

CURRENT PRACTICES RELATED TO ELECTRONIC RESOURCES IN MANAGEMENT LIBRARIES OF NATIONAL CAPITAL REGION OF DELHI: AN ANALYTICAL STUDY

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ABSTRACT

The present study reports the changing facets of e-resources and current practices related to acquisition, selection, mode of procurement, promotion, development policy, problems and future plans of Management Libraries in National Capital Region (NCR) of Delhi. The findings, shed light on the e-resources, are: e-journals and databases are most common e-resources, and subscribing e-resources is based on easy to use, saving of space and timeliness of e-resources. Users are given second preference in mode of procurement of e-resources. Subject matter and quality of the information is the top most criteria for selection of e-resources. Geographic parameter and remote accessibility is used in selection of e-resources. Language to include parameters of resources is the first, and geographical limits and physical condition of material are last factors in collection development policy. Acquisition of e-resources through direct subscription is most popular. Providing links from library's home page and conduct of information literacy programs is the highest order. Budget and trained staff is the top most problems associated with e-resources. The study also highlights the current practices in selection of e-materials and helps in efficient collection development policy of e-resources in management libraries.

Keywords: Electronic resources, online journals, management libraries, NCR.

1 INTRODUCTION

The basic functions of a library are collection, storage, and dissemination of information. Out of these three functions, "collection" occupies the most vital position and plays a significant role as it affects to a considerable extent the other two functions of the library. A representative

collection is adequate in terms of both quality and quantity, if not properly and constantly nurtured it will cease to be a live collection. Hence, acquisition of information in its various forms should be done in a continuous process. In a developing country like India, different steps are being taken to disseminate information embedded in e-resources which have emerged as quick sources of information.

Electronic resources (e-resources) represent a significant and growing part of the academic library's offerings. E-resources are changing rapidly and leading to new generation of libraries. On one side, there is an increasing demand for good quality library collections in terms of large amount of information and on the other hand, the publishing media is striving hard to support the demand at lightning speed by way of e-publications as well as online access. But this has many implications in terms of cost, promotional activities, their management issues, etc. The perpetual job of libraries is collection development, preservation, retrieval of information and providing the required user services.

The users demand for electronic services is growing at a faster pace which has in turn compelled the library and information professionals to redesign and revamp the existing services by dismantling their conventional practices. Geller¹ observes that the e-resources, at the selection stage, must meet a set criteria in addition to those we set up for print, and while it is still in the selection stage, this decision involves expertise and input from library staff members beyond the subject selector group. The need was felt for an in depth study on e-resources collection development and their current practices with particular reference to management libraries in National Capital Region of Delhi.

2 REVIEW OF RELATED LITERATURE

Much of the literature in this area is devoted to the use and impact of e-resources specifically in academic libraries, as well as the selection, acquisition, issues, and access of e-resources in general. Very little is found devoted to current practices and criteria related to online databases. The works of Kovacs and Robinson's (2004) and Gregory's (2006) are basically introductory books to e-resources collection development. The processes and criteria they provide could be applied to many a type of e-resources. Pilgrim and Dolabaille (2011) discussed about the provision and management of e-resources in academic libraries in developing countries and future plans for successful development of an increased e-resources. Noh (2010) proposed an improved evaluation mechanism specifically for e-resources in university libraries. Deng (2010) explored the pattern and trend of accessing e-resources in university libraries in Australia. Kato (2009) says that libraries continue to purchase more e-resources, especially electronic journals, license agreements of electronic journals have become a burden for both libraries and publishers. Some of the recent studies have discussed very specific aspects, such as, current and potential e-book use in research and instruction (Cox, 2009; Hanson & Terese, 2010; Korah, et al., 2009); improve the current state of e-resources evaluation (Flatley & Prock, 2009; Lamothe, 2010; Wiersma, 2010); collections and collection-development policy (Khan, 2010 and Morrissey, 2010); major issues connected to the collection management in academic libraries (Horava, 2010; Ciszek & Courtney, 2010; Sharma, 2009); changing trends in management of e-resources (Kusik & Vargas, 2009; Shuling, 2006).

Noh (2012) provides an input-output analysis of electronic resources in academic libraries by verifying evaluation indicators and applying them to the digital library environment. This study measures the performance of electronic resources in academic libraries in Korea. To measure the

efficiency of the input-output ratio, evaluation indicators were divided into inputs and outputs. Inputs refer to the e-resource use environment as well as the acquisition of e-resources, such as, web DB, e-books, e-journals, and so on. Outputs quantify the use of each resource. First, the results of this study show that a large share of academic library budgets is spent on e-resource purchases and e-resource environment improvement for better use. Secondly, the measurement shows that web DB subscription, annual e-resource development, and education for e-resource exhibit higher efficiency, while e-resource use, web DB and e-journal download exhibited relatively high efficiency. Thirdly, when the input-output ratio is calculated in percentage terms, the efficiency of e-resources of Korean academic libraries reaches 88.20 per cent.

Das and Mohapatra (2012) say that emergences of e-resources have made revolutionary changes in the library scenario. The four basic criteria for selection, namely, quality, library relevancy, aesthetic and technical aspects, and cost remain the same in the electronic era of information. Mangrum and Pozzebon (2012) discuss the role of collection development polices, past and present, and the challenge of collections moving to an electronic format. The management libraries therefore, need to formulate a separate e-resource collection development policy to address these issues.

