



## Use of Print vs. Electronics Journals by Engineering & Management Students in Panipat Institute of Engineering & Technology, Samalkha (Panipat) Haryana

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### **ABSTRACT**

This study seeks to examine the use of electronic journals and print journals by the student of Engineering & Management students of Panipat Institute of Engineering & Technology, Samalkha (Panipat) Haryana. From this study, it was found that most of the students refer to both Electronic & Print journals from the Library. The main aims of consulting these journals are for retrieving information for presentations, seminars and for updating knowledge. However, this study also reveals several inherent problems especially with the use of electronic journals.

**Keywords:** Electronic Journals, Print Journals, Use of Resources, Panipat Institute of Engineering & Technology.

### **1. INTRODUCTION**

The evolving phase of digital libraries is bringing us closer to the turning point where scientific publications, especially journals, predominantly only appear in the e-format. The use of e-journals has grown, although this innovation has not yet been fully adopted by scientists even in developed countries. To be adopted, an e-journal should perform the same functions as its predecessor, the print journal, such as building a collective knowledge base, communicating information, validating the quality of research and building scientific communities (Kortelainen 2004).

e-journals offers several advantages that cannot be offered by a printed version such as increased speed of production through electronic interaction between authors, editors, publishers and readers, faster downloading, printing availability through computer networks and use of multimedia molecular models structure of molecules in 2D. 3D editing, etc. on the other hand, the use of p-journals is time tested, has developed over several centuries and has

evolved in specialised ways to fulfil their primary activities of easy and elaborate dissemination of information, quality control and recognition of author (Trivedi, 2009) .

however, accessing p-journals involves a number of methods including the use of variety of both specialised and general indexes, library catalogues, keywords searching, usage of Boolean operators, reference citing from other articles, recommendations from readers and colleagues, as well as meticulous arrangement of p-journals by the library.

In order to understand the usage of e-journals and p-journals in Engineering & Management Institute was undertaken to study their use of the two formats of journals. Details of the survey are given below:

### **2. LITERATURE REVIEW**

Early studies on e-journals have emphasised the need for e-journals to emulate the usefulness of p-journals (Schwarzwalder, 1998, although acceptance depended on the way they would interface with the users working environment (Olsen, 1994). Later



studies have also emphasised the importance of interaction between the working habits of users, the demands of e-journals products and the technological capabilities of the users systems\ (Stewart, 1996; Pullinger, 1999; Mahe et.al., 2000). At the time, there were technical barriers to their use (Meadows, 1996), and it was believed that the lack of critical mass in particular subject areas was a reason for the reluctance of many academicians and researchers to use e-journal (Jenkins, 1997; Tommey and Burton, 1998; Pullinger, 1999). A more recent study (Rogers, 2001) at the Ohio state University cites, for example, a change from 200 to over 3000 e-journals as a move towards critical mass, at which point users would be happy to see print subscriptions cancelled. Qualitative data on usage (Woodward, 1997), although limited by poor response rate, suggested that academic staff and students disliked reading from a screen, particularly if the image quality was poor, and that the quality of interfaces and the ease of use would need to improve if e-journals were to be used more. Many of the research studies do not address how the periodical and journal literature was used by

staff, and students in different disciplines prior to the introduction of e-journal trials, and some of the differences found (Pullinger,1999), might be attributed to disciplinary differences (Tommey and Burton, 1998). More recently, the strength of these disciplinary differences may be seen in the differential uptake of electronic information products (Kling and McKim, 2000) and different publishing models (2002), with several of these models attempting to deal with the serial crisis of soaring subscription costs (Halliday and Oppenheim, 2001). A review (Tenopir and King, 2002) of e-journal studies from 1997 to 2010 also notes the considerable variation among disciplines in reading habits, alongside an apparent overall increase in the proportion of electronic.

### 3. THE PIET LIBRARY

The PIET Library is one of the central places of knowledge in the institute and is an essential component of Piet's outstanding research and education mission. With modern collection of knowledge resources and innovative information services, it plays an important role for students and faculties in their intellectual pursuits. As various research projects are carried out in the institutes, journals plays a vital role in the library collection. The library subscribes 231 print National and International journals. With the advent of information and communication technology, the PIET library has started providing electronic access to a wide variety of resources including full-text to more than 4000 journals and subscribe to various databases like IESTC & IMC collection of e-journals packages of CENANGE LEARNING, & DELNET etc. Along with the availability of both forms of journals in the library, it became necessary to compare and evaluate like effectiveness of e-journals and p-journals from user stand libraries point of view. A case study to evaluate and compare the services of journals in both formats was conducted at the PIET library.

