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## PERSPECTIVES AND ATTITUDES OF USERS TOWARD ELECTRONIC JOURNALS

Mukesh Saikia

### Abstract

*This article discusses a survey conducted to learn perspectives and attitudes of faculty members and research scholars of Tezpur University towards electronic journals. The online questionnaire was mailed to faculty members and research scholars of Tezpur University to determine the views and feeling on use of electronic journals. The survey examines the current use of electronics and print journals of Tezpur University Library and distinguished between respondents' format preferences for those journals that were most important to their research and teaching. This study will help Tezpur University Library in the development of guidelines to be used to add or cancel print or electronic journal subscription to serve the teachers and research scholars efficiently.*

**Keywords :** Academic journal, Print journal, Electronic Journals, Formats of Journal, Features of Electronic journals, Issues of Electronic Journal.

### 1. Introduction

A journal is a peer-reviewed periodical in which scholarship relating to a particular discipline is published. Journals serve as forums for the introduction and presentation for scrutiny of new research, and the critique of existing research [1]. Academic libraries are subscribing print journals as a collection of primary source of research. Print journal serves for disseminating information, ensuring credibility of its content, establishing a permanent archive for research and offering its authors professional recognition.

Electronic journal is defined as any journal that is available online, including both electronic only journals, and journals that are available both electronically and in print [2]. E-journals are specialized form of electronic document that can be accessed via electronic transmission and they are formatted approximately like printed journal articles. Electronic scholarly journals have increasingly becoming the focus for research and development in recent years [3]. The enormous growth of electronic journals since 1990s has made the worldwide change in scholarly communication in the 21<sup>st</sup> century. Now, academic community feel that print journals should be replaced by electronic journals [4]. In fact, print and electronic, both forms are complementary to each other. The electronic journals is more likely to facilitate communication within scholarly communities because of the speed with which it can be written, reviewed and edited, its ready accessibility, ease and economy of its distribution just at the touch of a few keys. Publishers have recognized the existence of two types of

readers with differing needs and some publishers have offered their journals in both formats to assure the readers that traditional standards of editing and peer review have been applied to both the version.

Traditional print journals are thought to face impending demise [5]. E-journals are now an accepted format in library collections. Electronic journals represent a significant and growing part of academic library's offerings. As demand for e-journals increase, librarians are faced with a new set of decisions related to subscription and services [6]. The development of electronic journal presents opportunities and dilemmas for academic libraries. As journals are increasingly available in electronic format, often at an added cost when electronic access is added to print subscription, libraries are exploring options for managing both subscription [7]. The escalating cost of journals make it necessary for the libraries to carefully consider purchase for and out to the journal subscription. Libraries face a dilemma in financing the added costs to access electronic journals in addition to print subscription as duplicate subscriptions presents a financial burden [8]. Again, individual perspective and attitudes of faculty members and research scholars towards electronic journals depend upon an individual's interpretation of the concept. Faculty members of a university are key stakeholders whose support is essential for subscribing either print journal or electronic journal or both format [9]. Hence, it becomes more vital that they are to be reviewed to determine if subscription of electronic journal only or print journal only or both is appropriate.

## **2. Purpose of the Study**

The purpose of the study is to learn perspectives and attitudes of faculty members and research scholars of Tezpur University towards electronic journals as their views and feelings concerning electronic journals will advise in the development of guidelines to be used to determine the subscription or cancellation of print or electronic journals.

The purpose of the present study is to gather data addressing following questions :

1. What views and feeling do faculty members and research scholar have towards electronic journals?
2. What is the level of awareness and frequency of use of print and electronic journals?
3. What are the issues that would be effected the replacement of print journals with electronic version of the same titles?
4. Which features of electronic journals are important to users?
5. How do usage, acceptance of electronic journals vary among faculty members and research scholars.

### 3. Methodology

The survey was conducted using e-mail list of faculty members and research scholars of Tezpur University. Online questionnaires were posted to all faculty members and research scholars explaining the purpose of the study and inviting participation in the survey. One electronic reminder was also sent to each members of the survey population requesting to fill up and return online questionnaires. The survey was conducted between 24- 31October, 07. Printed questionnaires were also sent to few senior faculty members.

### 4. Survey Responses

A total of 248 Questionnaires were distributed to all faculty members and research scholars of Tezpur University. Out of these, 155 completed questionnaires were obtained for a response rate of 62.5 %. Faculty response was 75.9 % ( i.e. 82 out of 108) and research scholars was 52.1 %. (i.e. 73 out of 140) .

