accessible terminals.

REFERENCES:

1. Anthony, W. Ferguson. (2006). Print to Electronic: The University of Hong Kong Case, *Collection Building*, 25(3), pp. 85-88.
2. Chuma O. Nnadozie, Juliana O. Akidi and Nnamdi E. Onyekweodiri (2015). Journal usage in selected University and Polytechnic Libraries in Nigeria. *International Journal of Library and Information Science*, 4 (3), 26-29.
3. Gurudev Singh (2002). Use of College Libraries by Faculty members of University of Delhi, *Library Herald*, 40(4), pp. 263-270.
4. Krishna Naik, R and Raju Naik, S. (2016). Use of e-resource by Higher Education Students and Faculty Members in Chikkamangalur District: A Survey. *International Journal of Library and Information Studies*, 6 (3), 91- 96. Retrieved from http://ijlis.org/img/2016_Vol_6_Issue_3/91-96.pdf
5. Manok Kumar Sinha (2008) Prospects of e-journals Consortium Imitative for Technical Educational Institutions in India: Issues and Challenges, paper presented at the 9th Annual National Convention of MALIBNET on Business and Management Librarianship: The decade ahead, New Delhi.

6. Mostofa, Mamun Sk. (2011). Internet access and use among Business students of a Private University of Bangladesh: A Survey, *Annals of Library and Information Studies*, 58 pp. 79-86.
7. Ravinder, D. (2015). Problems in accessing UGC INFONET E-Journals Consortium among Research Scholars: A Survey of Sri Krihnadevaraya University Library, Anantapuram, Andhra Pradesh. *PEARL: Journal of Library and Information Science*, 9(1), 29-36.
8. Sampath Kumar B T and Kumar G T(2010), Perception and usage of e-resources and the internet by Indian academics. *The Electronic Library*, 28(1), pp 137-156.
9. Varaprasad, S.J.D and Madhu Sudan, S. (2010) E-Journal Consortium: Is it a success story always? *DESIDOC: Journal of Library and Information Technology*, 30(2), pp. 92-96.