3 OBJECTIVES OF THE STUDY

The main objective of the study is confined to the management librarians' perception towards the collection development of e-resources and the current practices. The specific objectives of the study are to:

- (i) know the availability of different types of e-resources in select management libraries in NCR;
- (ii) find out the reasons for acquiring/subscribing e-resources;
- (iii) examine the different criteria for selection of e-resources and collection development policy;
- (iv) study the different modes of procurement and acquisition of e-resources; and
- (v) find out the current policies and practices followed for acquiring e-resources.

4 SCOPE OF THE STUDY

The scope of the study is confined to ten Management Libraries (owned by Central Government, State Government and Private Management) of Delhi and NCR, namely, (i) Faculty of Management Studies (FMS), University of Delhi, Delhi; (ii) Indian Institute of Foreign Trade (IIFT), New Delhi; (iii) Management Development Institute (MDI), Gurgaon; (iv) Institute of Management Technology (IMT), Ghaziabad; (v) Department of Management Studies, IIT Delhi; (vi) International Management Institute (IMI), New Delhi; (vii) Birla Institute of Management Technology (BIMTECH), Noida; (viii) Institute of Management Studies (IMS), Ghaziabad; (ix) Institute of Technology and Science (ITS), Ghaziabad; and (x) Lal Bahadur Shastri Institute of Management (LBSIM), New Delhi. The selection of sample was done on the basis of availability of e-resource to their respective users and management libraries located in NCR of Delhi.

5 METHODOLOGY

The Survey Method with the help of structured questionnaire designed keeping in view the stated objectives and scope of the study comprising of dichotomous, multiple choice, rating, and opinion questions, has been followed for this study. However, a few open-ended questions were also included in order to gather qualitative data related to the subject. Thus, only 14 questions were included in the questionnaire under three major sections.

6 ANALYSIS OF DATA

The survey was conducted through a structured questionnaire which was circulated personally among the ten management libraries in NCR. All filled-in questionnaires were collected personally to make the response rate 100 per cent. The secondary data was collected from the libraries covered in the study through library records, annual reports, plans, and other relevant documents/sources. On the basis of the responses received on various aspects of e-resources collection development and current practices, data is analyzed, interpreted and presented in the sub-sections, as follows.

6.1 Participating Libraries

In India, the development of management education is closely associated with the steady growth and development of the library of the Institution. A management library is a service component of its parent body and it serves as main channel of bringing information to cater to information requirements of the users. The overall functions of a management library include building up a comprehensive e-collection of academic and research literature, to organize and provide access to the information sources with the help of a variety of tools, and to retrieve academic knowledge through multifarious information services. The respondent management libraries were established during the period from 1954 to 1996. The most recently established one is seventeen years old Institute of Technology and Sciences (ITS), whereas the oldest one is fifty nine years old Faculty of Management Studies (FMS). This information helps in determination of the collection development of the respective e-library and their practices since their inception, and the relevant information is given in Table-1.

Table-1: Participating Management Libraries

S. No.	Management Institute	Name of Library	Year of Establishment	URL of Library
	FMS*	FMS Library	1954	www.fms.edu.in
	IIFT	Foreign Trade Library	1963	www.iift.edu.
	MDI	MDI Library	1973	www.mdi.ac.in
	IMT	IMT Library	1980	www.imt.edu/library/library.aspx
	IIT	IIT Central Library	1961	www.iitd.ac.in
	IMI	IMI Knowledge Resource Centre	1981	www.imi.edu
	BIMTECH	Knowledge Centre	1988	www.bimtech.ac.in
	IMS	IMS Library	1990	www.ims-ghaziabad.ac.in
	ITS	ITS Library	1996	http://pg.its.edu.in
	LBSIM	LBSIM Library : The Learning Resource Centre	1995	www.lbsim.ac.in

Note: FMS= Faculty of Management Studies, University of Delhi, Delhi; IIFT=Indian Institute of Foreign Trade, New Delhi; MDI=Management Development Institute; IMT= Institute of

Management Technology; **IITD**= Indian Institute of Technology, Delhi; **IMI**= International Management Institute; **BIMTECH**= Birla Institute Management Technology; **IMS**= Institute of Management Studies; **ITS**= Institute of Technology and Sciences; **LBSIM**= Lal Bahadur Shastri Institute of Management.

6.2 Library Budget & Budget for e- resources

Budget is the most important factor for acquiring of e- resources in management libraries. The data reveals that the libraries are spending more budget for procurement of e-resources, such as, e-books, e-journals, databases, electronic thesis/dissertations, microfilms/microfiches, audio-cassette, CD-ROM databases, CD/DVD-ROM, etc. Libraries were asked to indicate their yearly budget allocation for acquiring e-resources since the year 2008-09. The response is presented in Table -2.