The survey responses from faculty and research scholar were quantitatively compared and analyzed as an entire data set and by disaggregating into faculty and research scholar responses, respectively. Qualitative data obtained from answers provided to the free-response questions and from additional explanatory narrative provided by respondents (both faculty members and research scholar ) were used to enrich and further clarify the interpretive section of this study.

**Table-1: Preference of format of journal for study/ teaching/research**

Questions	Respondent	Response percentage (%)		
		Electronic	Print	Print +Electronic
What format of journal do you prefer to use for your study/teaching /research?	Faculty members	63.4	14.6	22
	Research Scholars	69.9	13.7	16.4
	Average	66.5	14.2	19.3
Many journals are available in both print and electronic formats. In which format do you think core journals should be made available by Tezpur University?	Faculty members	78	8.6	13.4
	Research Scholars	71.2	11	17.8
	Average	74.8	9.7	15.5
For non-core journals, if you only have access to one format only, which would you prefer?	Faculty members	70.7	17.1	12.2
	Research Scholars	67.1	20.6	12.3
	Average	69	18.7	12.3

Table-1 illustrates the percentage of preference of print and electronic journals reported by faculty members and research scholars. Both faculty members and researchers were requested to report their preferred format both for core and non-core journals. 63.4 % faculty member and 69.9% research scholars preferred to use electronic journals for their teaching and research works. On average, 66.5 % users reported to prefer electronic journals. 78 % faculty members and 71.2 % research scholars preferred to have core journals in electronic format. 13.4% faculty members and 17.8% research scholars preferred to have journals in both the format. 8.6% faculty members, 11% research scholars preferred print journals. On an average, 69% users preferred to have non-core journals in electronic format, 18.7% preferred print format and rest 12.3% preferred both the format. Research scholars are even more frequent users of e-journals than faculty members. On average, 15.5% and 12.3 % of respondents preferred of both print and electronic access to core and non-core journals respectively. The response for core and non-core titles were in favour of electronic only. Research Scholars preferences for electronic journals were higher than faculty member's preferences. Faculty members were slightly more likely to use print journals. A few electronic journals are available for Social Science and Humanities departments and faculty members and research scholars of Social Science and Humanities departments reported to use mostly print journals. The reason given most frequently for never using electronic journals included non-availability journals and having unfamiliarity with how to access the resources.

**Table- 2: Frequency of usage of printed journal/ electronic journal**

Format of journal	Respondent	Response Percentage (%)				
		Daily	Weekly	Monthly	Infrequently	Never
Print	Faculty members	12.2	30.5	39	13.4	4.9
	Research Scholar	24.7	34.2	28.8	2.7	9.6
	Average	18	32.3	34.2	8.4	7.1
Electronic	Faculty members	26.8	37.8	22	6.1	7.3
	Research Scholar	37	28.8	27	4.6	2.6
	Average	31.9	33.3	24.5	5.4	4.9

Table-2 illustrates to usage of available 183 print journals, 3590 electronic journals provided by UGC-Infonet and all IEEE journals subscribed through INDEST- AICTE Consortium. 30% faculty members reported to use print journal daily whereas 26.8% reported to use electronic journals. Similarly 30.5% used print journals weekly but 37.8% used electronic journals. On average, 18% users used print journals daily, 32.3 % used print journals weekly whereas daily and weekly use of e-journals were 31.9% and 33.5% respectively. 7.1% users never used print journals and 8.4% users never used electronic journals as journals of their own field were not available in the library.

Table- 3: Issues that would be effected if we switch over to electronic versions from print version of the same titles.

Issues	Impact percentage (%)			Importance percentage (%)		
	Positive	Negative	Not sure	Very important	Somewhat important	Not important
Browsing	83.7	3.8	9.5	93.6	6.4	0
Convenience of use	86.5	10.3	3.2	16.1	80.6	3.3
Archival facility i.e. access to back issues	89.4	2.5	8.1	96.8	3.2	0
Access to full text	94.8	5.1	6	95.5	4.5	0
Image quality	58.4	30	11.6	9.7	87	3.2
Obtaining a copy of the article	61	14	25	15.1	83.9	1
Cost i.e. Subscription Fees	51	24	25	15.4	80	4.6
Reliable access	61.5	3.4	35.1	16.8	78.6	4.6
Timely release of Articles	57	9.7	33.3	19.5	74.8	5.7

