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## DYNAMIC SHIFT FROM PRINT TO ELECTRONIC RESOURCES

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### ABSTRACT

The study assesses and evaluates use of e-resources by 240 subjects, namely post graduate students, research scholars and faculty members at Ratan Tata Library (RTL) of the Delhi School of Economics (DSE) and Faculty of Management Studies Library (FMSL), University of Delhi (DU), Delhi. Highlights problems encountered by the users and suggest remedial measures for their improvement. Authors investigate the use of e-resources through a survey based on a structured questionnaire. Various statistical methods used for data analysis. Study confirmed that all the three classes of subjects are aware with various types of e-resources, e-databases, e-books and e-journals. Suggests improvement in the access facilities, with more computer terminals, high internet speed, including Wi-Fi connectivity and subscription to more e-resources by the Delhi University Library System (DULS). Also finds out whether there is any shift in approach in using electronic resources over print, including internet, websites of RTL and FMS, OPAC, etc. by the users of RTL and FMS. The paper provides some insights concerning the benefits of electronic resources over print resources, i.e., technical ability for a single copy to be made accessible by multiple users; their durability; their use in preservation; the fact they don't go out of print; their ability to support distance learning; and their potential to provide users with access 24/7.

### KEY WORDS

Delhi School of Economics (DSE); Delhi University Library System (DULS); e-books; e-databases; e-journals; e-resources; Faculty of Management Studies (FMS); Faculty of Management Studies Library (FMSL); Online Public Access Catalogue (OPAC); Ratan Tata Library (RTL); University of Delhi (DU).

## 1. INTRODUCTION

Libraries have traditionally collected printed books and journals to provide access to educational, literary and recreational texts; and to act as a repository of this material for posterity. Additionally, they have been committed to the public good and equity of access to information. The move to digital information resources in general threatens this role, as libraries no longer have the same kind of control of the material.

Advantages of e-resources/databases for libraries include the technical ability for a single copy to be made accessible to multiple users; their durability; their use in preservation; the fact they don't go out of print; their ability to support distance learning; and their potential to provide users with access 24 /7.

In the present research, the term e-resources is used to describe “all of the information products that a library provides through a computer network. This includes electronic books, journals, bibliographic databases and library website pages, including OPAC.”

## 2. REVIEW OF LITERATURE

There are various studies available in primary and secondary sources on the use and pattern of e-resources carried out by students, research scholars, and faculty members of various institutions/ universities across globe. Some prominent studies concerning e-resources are by (Darnton, 1989), (Barnard, 1999), (Appelton, 2006), (Haridassan, 2009), (Mounissamy, 2005), (Nikam, 2007), (Sharma, 2008), (Swain, 2009), (Tomar, 2011), (Pilgrim, 2011), (Noh, 2012), (Pesch, 2011), (Pordes, 2011).

## 3. METHODOLOGY

### 3.1 Statement of the Problem

The present research, “Shift from print to electronic resources: A study of University of Delhi, Delhi, India” is focused to know the status of awareness of availability of computers, internet, opac and e-resources among the users and how often the users at the RTL and FMS Library use opac, internet and e-resources in their teaching,

learning and research. Also, the users are asked to give grading of e-resources on the basis of their preferences over others among the subscribed once by DU/UGC in view of their subject requirement.

### 3.2 Objectives of the Study

The objectives of the study are:

- (i) to know the status of awareness of subjects about availability of computers, internet, OPAC and e-resources etc.
- (ii) to study the level of knowledge of internet among subjects
- (iii) to assess usage and preference for OPAC over print catalogue
- (iv) to examine quantum of dependence of subjects for computers on libraries in question
- (v) to know quantitative and qualitative availability of e- resources and their relevance
- (vi) to mark preference of the available e-resources over others and grading them
- (vii) to suggest measures for improving infrastructure and promotion of e-resources.

### 3.3 Sample

300 subjects from the RTL and FMS Library were randomly selected for distributing questionnaires, out of which 150 subjects belonged to each of the libraries. Only 240 subjects (i.e., 80 percent) responded and returned filled in questionnaires. It was ensured to have proper representation of respondents from each department and category at the Delhi School of Economics as well as at the Faculty of Management Studies.

### 3.4 Data Collection

A structured questionnaire was designed to survey and collect data from students, research scholars and faculty members of the RTL of the DSE and the FMS Library, keeping in mind the basic objectives of the study. The data was personally collected from the students, research scholars and faculty members.

## 4. ANALYSIS OF DATA

The data collected through 240 questionnaires was classified and tabulated using statistical methods.

#### 4.1 Classified Data of the Subjects

Equal no. of respondents were taken from all the categories of users, i. e., 80 (33.33 percent) were post graduate students (M.A./ MBA), 80 (33.33 percent) from M. Phil. and Ph.D. students (i.e., research scholars), and 80 professors (33.33 percent) (assistant professor/associate professor/professor) out of a total of 240 respondents.