Table -2: Year -wise Library Budget & Allotted Budget for e-resources

Library*	Total Library Budget and Allotted Budget for acquiring e-resources during 2008-09 to 2012-13									
	Year 2008-09		Year 2009-10		Year 2010-11		Year 2011-12		Year 2012-13	
	Total Library Budget (Rs.)	Budget For e-Resources (Rs.)	Total Library Budget (Rs.)	Budget For e-Resources (Rs.)	Total Library Budget (Rs.)	Budget For e-Resources (Rs.)	Total Library Budget (Rs.)	Budget For e-Resources (Rs.)	Total Library Budget (Rs.)	Budget For e-Resources (Rs.)
FMS	27,55,283	11,45,692	30,00,000	15,34,567	29,70,000	19,34,532	32,61,000	23,76,321	35,00,000	29,54,323
IIFT	40,00,000	21,00,000	1,07,00,000	40,00,000	1,21,00,000	49,00,000	78,00,000	37,00,000	1,30,00,000	95,00,000
MDI	1,15,00,000	70,00,000	1,28,00,000	90,00,000	1,30,00,000	95,00,000	1,51,00,000	1,00,00,000	1,62,00,000	1,10,00,000
IMT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
IITD	6,70,00,000	5,22,00,000	6,26,00,000	4,73,40,000	8,50,00,000	6,75,00,000	7,55,00,000	5,89,50,000	8,50,00,000	6,75,00,000
IMI	35,00,000	15,00,000	35,00,000	18,00,000	40,00,000	20,00,000	50,00,000	22,00,000	55,00,000	25,00,000
BIMTECH	50,00,000	6,00,000	6,00,000	60,00,000	70,00,000	8,00,000	70,00,000	11,00,000	70,00,000	11,00,000
IMS	NA	NA	NA	NA	10,00,000	6,00,000	11,00,000	7,50,000	12,00,000	8,00,000
ITS	7,00,000	5,00,000	8,00,000	5,00,000	8,50,000	7,00,000	9,00,000	7,50,000	ND	ND
LBSIM	15,00,000	5,00,000	20,00,000	10,00,000	25,00,000	12,00,000	30,00,000	15,00,000	40,00,000	20,00,000

Note: NA = Not Available; ND=Not Declared;

* Pl. refer Table-1 for abbreviations of the study libraries.

Table-2 shows year-wise total budget and budget allotted for purchase of e-resources during 05 years (2008-2013) in management libraries. It reveals that in the year 2008-2009, IIT Library has earmarked highest (77.91 %) of total budget for subscription of e-resources. The ITS, MDI, IIFT, IMI, FMS, LBSIM and BIMTECH management libraries have respectively earmarked 71.43%, 60.87%, 52.05%, 42.86%, 41.58%, 33.33% and 12% of their total budget, as allocation for subscription of e-resources.

In the year 2009-10, the IIT library has earmarked highest budget (75.62%) of total budget for subscription of e-resources. The MDI, ITS, IMI, FMS, LBSIM, IIFT and BIMTECH libraries have 70.31%, 62.5%, 51.43%, 51.15%, 50%, 37.38% and 10% of total budget, budget respectively earmarked for subscription of e-resources. It may be noted that IMS Library has not allotted in the years 2008-2010 separate budget for subscription of e-resources.

In the year 2010-11, ITS library has earmarked highest budget (82.35%) of total budget for subscription of e-resources. The IIT, MDI, FMS, IMS, IMI, LBSIM and IIFT management libraries have 79.41%, 73.08%, 65.14%, 60%, 50%, 48% and 40.5% of the total budget respectively earmarked for subscription of e-resources.

In the year 2011-12, ITS library has earmarked highest budget (83.33%) of total budget for subscription of e-resources. The IIT, FMS, IMS, MDI, IIFT, IMI and BIMTECH management libraries have 78.08%, 72.87%, 68.11%, 66.23%, 56%, 44% and 15.71% respectively earmarked of total budget for subscription of e-resources.

In the year 2012-13, FMS library has earmarked highest budget (84.41%) of total budget for subscription of e-resources. The IIT, IIFT, MDI, IMS, LBSIM, IMI and BIMTECH management libraries have 79.41%, 73.88%, 67.90%, 66.67%, 50%, 45.45% and 15.71% of total budget respectively earmarked for subscription of e-resources. It is noted that ITS library has not decided budget for the year 2012-13 for subscription of e-resources. It's surprising to note that IMT library has not disclosed budget due to policy decision. On the whole all the study libraries are progressively increasing budget for subscription of e-resources.

It is clearly indicate from table 2 that in the year 2008-2009, IIT Library has earmarked maximum budget (77.91 %) of total budget for subscription of e-resources. The ITS, MDI, IIFT, IMI, FMS, LBSIM and BIMTECH libraries have 71.43%, 60.87%, 52.5%, 42.86%, 41.58%, 33.33% and 12% budget respectively earmarked of total budget for subscription of e-resources.

In the year 2009-10, the IIT library has earmarked maximum budget (75.62%) of total budget for subscription of e-resources, followed by MDI (70.31%), ITS (62.5%), IMI (51.43%), FMS (51.15%), LBSIM (50%), IIFT (37.38%) and BIMTECH (10%). It may be noted that IMS Library was not allotted any budget in the year 2008-2010 for subscription of e-resources.

In the year 2010-11, ITS library has earmarked maximum budget (82.35%) of total budget for subscription of e-resources. The IIT, MDI, FMS, IMS, IMI, LBSIM and IIFT libraries have 79.41%, 73.08%, 65.14%, 60%, 50%, 48% and 40.49% budget respectively earmarked of total budget for subscription of e-resources.

In the year 2011-12, ITS library has earmarked maximum budget (83.33%) of total budget for subscription of e-resources, followed by IIT (78.08%), FMS (72.87%), IMS (68.11%), MDI

(66.23%), IIFT (56%), IMI (44%), and BIMTECH (15.71%).

In the year 2012-13, FMS library has earmarked maximum budget (84.41%) of total budget for subscription of e-resources. The IIT, IIFT, MDI, IMS, LBSIM, IMI and BIMTECH libraries have 79.41%, 73.88%, 67.90%, 66.67%, 50%, 45.45% and 15.71% respectively earmarked of total budget for subscription of e-resources. It may be noted that ITS library could not decide its budget for the year 2012-13 at the time of present study. Further, IMT library has not disclosed its budget due to policy decision. It may be noted that all the libraries are progressively increasing budget for subscription of e-resources.