Table-4 illustrates the issues that would be effected if switch over from print journals to electronic journals of the same titles. 83.7 % users have reported that browsing would have a positive effect if we switch over to electronic format from print format of the same title and it is 93.6% important. 86.5% users reported that convenience of use would have positive impact if we switching over to electronic and 80.6% users reported that it would have some what important. 89.4% users reported if we switch over to electronic format from print format, the archival facility would have positive impact which reported to be very important by 96.8% respondents. Access to full text would have positive effect which was reported by 94.8% users and 95.5% have reported to be very important. More than half of the respondents reported that image quality would have positive impact and reported to be somewhat important by 87% respondents. Obtaining a copy of the article would have also positive effect as reported by 61% users and it was reported to be somewhat important by 83.9% users. Cost of journals would also have positive impact as we switched over to electronic journals and 80% users had reported to be somewhat important issue. Reliable access has also positive impact and 78.6% users reported to be somewhat important issues. Timely release of

articles issue would have positive impact as reported by 57% users and 33.3% users were not sure about the impact of this issue and 74.8% users reported it to be somewhat important issue.

From each of this issues, larger percentage of respondents indicated that they expected a switching over to electronic access to have a positive effect. Access to full content was one of the more frequently mentioned concerns. However, many more respondents said that access to the full content of the journal would be enhanced by converting to electronic only access and did not see this issue in a negative light. Smaller numbers of respondents also suggested that image quality to be positively affected by a move to electronic only access.

**Table- 4: Features of electronic journals that users feel important**

Features	Importance percentage (%)	
	Yes	No
Can access at any time (on a 24/7 basis) from any place by multiple users	86.5	13.5
Can access not just recent issues but to archive dating back several years.	83.2	16.8
Provide electronic search capabilities relevant to specific research needs	70.3	29.7
Provide hyperlink to cited references	62.6	37.4
Articles are displayed clearly in an easy to read format	52.9	48.1
A user-friendly interface	60.9	39.1
Provide access to same content (including images) as that of print journal	57.4	42.6
Save shelf, floor space of library and time of library staff and users	74.1	25.9

Table- 4 illustrates the features of electronic journals that users feel important. 86.5% users felt that access to electronic journal any time from any place by multiple users is one of the important feature of electronic journal. Access to back issues of journals is also important feature as reported by 83.2% users. The electronic search capabilities of electronic journals was also reported to be important feature by 70.3% users. 62.6% users reported that provision of hyperlink to cited refer-

ences of electronic journal papers is also important features. More than half of the users reported that articles displayed clearly in an easy to read format. More than 60% users reported that a user-friendly interface of electronic journal is also important feature. More than half of the users reported that provision of access to same content as that of print journals is also important feature. 74.1% users reported that saving of shelf space & floor space of library and time of library staff & users is important feature of electronic journals.

**Table- 5: Use of other electronic resources**

E- resources other than e-journals	Response percentage (%)				
	Daily	Weekly	Monthly	Infrequently	Never
Author's websites	16.8	17.3	29.5	21.7	14.7
Websites maintained by professional organizations	4	21.2	14	17.5	43.3
Electronic conference proceedings	11.8	26.2	18	27	17

Table- 5 illustrates the faculty members and researchers awareness and use of other e-resources. 16.8% users reported to use author's websites daily, maximum 29.5% users reported to use author's websites for their teaching and research. 14.7% users never used author's websites. 21.2% users reported to use websites maintained by professional organizations and 43.3% users never used websites maintained by professional organizations. Electronic conference proceedings were used by 11.8% users daily, 26.2% weekly, 18% monthly, 27% used infrequently and 17% of users never used. Most of the faculty members visited author's websites and conference proceedings but most of the research scholars visited websites maintained by professional organizations.

5.0 Analysis: This study offers several relevant developments. This study found that small but substantial proportion of faculty report using library journals infrequently or never. By gathering data on both print and electronic journal use from the same study population it is possible to generate a yardstick for measuring adoption of electronic journals.

We found that higher proportion of all faculty members and research scholars use electronic journals daily and print journals at least monthly. Interestingly, more users reported using electronic journals daily and weekly. E- journal users tend to use electronic version of print journals more frequently. Also many print journals of Social Science and Humanities departments still lack electronic versions.