### 4. SCOPE OF THIS STUDY

This study was confined to the PIET library and its services. It was further limited to the small sample of 120 users. The results will help collection developers in designing a suitable policy and assessing the technical intricacies faced by the library staff in providing efficient infrastructure requirements for managing journals in both the formats.

### 5. OBJECTIVES OF THIS STUDY

- a. To assess and compare the use of p-journals with e-journals
- b. To assess issues relating to the management of e-journals



- c. To assess the technical difficulties faced by users in utilisation of e-journals services
- d. To suggest measures to improve the existing e-journals facilities in the PIET Library.

## 6. METHODOLOGY

To fulfil the above objectives, a sample survey was conducted and a detailed and well-structured questionnaire was designed and distributed to the selected 150 users of the PIET library.

## 7. RESULTS AND DISCUSSION

### 7.1 Format Preference

The format preference of journal by the respondents is shown in Table 1. Respondents were asked about their preferred formats for journals. A substantial majority, i.e., 69.17% of users wanted journals available in both electronic & print forms. Overall, 20.83% preferred electronic- only access, whereas 10.00% wanted only the print version.

### 7.2 Information-seeking patterns of Users

Users use journals in different ways like browsing, checking references, photocopying or printing, reading related articles, reading entire journals or reading instructions of authors. Information-seeking patterns of users varied with different media.

**Table 1: Format Preference**

S. No.	Format Preferences	No. of Respondents	Percentage
1	Print	12	10.00
2	Electronic	25	20.83
3	Both	83	69.17
		120	100.00

Users use journals in different ways like browsing, checking references, photocopying or printing, reading related articles, reading entire journals or reading instructions of

authors. Information-seeking patterns of users varied with different media.

**Table 2: Information-seeking patterns of users**

S.No.	Frequency of use	Print		Electronic	
		No. of respondents	Percentage	No. of respondents	Percentage
1.	By browsing	76	63.33	96	80.00
2.	By checking reference	60	50.00	90	75.00
3.	By printing or photocopying	66	55.00	97	80.83
4.	By reading related articles	56	46.66	80	66.66
5.	By reading entire journals	62	51.66	92	76.66
6.	By reading instructions of authors	32	26.66	51	42.50

Table 2 shows that for e-journals, the maximum number (80.83%) of respondents use journals by printing of photocopying, 80.0% by browsing, 75.00% by checking references, 76.66% by reading entire journals and 42.50% by reading instructions of

authors. On the other hand, for P-journals, it was 63.33 by browsing, 55.00% by printing and photocopying, 51.66% by reading entire journals, 50.00% by checking references, 46.66% by reading related articles, followed by 26.66% by reading instructions of authors,

from the above data, it is clear that e-journals are mostly used by printing and photocopying on computers. It is also observed that for

reading entire journals, users mostly prefer e-journals rather than p-journals.

TABLE 3: Frequency of Use

S.No.	Frequency of use	Print		Electronic	
		No. of respondents	Percentage	No. of respondents	Percentage
1	Daily	63	52.50	86	71.67
2	Weekly	29	24.17	21	17.50
3	Monthly	16	13.33	10	8.33
4	Infrequently	12	10.00	3	2.50
5	Never	0	0	0	0
		120	100	120	100

### 7.3 Frequency of Use

Data regarding the frequency of use of journals in both formats indicate the user's awareness towards the journals. Table 3 categories the users based on the frequency of use, i.e daily, weekly, monthly and infrequency.

Table 3 reveals that for e-journals, 71.67% referred daily, 17.50% referred weekly, 8.33% referred monthly and 2.50% referred infrequently. Whereas for p-journal, 52.50% referred daily, 24.17% referred weekly, 13.33% referred monthly, followed by 10.00% who referred infrequently. Table 3

depicts that a majority of the respondents use electronic as well as p-journals for day-to-day.