6.3 Availability of e-resources

This is the most significant and one basic aspect related to e-resources collection development, the quality has replaced the quantity of library collection during the present days. The quality has direct link with the type of library collection as it depends upon the requirement of the users. Management Libraries need to procure a variety of documents not only in different subjects but also in various types. Furthermore, the information explosion, bringing in different types of information storage media, calls for acquisition of information in various forms of documents. The data reveals that the libraries are also adding electronic media apart from print media. The e-resources include e-books, e-journals, databases, electronic thesis/dissertations, microfilms/microfiches, audio-cassette, CD-ROM databases, CD/DVD-ROM, etc. After editing, the data is presented in Table 3.

Table 3: Availability of e-resources

Library	Availability of e-resources								
	e-Books	e-Journals	Data bases	e-Theses / Dissertations	Microfilms/ Microfiches	Audio Cassettes	Video Cassettes	CD-ROM Databases	CD/DVD-ROMs
FMS*	√	√	√	NA	NA	NA	√	NA	√
IIFT	NA	√	√	NA	NA	NA	√	√	√
MDI	√	√	√	NA	NA	NA	NA	NA	NA
IMT	√	√	√	√	NA	NA	√	√	√
IITD	√	√	√	√	NA	NA	√	NA	√
IMI	√	√	√	NA	NA	√	√	√	√
BIMTECH	NA	√	√	NA	NA	√	NA	NA	√
IMS	√	√	√	NA	NA	NA	NA	NA	√
ITS	NA	√	√	NA	NA	√	√	√	√
LBSIM	√	√	√	√	NA	√	√	√	√

Note: NA = Not Available; * Pl. refer Table 1 for abbreviations of the study libraries.

Table 3 reveals that e-journals and databases are the most common e-resources among all the study libraries, followed by CD/DVDs (90 per cent), e-books and video cassettes (70 per cent each), CD-ROM databases (50 per cent), audio cassettes (40 per cent) and e-Theses/Dissertations (30 per cent). Surprisingly, none of study libraries is having Microfilms/Microfiches in its collection. LBSIM and IMT libraries are having highest collection of e-resources. This data clearly indicates that the respondent libraries are having good collection of e-resources to cater

the information needs of their information age users.

6.4 Acquisition of e-resources

Acquisition of e-resources is a regular and continuous process by adding of e-resources by the Management Libraries for help to users in accessing up-to-date information, thereby improving academic and research standards in the Institution. The Library and information services of the 21st century are fast changing with the rapid development of electronic publishing, libraries are acquiring reading materials for providing access to various learning resources in electronic form. All libraries covered in the study have experienced a tremendous shift in e-content and deluged daily by offering e-resources in a myriad of forms. On the whole, the e-resources are moderate in number in all the study libraries. These libraries still continue to hold documents primarily in print media and are yet to move towards acquiring modern storage media. The data is presented in Table 4.

Table 4: Total Acquisition of e-resources

Library	Acquisition of e-resources								
	e-Books	e-Journals	Databases	e-Theses / Dissertation	Microfilms/ Microfiches	Audio Cassettes	Video Cassettes	CD-ROM Databases	CD/DVD-ROMs
FMS	450	5,398	54	NA	NA	NA	20	NA	580
IIFT	NA	30	31	NA	NA	NA	20	02	2,000
MDI	2,000	15,000	23	NA	NA	NA	NA	NA	NA
IMT	9,234	9,120	22	300	NA	NA	300	31	130
IIT	500	5,500	08	4,100	NA	NA	500	NA	230
IMI	200	5,117	14	NA	NA	30	78	02	329
BIMTECH	NA	380	05	NA	NA	500	NA	NA	2,780
IMS	155	1,201	04	NA	NA	NA	NA	NA	250
ITS	NA	12	03	NA	NA	06	66	01	1,650
LBSIM	250	35	10	150	NA	07	38	08	1,235
Total	12,789	41,793	174	4,550		543	1,022	44	9,184

Note: NA = Not Available, * Pl. refer Table 1 for abbreviations of the study libraries.

Table 4 reveals that the IMT, MDI and IIT libraries have the highest number of e-resources and IMS, LBSIM and IIFT libraries have very small collection of e-resources. IMT Library has the highest number of e-books numbering 9234 followed by MDI, IIT, FMS, IMI, LBSIM and IMS, whereas, IIFT, BIMTECH, ITS libraries do not have e-books.

Then MDI, IMT, IIT, FMS and IMI Libraries have the large collection of e-journals, IMS Library has medium size collection and the LBSIM, IMI, IIFT, ITS and BIMTECH have very small size of e-journals collection. They account for 36.22%, 22.02%, 13.28%, 13.03%, 12.36%, 2.90%, .08%, .07% and .03% respectively of the total collection.

It is important to note that the FMS Library has the highest number of databases followed by IIFT, MDI, IMT, IMI, LBSIM, IIT, BIMTECH, IMS and ITS study libraries. They account for 31.03%, 17.82%, 13.22%, 12.64%, 4.60%, 8.05%, 2.87%, 2.30, 1.72% and 5.75% respectively of the total collection, the total database collection being 174.

The IIT Library has the highest number of e-theses and dissertations, the total ETDs collection being 4550 volumes. It is surprising to note that no study libraries have collection of Microfilms/Microfiches.

BIMTECH library has the highest number of Audio-Cassettes (500) followed by IMI, LBSIM and ITS libraries. The IIT and IMT Libraries have large size collection of video cassettes and IMI, ITS, LBSIM, FMS and IIFT libraries have small size of video cassettes collection except MDI, BIMTECH, IMS libraries.