### 5. INTERPRETATION AND RESULTS

#### 5.1 Awareness of Subjects about Availability of Computers, Internet, OPAC and E Resources etc.

Due to library orientation programmes conducted in the beginning of each academic session in every department, it was found that all the respondents were aware about the availability of computers, internet, OPAC and e resources etc. Table 1 shows that subjects from all categories were fully aware about the availability of computers, internet, OPAC and e-resources etc. (i.e., 100 percent).

Table 1. Awareness of subjects about availability of computers, internet, OPAC and e-resources

CATEGORY OF SUBJECTS	NO. OF SUBJECTS	PERCENTAGE
Post Graduate Students (M.A./MBA)	80	100
Research Scholars (M. Phil./ Ph.D.)	80	100
Professors (Assistant/ Associate and Professors)	80	100

#### 5.2 Level of Knowledge of Internet among Subjects

Knowledge and use of internet have become essential for all professions, including teaching, learning and research. In the present study, it is revealed that all the subjects possessed fair amount of knowledge of Internet and Table 2 clearly shows that all the categories of subjects use internet (100 percent).

Table 2. Level of Knowledge of Internet among Subjects

CATEGORY OF SUBJECTS	NO. OF SUBJECTS	PERCENTAGE
Post Graduate Students (M.A./MBA)	80	100
Research Scholars (M. Phil. / Ph.D.)	80	100
Professors (Assistant/ Associate and Professors)	80	100

However, all the categories of subjects differ in the frequency of use of internet as indicated in Table 2.1, i.e., as high as 75.8 percent subjects use internet on daily basis (182 subjects) and the remaining 58 subjects (i.e., 24.2 percent) differ on use of internet on regular basis.

Table 2.1. Frequency of Use of Internet

FREQUENCY	NO. OF SUBJECTS	PERCENTAGE
Daily	182	75.8
As when required	58	24.2

#### 5.3 From Print Catalogue to Online Catalogue (OPAC)

Most of the libraries have shifted in their approach by providing OPAC, either after replacing print catalogue or in addition to it. The libraries in question, i.e., the RTL of the Delhi School of Economics and Library of the Faculty of Management Studies have developed OPAC in addition to print catalogue. Both are accessible through LAN and internet.

Results in Table 3 revealed that all the subjects preferred to use OPAC (100 percent) in comparison to print. However, 24 subjects (10 percent) indicated that they also used print catalogue in addition to OPAC, but only in two situations (i) when OPAC was not accessible and, (ii) when they did not find a particular book in the OPAC.

Table 3. From Print Catalogue to Online Catalogue (OPAC)

CATEGORY OF SUBJECTS	USE OF PRINT CATALOGUE & OR OPAC	NO. OF SUBJECTS	PERCENTAGE
All	OPAC	240	100
All	Print Catalogue, in addition to OPAC	24	10

#### 5.4 Dependence of Subjects on Libraries for Computers

All the users have been found dependent on the libraries in question for making use of computers. Table 4 showed that out of total 240 subjects, only 192 subjects (i.e., 80 percent) used computers made available by the libraries and only 48 subjects (i.e., 20 percent) preferred to use their own laptops.

Table 4. Dependence of Subjects on Libraries for Computers

CATEGORY OF SUBJECTS	DEPENDENCE ON LIBRARY COMPUTERS/ OWN LAPTOPS	NO. OF SUBJECTS	PERCENTAGE
All	Library Computers	192	80
All	Own laptops	48	20

#### 5.5 Availability of E-Resources and Their Relevance

As a result of the library orientation programs conducted by the libraries in question and availability of the list of e-resources on the respective websites, it was found that all the subjects (i.e., 100 percent) were satisfied with the quantum of e-resources made available by the University of Delhi and UGC in view of their relevance in teaching, learning and research as indicated in Table 5.

Table 5 further revealed that 96 subjects (i.e., 40 percent) wanted to have archives of all the leading e-resources/ databases/journals from their

year of inception till current year so that for back files they did not have to go elsewhere or look for print versions. However, a very few subjects, especially the faculty members (i.e., 5 percent) wished that they be consulted or made part of the committee constituted for finalizing procurement of e-resources.

Table 5. Availability of E-Resources and Their Relevance

AVAILABILITY OF E-RESOURCES AND RELEVANCE	NO. OF RESPONDENTS	PERCENTAGE
Satisfied	240 (All)	100
Archives of all subscribed e-resources	96	40
Be made part of the committee	12	5

#### 5.6 Grading of E-Resources and Preference over Others

The responses of all the subjects concerning their preferences for various e-resources (out of a list of 109 e-resources/ databases as per annexure) have been listed in Table 6 (sr. no.1) which clearly indicated that there were very few (9) e-resources/ databases (i.e., 8.25 percent) used by all the respondents. There were other 9 e-resources/ databases (i.e., 8.25 percent) used by all the respondents in the subjects of Economics, Commerce and Management (Table 6, sr. no. 2). The respondents in the subjects of Commerce and Management indicated use of another 3 e-resources/databases (2.75 percent) (Table 6, sr. no. 3). The respondents in the subjects of Sociology and Geography highlighted their preferences for 3 other e-resources/databases (2.75 percent) (Table 6, sr. no. 4). Two each e-resources/databases were marked by all the respondents in the subjects of Sociology and Geography (Table 6, sr. nos. 5 & 6).