### 7.4 Advantages of electronic journals

Most of the literature describing the recent growth in e-journals emphasise three important factors, i.e., money, technology and convenience, as well as speed. Although the greatest paradox of p-journals is that they act more like archival and legitimising tools than as communication tools, e-journals have the ability to re-establish the communication purpose of scholarly publications, without losing their archival or legitimising values.

Table 4: Advantage of e-journals

S. No	Advantage	No. of Respondents	percentage
1	Timely access	95	79.16
2	Access to the same content	50	41.67
3	Link to other journals (articles)	82	68.33
4	Electronic Search Capabilities	77	64.16
5	Remote Computer access	39	32.50
6	Articles are displayed clearly and are easy to use	80	66.66
7	User friendly	87	72.50
8	Contains multimedia Information	36	30.00
9	Can be used by more than one user	59	49.16
10	Other reasons	16	13.33

Table 4 shows why users like e-journals. It shows that a majority of the respondents (79.16%) like e-journals because of their timely access, 72.50% for them being user-friendly, 68.33% for their link to other journals/ articles, 66.66% for their clarity and easy usage, 64.16% for their electronic search capabilities, 49.16% for the fact that more than one user can use the same journal, 41.67% for their access to the same content, 32.50% for their remote computer access, 30% for the multimedia information they contain and 13.33% for other reasons.

### 7.5 Disadvantages of electronic journals:

Table 5 explains that most of the respondents (72.50%) dislike e-journals because it requires promotion & training for their use, 66.67% were concerned about the difficulty in browsing, 63.33% disliked them for copyright issues, 46.66% for excessive printing and 30% for insufficient journals and time coverage.

Table 5: Disadvantages of e-journals

S. No	Advantage	No. of Respondents	percentage
1	Need special infrastructure facility	43	35.83
2	Are more difficult to browse than are print journals	80	66.67
3	Result in excessive printing	56	46.66
4	Require promotion and training	87	72.50
5	Cause more concern about copyright issues	76	63.33
6	Do not have sufficient journals and time coverage	36	30.00
7	Other reasons	10	8.33

### 7.6 Advantages of print journals

Printed resources are equally important for any institute. Table 6 shows why users like p-journals.

Table 6: Advantages of p-journals

S. No	Advantage	No. of Respondents	percentage
1	Easily accessible	73	60.83
2	Personified copy	57	47.5
3	Legibility	70	58.33
4	No dependency on computer/electricity	90	75.00
5	Can read at one's leisure	98	81.67
6	No need of link/continuity	64	53.33
7	Can keep all printed version to eyesight at a glance	47	39.16



The table reveals that the majority of the respondents, i.e. 81.67% liked print journals for leisure reading, 75% for their non-dependency on computers/ electricity, 60.83% for their easy accessibilities, 58.33%

for their legibility, 53.33% for the non requirement of link/ continuity, 47.5% for the personified copy and 39.16% because all printed version can be eyesight at a glance.

### 7.7 Disadvantage of print journals:

S. No	Advantage	No. of Respondents	percentage
1	Increased time spent in searching information	111	92.50
2	Non-availability of indexes in some journals	85	70.83
3	Expensive according to number of copies	72	60.00
4	Require more space	64	53.33

Table 7 explains that most of the respondents (92.50%) dislike p-journals because of the increased time spent in searching for information, 70.83% for the non-availability of indexes in some journals, 60.00% for the expense according to the number of copies and 53.33% for their requirement of more space.

4 The library personnel should cooperate with the users and help them in overcoming the technical difficulties they face while accessing e-journals.

5. Training programmes are essential for the library personnel to help users library resources.

## 8. SUGGESTIONS

Based on the data collected, the following suggestions are made to improve e-journals usage.

1 Orientation programmes should be organised at regular intervals for the use of e-journals.

2 Users should be informed regularly about the new e-journals added to the library collection.

3 To increase interest among users regarding e-journals, content pages should be distributed to users through e-mail or by displaying on the library notice board.

## 9 CONCLUSION

Looking at the present situation of information explosion and competency in acquiring it, is is on the part of the library personnel to create more awareness about e-journal availability among the users and to provide them a friendly environment so that they can make better use of the resources. The training programmes should be organised so that the library personnels can handle e-journals, user's needs and acquire more sophisticated searching and retrieval skills.

This study reveals that most of the users choose to use the journals in both formats; p-



journals are equally important as are e-journals. Therefore, even in this digitisation era, e-journals may not completely replace the existing print version.

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