The IMT, LBSIM, IMI and ITS libraries have small size collection of CD-ROM databases, but, BIMTECH, IIFT, ITS and LBSIM libraries have large size collection of CD/DVDs and IMI, IMS library has small size collection of CD/DVDs. They account for 33.72%, 24.26%, 14.90%, 20.01%, 3.99% and 3.03% respectively, the total CD-DVDs collection being 8244 numbers. FMS library tops in having large number of databases (31.03 % of collection), followed by IIFT, MDI, IMT, IMI, LBSIM, IIT, BIMTECH, IMS and ITS. These account for 17.82%, 13.22%, 12.64%, 4.60%, 8.05%, 2.87%, 2.30, 1.72% and 5.75% respectively, of their total collection.

The IIT and IMT libraries possess large number of video cassettes, but IMI, ITS, LBSIM, FMS and IIFT libraries have smaller size of collection of video cassettes.

6.5 Different Sources of Finance

Finance is very important and vital factor that influences heavily and contributes much for the development and progress of any institution. Thus, finance is very essential element wherein the competent authority and all concerned should take up necessary measures to provide stable, sound and adequate financial support to meet the mandate and objectives of any given institution. It is often said that management Libraries exist for generation, dissemination and preservation of knowledge and to sustain, maintain and further flourish, libraries need adequate finance.

The primary source of income of the Libraries is funding from the Government, Management, Marketing of Library products & Services and raising money by Management Libraries themselves by way of fee and other charges. However, some Libraries receive donation from other agencies. The Government provides grants to its Management Libraries under five year plan programmes for purchase of e-resources. It has also introduced special schemes to provide financial assistance for e-resources and for equipping libraries with necessary equipment and infrastructure to provide needed e-services to the students, researchers and teachers. The data pertaining to different sources of the finance of the management libraries is presented in Table 5.

Table-5: Different Sources of Finance

Sources of Finance	Name of Library									
	FMS	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Government Grants	√	√	NA	NA	√	NA	NA	NA	NA	NA
Management Grants	NA	NA	√	√	NA	√	√	√	√	√
Special Grants	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Library Fee	√	√	√	√	√	√	√	√	√	√
Library Late Fees	√	√	√	√	√	√	√	√	√	√
Marketing of Library Products & Services	NA	NA	NA	√	NA	NA	NA	NA	NA	NA

Note: NA = Not Available * Pl. refer Table 1 for abbreviations of the study libraries.

Table 5 shows that maximum libraries are receiving major grants from the management and government, and meagre generating from library fee and library late fees. No library is receiving any special grants and other sources of income during the study period as reported by study libraries. Furthermore, IMT library is generating income from the marketing of library products and services. It is a well established fact that the financial position of the some libraries is not so good. Many study libraries are unable to carry out their objectives and goals like providing necessary e-resources highly needed for the improvement of the library services due to financial crunch.

6.6 Responsibility for Selection of e-resources

Selection of e-resources is very important step in collection development process. If the right source is selected, the usage of such source will certainly be high. Librarian not necessarily be the specialist in selecting the e-resources, but he has different selection tools to assist in selection process of e-resources. Several studies have shown that the users are the best judges in selecting the e-resources and as such, e-resources acquired on the basis of users' recommendations largely meet their requirements and also rate of their usage is more. In contrast, the Heads of the Departments recommend and select the e-resources for purchase in many academic libraries in India. There are five choices provided by the questionnaire for respondents and results are tabulated in Table 6.

Table 6: Responsibility for Selection of e-resources

Responsibility	Name of library									
	FMS	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Librarian	NA	NA	NA	NA	NA	NA	√	NA	NA	NA
Library Committee	NA	√	√	√	√	√	√	√	√	√
Head of the Department	√	NA	NA	√	NA	NA	NA	NA	NA	NA
Users	NA	NA	NA	√	NA	√	NA	NA	√	NA
e-Resources Committee	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Any Other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Note: NA = Not Available, * Pl. refer Table 1 for abbreviations of the study libraries.

The Table 6 reveals that the selection of e-resources is primarily made by the Librarian with Library Committee in BIMTECH Library. In remaining libraries it is the Library Committee to play the important role. Users, Head of the Department and Library Committee select in IMT, and in IMI and ITS, it is Library Committee and the Users. Surprisingly, none of the libraries has an e-Resources Committee or some other Committee for selection of e-resources. In FMS all powers of selection of e-resources is vested in the Head of Department.

6.7 Criteria for Selection of e-resources

A large number of librarians believe that e-resources have radically changed the principles of selection, some believe that they will virtually eliminate selection. But, the selection of e-resources is still crucial for libraries. The four basic criteria for selection, namely, quality, library relevancy, technical aspects and cost remain the same in the electronic era of information. What they mean and how they are used has changed? But even quality and cost, the two most important criteria, carry great value for the responsible selection of e-resources. The library aims to acquire information resources in support of teaching, learning and research. Electronic resources are selected on the basis of their subject content, courses and on-going research. The library will give priority to acquiring materials in e-format where this gives return on investments, enhanced service quality of users in terms of access and use of the material value for money for the subject and appropriate assurances of long term access to the content. Where the principles set out above cannot be met through the acquisition of materials in e-format alone, a copy in print format will be acquired. Criteria for selection of e-resources varies from type of library to library, but, most common and major fifteen criteria facilitated by the questionnaire and responses received from the study libraries are presented in Table 7.