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Many science and technology faculty are supportive of moving to electronic only access. 74.8% respondents favour electronic journals access to core titles while 15.5% respondents believed that both electronic and print access to core journals are essential. Similarly 69% responded also need non-core journals in electronic format while 12.3% respondents need non-core journals both in electronic and print formats. Thus, most respondents believe that access in both formats is appropriate for many titles.

A small number of respondents preferred in both the format because of archiving reason, a small numbers of respondents clearly believe that core journals should be made available in both print and electronic form. However, majority of the respondents strongly preferred in electronic form. 14.2% respondents preferred print journals only. This suggests that faculty members and research scholars might be supportive of switching over to electronic subscription only but could be resistant to cutting the print versions of other titles. The study defined core titles simply as those which are most important to the respondent's field and this suggests that there is some ambiguity about how to identify core titles.

Based on responses to the question regarding the most important issues in the replacement of print journals with e-journals, the concerns of respondents about long-term access and the reliability of access could be driving the interest to retain print. Image quality and layout seem to be less pressing.

The study found that 9.6% research scholars at Tezpur University never used print journals. While the trends were much the same between faculty members and research scholars, 37% research scholars used e-journals daily and 24.7% used print journals daily. Research scholars at Tezpur University are more willing to give up print journals.

## **6. Findings and Discussions**

1. A significant finding from this study is that the Faculty members and research scholars share the same perceptions about e-journals. The study has shown that e-journals perform an increasingly important role in research at Tezpur University. Faculty members not only required to current e-journals, but also need back issues as well. There is a never increasing demand for subscriptions to more e-journal titles. More importance is given to subscriptions to current e-journal titles than access to back volumes .
2. Another most significant finding from the survey were the high levels of adoption of e-journals among faculty members and research scholars, the support for electronic journals for both core and non-core disciplinary journals. Respondents had same formats preferences for core and non-core journals.



3. The library has good evidence that their existing e-journal collections are widely used by faculty members and research scholars, justifying UGC's and University's ongoing and increasing investment.
4. Access to full text, convenience of use, browsing and access to back issues of electronic journals influenced the faculty members and research scholars to switch over to electronic versions from print versions of the same titles.
5. The faculty members and research scholars preferred electronic journals because electronic journals can provide electronic search capabilities relevant to specific research need, access at any time from any place by multiple users, access not just recent issues but to archive dating back several years.
6. The percentage of daily use of electronic journals by research scholar is higher than faculty members. Research Scholars use electronic journals. Faculty members overall are more interested in retaining print access to journals than research scholars. Faculty members from Social Science & Humanities departments agree with the need to retain print access to core collections but are moving more to e-journals while Science and Technology faculty members are supportive of moving to electronic only access. Research Scholars are more willing to cancel print subscriptions of journals.
7. The study has also shown that a wide range of low level access problems was identified as a demotivating factor for users as well as the need for 'considerable training exercises.

#### **7. Recommendations**

1. The Library should continue developing electronic journal collections.
2. There is a need for the Library to manage the e- journal archive carefully. An electronic journals archive should be provided wherever possible.
3. Training in electronic resources management should be offered to library staff.
4. The study indicates the need of orientation/workshop of e-resources for faculty members and research scholars also.
5. Library should conduct such type of survey to review library orientation/ information literacy programme at regular interval and identify changes in use of journals.
6. This study indicates that print journal are still significant for some faculty members and research scholars. Therefore the Library should continue to subscribe print journals besides electronic journals in balance ratio.
7. Library should identify, index and link open URLs to Tezpur University Library website.

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## ABOUT AUTHOR

**Dr. Mukesh Saikia** is presently working as Deputy Librarian of Tezpur University. Dr. Saikia graduated from St. Anthony's College, Shillong with Physics honour and topped both in Bachelor and Master degree of Library and Information Science from Gauhati University. Before Joining Tezpur University he served Regional Science Centre, Life Insurance Corporation of India, Indian Postal Services, Gauhati University, National Child Development Commission, Oil & Natural Gas Commission in different capacities for short periods. He received IFLA/ALP award for the year 1998 and attended special training course on "Emerging Technologies for Automated Information Management" at Asian Institute of Technology, Bangkok. Dr. Saikia received his Ph.D. degree from North Eastern Hill University, Shillong for his research work under Prof. A.S.Chandel, Dept. of Library and Information Science, North Eastern Hill University, Shillong.

E-mail:mukesh@tezu.ernet.in