Table 6. Gradation of E-Resources

E-RESOURCES/ DATABASES PREFERRED BY RESPONDENT S	E-RESOURCES/ DATABASES	PER CEN TAG E
1. All respondents (240 subjects)	GIST Find (integrated search engine), Chicago Manual of Style, Credo reference, Encyclopedia Britannica, Indiastat.com, Economic & Political Weekly, Elsevier Science, Sage Journal Online, Science Direct (9)	100
2. By all respondents in Economics, Commerce and Management (180 subjects)	The New Palgrave Dictionary of Economics Online, Econlit, Scopus, CapitallinePlus, ABI/INFORMATIO N Complete, Academic Search Premier, Business Source Premier, Emerald Management Xtra, Regional Business news (9)	100
3. By all respondents in Commerce and Management (150 subjects)	ISI Emerging Markets CEIC Asia, ISI Emerging Markets EMEI Asia, World Intellectual Property Search (3)	100
4. By all respondents in Sociology and Geography (60 subjects)	UMI Database, J-STOR, Oxford University Press (3)	100
5. By all respondents in Geography (30 subjects each)	American Geophysical Union Journal, Geoscience World, (2)	100
6. By all respondents in Sociology (30 subjects)	Anthrosource, Project Muse (2)	100

## 6. SUGGESTIONS

1. More and frequent library orientation programs/information literacy programs are needed to be organized in view of admission of M. Phil. and Ph. D. students not always at the beginning of academic session, but throughout the academic session.
2. OPAC of DULS should cover all the 34 units of libraries under its umbrella accessible uninterrupted 24 x 7 and all bibliographical records of documents should be edited without any further delay.
3. Infrastructure facilities be properly developed and maintained in all the libraries under DULS as has recently been created and maintained at the RTL.
4. The committee constituted for procurement of e-resources/databases should invite suggestions from all the departments and not only from the Deans and Directors etc. so that requirements of all the departments could be taken care of and this committee should meet at least twice a year, instead of once a year.
5. University should develop and maintain its own usage statistics instead of depending on the information provided by the respective e-publishing houses for the purpose of renewal of e-resources/databases to avoid misuse of funds provided by the exchequer.

## 7. CONCLUSION

Information Technology (IT) and Information Communication Technology (ICT) have changed the information seeking behavior of the users and as well as pattern of services provided by the librarians. Information needs have been changed from asking for a book or a journal to an article or a topic with the provision of e-resources. Increase in the demand of e-resources by the users as well as librarians have been observed with the growth of knowledge to use these resources. In spite of some problems in using e-resources almost every user need e-resources in one or the other form. Provision of e-resources has shown a rapid growth in research.

The number of electronic resources has climbed up steadily in recent times, some of these e-resources are reference sources, mostly in Science, Technology and Medicine (STM), which publishers convert to electronic for obvious reasons. The library budgets for materials usually have two main lines, budget for one time purchase (monographs)

and budget for ongoing subscriptions (serials). It, therefore, becomes an issue when pricing model is not stable and this balance cannot be maintained.

It is somewhat early to determine the impact of e-resources on a library collection, though the indications are that they have been reasonably successful to this point. However, as outlined previously, issues of access, preservation, ownership, copyright and fair use, cost, privacy, standards, bibliographic control and adequate content are critical. There is a concern over the appropriateness of e-book acquisition and service delivery models.

On the basis of the above analysis, it would be appropriate to mention here that there is a clear shift from print to e-resources. However, more rigorous research is needed to establish a more accurate picture of user behavior and usability of e-resources.

In view of the above, it would be appropriate to mention here that Information Communication Technology (ICT) has brought use of e-resources/databases in the libraries with an edge over print resources as these include the technical ability for a single copy to be made accessible to multiple users; their durability; their use in preservation; the fact they don't go out of print; their ability to support distance learning; and their potential to provide users with access 24 /7.

It is essential to mention here that RTL is one of the best libraries in Social Sciences in the country considering the collections it has. Very valuable additions to the collection of the RTL were made by Dr. V.K.R.V. Rao's personal efforts. He secured gifts of books and back numbers of periodicals from the Library of Congress, Washington, D.C.; the Institute of Pacific Relations, New York; the New School of Social Research, New York; the Royal Institute of International Affairs, London; the British Library of Political and economic Sciences, London; and the National Book Centre, London. A grant of two thousand dollars from the state department of United States was used for the purchase of books from that country this was the nucleus around which the Ratan Tata Library has grown. Prof. B.N. Ganguli who later became Vice Chancellor of University of Delhi (1967-1969) was the first one to look after the RTL during its formative years (Kumar, 1995). On the initiatives and keen interest of both the present Prime Minister, Dr.

ManMohan Singh and Chief Economic Advisor, Prof. Kaushik Basu in view of their close association with the DSE as faculty, the RTL has been receiving Endowment Grants from the Ministry of Finance, Govt. of India (Rs. 5 Crores in 1993-94, Rs. 2 Crores in 2003-04 and Rs. 7 Crores in 2011-12) (India, 2011) to maintain its pride of place in the academics.

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