Table 7: Criteria for Selection of e-resources

Sl.No	Criterion	Name of Library									
		FMS	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
01	Quality	√	√	√	√	√	√	NA	NA	√	√
02	Subject Matter	√	√	√	√	√	√	√	√	√	√
03	Currency and authority	NA	√	√	√	√	NA	√	NA	NA	NA
04	Uniqueness of content	NA	√	√	NA	√	NA	NA	NA	√	√
05	Geographic parameters	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
06	Relevance of material	√	√	NA	√	√	√	√	√	√	√
07	Cost	√	√	√	NA	√	√	√	√	√	NA
08	Network capability	NA	√	NA	NA	√	√	NA	NA	NA	NA
09	User friendly	NA	√	NA	NA	√	√	√	√	√	√
10	Strength of retrieval	NA	√	NA	NA	√	√	NA	NA	NA	√
11	Hardware compatibility	NA	√	NA	NA	√	NA	NA	NA	NA	NA
12	Software compatibility	NA	√	NA	NA	√	NA	NA	√	√	NA
13	Service implications	NA	√	NA	NA	√	√	NA	NA	√	NA
14	Remote accessibility	NA	NA	√	NA	√	√	NA	NA	NA	NA
15	License restrictions	NA	NA	NA	NA	√	NA	NA	NA	NA	NA

Note: NA = Not Available * Pl. refer Table 1 for abbreviations of the study libraries.

Table 7 reveals that the subject matter of a resource's content is the top most priority factor determining the decision making about subscription. The quality of digital content and that of printed content is determined according to a number of parameters, among which are the authoritativeness of a resource, its value, completeness, exactness, clearness, currency, uniqueness and corresponding to academic standards.

All the study libraries are maintaining the subject matter criteria for selection of e-resources, while, all libraries are maintaining the relevance of material except MDI library. The content quality determines the utility of e-resources. Hence, the content quality of e-resources needs to be high standard, and more relevant to target audience and 80 per cent of study libraries are using this criterion.

The criterion of the cost of a resource is the last in the list but by no means the last in practice, 80 per cent of study libraries are taking price has a major criteria for selection of e-resources. In contrast, the price formation in the e-resources market is rather flexible. Unlike printed journals which have a basic cost with a possible rebate, e-resources can change in price depending on the level of access to their content, the presence of additional options, the status of the selling organization, quantity of potential users, country etc. The price can be changed as a result of negotiations or divided in to several parts.

Electronic resources must support the curricular and research needs of the management libraries. There should be a target audience and an expected level of use, if the e-resources are providing user friendly environment, majority of study libraries (70 per cent) are using this criteria. The resource will add depth to the existing collection. The currency and uniqueness of the information is one of the important features of e-resources and 50 per cent of libraries covered in the study are using the currency as the most important criteria in selection of e-resources.

Value addition factors of e-resources increase their utility and worth. These include the possibility of creating virtual interconnections, hyperlinks between different documents; article's bibliography equipped with hyperlinks the possibility of combining several searches through a common interface, the possibility of creating a user's profile facilitating storage of sources, texts, searches (alerts) etc. Thirty per cent of libraries covered in the study are using network capability and 20 per cent hardware compatibility criteria.

Strength of retrieval, software compatibility, service implications, and remote accessibility are minor implications in selection of e-resources, only 30 per cent study libraries are following the above criteria. It is interesting to note that IIT library has licence restrictions parameter among libraries covered in the study for selection of e-resources. No library has geographical parameter for selection of e-resources.

6.8 Electronic Resources Development Policy

The e-resources development policy can provide general guidelines for allocating funds fairly and formulating objective selection criteria. The main purpose of the e-resources development policy is to establish guidelines for the planned development of e-resources to meet the academic and research information needs of the students, research scholars and faculty at the Institute. From the mission statement of the management libraries, it is important to provide users with information and access to information in support of scholarly activity, research, student learning, teaching excellence and curricular development.

At the same time, the ever growing production of books, periodicals, audio-visual material and rising costs of e-resources and limited budgets, co-operative resource sharing becomes a necessity. In this context, a question was asked under e-resources development policy and response is presented in Table 8.

Table 8: Considerations under E-resources Development Policy

Consideration	Name of Library									
	FMS*	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Language to include	√	√	√	√	NA	√	NA	NA	√	NA
Language to exclude	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chronological limits	√	NA	√	NA	√	NA	NA	NA	√	NA
Geographical limits	NA	NA	√	NA	NA	NA	√	NA	NA	NA
Physical format of material	NA	NA	NA	√	√	√	NA	NA	NA	NA
Physical condition of material	NA	NA	√	NA	NA	√	NA	NA	NA	NA
Whether the work is a translation or original one	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Whether the work in one format	√	√	NA	√	NA	√	NA	√	NA	√

Note: NA = Not Available

* Pl. refer Table-1 for abbreviations of the study libraries.

Table 8 reveals that the ‘language to include’ and ‘work in one format’ are the top most considerations in e-resource development policy, 60 per cent of respondent libraries are using these considerations for their e-resources development policy. Then, 40 per cent of study libraries (FMS, MDI, IIT, and ITS) have consideration of ‘chronological limits’ for e-resources development policy, followed by ‘physical format of material’ with 30 per cent. ‘Geographical limits’ and ‘physical condition of material’ are considered by 20 per cent of study libraries to incorporate it in their e-resources development policy. Surprisingly, none of the respondent libraries considers ‘excluding the language’ and ‘whether the work is a translated one or original one’ in their e-resources development policy.

6.9 Procurement Criteria of e-resources

There are different modes of procurement of e-resources based on the types and places of publication. In normal practice, the libraries may use simultaneously more than one mode of procuring e-resources. The data regarding mode of procurement criteria adopted by the management libraries is given in Table 9.

Table 9: Procurement Criteria of e-resources

Procurement Criteria	Name of Library									
	FMS*	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Through publisher’s catalogue	NA	NA	NA	NA	NA	√	NA	√	NA	√
Users recommendation	√	√	√	√	√	√	NA	√	√	√
Through publisher’s website	√	NA	√	NA	NA	√	NA	NA	NA	NA
Through aggregators/agents	NA	NA	NA	NA	√	NA	√	NA	NA	NA
Professional journals/magazines	NA	√	√	NA	NA	√	NA	√	NA	NA
Printed reviews, lists, bibliographies & indexes of other libraries	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Consortia membership & information bulletins	NA	NA	√	NA	√	NA	NA	NA	NA	NA
Curriculum plans and reference lists	NA	NA	√	NA	NA	NA	NA	NA	NA	NA

Note: NA = Not Available * Pl. refer Table- 1 for abbreviations of the study libraries.

Table 9 reveals that the procurement of e-resources with the help of ‘users recommendation’ is the top most criteria followed by all libraries except BIMTECH (90 per cent), followed by through ‘professional journals & magazines’ (40 per cent), through ‘publisher’s website’ (30 per cent), through ‘publisher’s catalogue’, through ‘Aggregators/agents’, and through ‘consortia membership information and bulletin’ (20 per cent each). Interestingly, only one library, i.e. MDI Library, has procured the e-resources through ‘curriculum plans and reference lists’. In contrast, none of the study libraries considered the procurement criteria of e-resources through ‘printed reviews, lists, bibliographies, & indexes’ of other library catalogues.

6.10 Modes of acquiring of e-resources

Mode of acquisition is an important part in collection development of e-resources subscription of e-journals and databases, especially foreign e-journals, involves more risk factors compared to Indian e-journals. Different libraries follow different modes of subscription to e-journals. The different libraries follow different modes of subscription to e-journals. Information from the respondent libraries was sought on mode for acquiring of e-resources, and the data collected is presented in Table 10.

Table 10: Modes of Acquiring e-resources

Modes of Acquiring e-resources	Name of Library									
	FMS	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Through Direct Subscription	√	√	√	√	√	√	√	√	√	√
Through Consortia Based	√	NA	√	√	√	√	NA	NA	NA	√
Through Agent/Vendor	√	NA	√	NA	√	NA	√	NA	NA	√
Through Exchange	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gratis with Free Printed Subscription	√	NA	NA	NA	NA	NA	NA	NA	NA	NA
Open Access	√	NA	NA	NA	√	NA	NA	NA	NA	NA
Institutional Repositories	NA	NA	NA	NA	√	NA	NA	NA	NA	NA

Note: NA = Not Available * Pl. refer Table-1 for abbreviations of the study libraries.

Table 10 reveals that acquisition of e-resources through 'direct subscription' is most popular among all the study libraries, followed by through 'consortia based with 60 per cent. Five out of ten management libraries are also acquiring e-resources through 'agent /vendor'. The FMS and IIT libraries are acquiring e-resources through 'open access mode'. It may be noted that only one library (IIT Library) acquires through 'institutional repositories' and through 'gratis with fee printed subscription mode' (FMS Library). It may be significant to note that none of the study libraries is acquiring e-resources through 'exchange mode'.

6.11 Promotion of e-resources

There are many ways to promote e-resources among the users as well as faculty members of the study libraries, so that the users can be made aware about the e-resources and their features. In this context, a question was asked regarding steps involved in promotion of e-resources and the responses are presented in Table 11.

Table 11: Promotion of e-resources

Promotion of e-resources	Name of Library									
	FMS	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Provide links from Library home page	√	√	√	√	√	√	NA	NA	√	NA
Conduct of information literacy programs	√	√	√	NA	√	√	NA	NA	√	√
E-mail/ internal mailing lists	NA	√	√	√	√	√	√	NA	√	√
Guide and tutorials (printed/electronic)	NA	NA	√	√	√	NA	NA	NA	NA	√
Seminars and Workshops	√	NA	√	NA	√	NA	NA	√	NA	NA
Posters	√	NA	√	NA	√	NA	NA	NA	NA	NA
Any Other	NA	NA	NA	NA	NA	NA	NA	NA	√	NA

Note: NA = Not Available * Pl. refer Table 1 for abbreviations of the study libraries.

Table 11 shows that 80 per cent of study libraries follow method for promotion of e-resources by 'e-mail /internal mailing lists', followed by 'conduct of information literacy programmes' and 'providing links from library home page' (70 per cent each), 'guide and tutorial (printed/electronic)' and 'seminars and workshops' (40 per cent each), and 'posters' (30 per cent). Only one library (ITS) makes use of a different method of promotion and that is 'multimedia presentation'.

6.12 Problems in Development of E-resources Collection

The demand for e-journals among the academic and research community has increased over the years. Due to decreasing budgets, libraries are forced to cancel subscriptions to important e-journals. The loss of e-journals subscriptions hampers access to scholarly research in management libraries and reduces global research opportunities for research scholars. In this regard, a question was asked from the study libraries to mention their problems in development of e-resources. The responses are presented in Table 12.

Table 12: Problems in Development of E-resources Collection

Problem	Name of Library									
	FMS	IIFT	MDI	IMT	IIT	IMI	BIMTECH	IMS	ITS	LBSIM
Budget	√	√	NA	NA	√	√	√	√	√	√
Infrastructure	√	NA	NA	NA	√	NA	NA	√	NA	NA
Trained Staff	√	√	√	√	√	√	NA	√	√	√

Networks	√	NA	NA	NA	√	NA	NA	NA	NA	NA
Library Websites	√	NA	NA	NA	√	NA	NA	NA	NA	NA
Internet Bandwidth	√	NA	NA	NA	√	NA	√	NA	NA	√
Any other	NA	NA	√	√	NA	√	NA	NA	NA	NA

Note: NA = Not Available * Pl. refer Table -1 for abbreviations of the study libraries.

It may be observed from table 12 that the major problems associated with setting up of e-resources collection is ‘budgetary limitations’ and ‘shortage of trained staff’ (80 per cent each), followed by ‘Internet Bandwidth’ (40 per cent), ‘Lack of Infrastructure Facilities’ (30 per cent), ‘Networks’ and ‘Library Websites’ (20 per cent each). Interestingly, 30 per cent of study libraries are facing some different problems, i.e., ‘Problems from Library Authority or the Management of the Institute’. This indicates that there are problems generated by the Library Authority which hampers the proper development of e-resources collections.

6.13 Membership in Library Consortium

The shared subscription or consortia-based subscription to e-resources enables successful deployment and desktop access to e-resources at much discounted rates of subscription. It helps libraries in coping with their needs of e-resources, the constant fall in their budgets and ever increasing demands from users on one side and, on the other, the rising costs of e-journals.

The library consortia, on the basis of sheer strength of the number of member institutions, attracts the electronic publishers who offer best possible price, terms and conditions, and services to make better turnovers. So, the management libraries may found a consortia more cost-effective while providing more in quantity and better in quality the e-services to their users. The information collected on the management libraries joining different consortia is given in Table 13.

Table 13: Membership in Library Consortia

Sl. No.	Library	Membership of Library e-resources Consortium
01	FMS	UGC INFONET Digital Library
02	IIFT	NA
03	MDI	INDEST- AICTE
04	IMT	INDEST- AICTE, AIRC, BCL, MALIBNET-DELNET
05	IIT	INDEST-AICTE
06	IMI	INDEST-AICTE, UGC INFONET Digital Library
07	BIMTECH	NA
08	IMS	DELNET
09	ITS	INTRANET
10	LBSIM	INDEST- AICTE, DELNET

Note: NA = Not Available * Pl. refer Table-1 for abbreviations of the study libraries.

Table 13 reveals that larger number of libraries covered in the study is members of the Indian National Digital Library in Engineering Sciences and Technology (INDEST)-AICTE consortium, followed by UGC-Infonet Digital Library Consortium, AIRC, BCL and DELNET. Moreover, the INDEST-AICTE Consortium, as an open-ended proposition, welcomes other institutions to join it on their own for sharing benefits it offers in terms of highly discounted rates of subscription and better terms of agreement with the publishers. The management libraries have increasingly moved towards consortia as a way of brokering better prices and rendering rapid and efficient services to information seekers. However, library consortia is also facing new challenges, such as, increasing expectations, rising of costs and static budget of member libraries, fair use archiving of information, pricing strategies, measures of effectiveness and licensing e-rising.

6.14 Suggestions for Improvement

Libraries are the direct incentives to the development of management education and social activities of a nation. They transfer the knowledge and culture from one generation to other. They contribute a lot to the awakening of public in day-to-day life. In the words of Dr. S R Ranganathan, libraries are not merely the store houses; they are rich springs from which knowledge flows out to irrigate the field of education and culture. An open-ended question was asked from the management librarians about future plans to improve e-resources in their libraries. The responses received are summarized as under:

- a) Draw and Implement a strategic plan for e-resources.
- b) Improve the provisions of e-resources (databases, e-journals and e-books).
- c) Expand the web-based online public access catalogues and improve their accuracy to facilitate access to the entire collections of Libraries.
- d) Promote workshops and information literacy programmes more frequently to enhance users' awareness about richness of e-resources.

7 CONCLUSION

Today, libraries have tools more powerful than ever before massive storage capabilities, rapid processing power coupled with global network and the Internet. Libraries have once again proved that given a mandate, they can adapt to any change, be it in the area of Internet, digital libraries or management of e-resources in a 'single window' system and examples for superior infrastructure, efficient services and customer-responsive organization.

In recent years, the management libraries are re-orienting their collections and collection development policies in the light of e-resources. Not only collections are changing, but, also the role of librarians. The findings of the study reveal that tools and criteria used for selecting e-resources are different from those used for printed materials. It is useful to point out that relevancy of tools and criteria used are, to an extent, influenced by the typologies of the library. For example, of the fifteen point criteria listed for selecting e-resources, the libraries covered in the study accepted one criterion fully and thirteen other criteria partially.

The survey has also revealed that the study libraries are lagging behind in strategic planning of e-resources, and e-resources development plan and its implementation. The study libraries have to improve especially in the areas:

- (i) marketing of library products and services,
- (ii) generating income from other sources,

- (iii) constituting e-resources committee,
- (iv) considering geographical parameters while selecting e-resources,
- (v) consulting printed reviews, lists, bibliographies, and indexes of other library catalogues at the time of procuring the e-resources,
- (vi) efforts to be made in exchange of e-resources among reputed management libraries in the world,
- (vii) wide publicity has to be given to e-resources in their websites with the help of banners and in the form of hyperlinks,
- (viii) more information literacy programmes and workshops to be conducted for better promotion of e-resources and efficient use of e-resources,
- (ix) try to allocate more budget for e-resources,
- (x) recruit more technical staff in vacant position and or in-house training to existing library staff to provide better e- services to users, and
- (xi) participate and become a member in more library consortia for sharing e-resources.

It is hoped that management libraries in NCR show their concern for the lacunae and ultimately develop a set of “best practices” for librarians to effectively manage e-collections. For the good of the community and nation, management libraries in NCR have to strive hard to improve accessibility and diversity in the digital age. They can do it provided they possess affordable technology, the power to negotiate through a cartel, and unwavering support from the authorities. Otherwise, they are liable to fall by the wayside, as traditional and orthodox as they are now.

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