

## **ORGANISATION AND MANAGEMENT ISSUES FOR ELECTRONIC JOURNALS: A BANGLADESH PERSPECTIVE**

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### ***ABSTRACT***

*This article provides information about electronic journals (e-journals), their subscribers, management issues and necessities from the Bangladesh perspective. An attempt has been made to explore the infrastructural facilities and the existing problems of libraries and information centres that are subscribing to e-journals. The study also discusses the status of e-journal usage and accessibility in selected libraries and information centres, as well as advantages, limitations and prospects for e-journals in the context of this country. Finally the paper suggests that there is a need to establish a workable and sustainable consortium among libraries and information institutions in Bangladesh. It also recommends that systematic efforts should be made urgently for the proper organisation and management of e-journals.*

**Keywords:** E-journals; Electronic journals; Library consortia; Academic libraries; Research libraries; Bangladesh

### **INTRODUCTION**

Electronic journals or e-journals may be defined as any serial publication (such as journal, magazine and newsletter) in digital format and made available on CD-ROM, DVD, online systems and the Internet. E-journals are often referred to interchangeably as “electronic publishing”, “electronic serials”, “online journals” and “electronic periodicals” (Chan, 1999). Smith (2003) defines e-journal as ‘any journal that is available online, including both electronic only journals, and journals that are available both electronically and in print’. Bombak et al. (1992) define e-journal as ‘a publication whose primary means of delivery to subscribers is through computer files.’ Most of the publication processes of e-journal are now done

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electronically, over the internet-submission, peer review, editing and hosting on the publisher's website. Any user having access to Internet can now have access to e-journals, as publishers are able to deliver them directly to the users' desktops.

E-journals are becoming popular and more effective with the growth and expansion of the Internet. They have revolutionized the change in the field of library and information services. They have been regarded as important library resources and many libraries all over the world have already replaced print journals with e-journals. As a case in point, the W.W. Hagerty Library of Drexel University made migration to an e-journal as quickly as possible with a key component of its strategic plan in 1998. Montgomery (2000) in a case study indicated that with few exceptions, if a journal is available electronically, only the electronic version is purchased whenever possible. In 2002/2003, the Libraries Deanship of United Arab Emirates University (UAEU) made a commitment to cancel printed journals and migrate to all e-journals collection (Abdulla, 2005)

However, e-journals are not widely used in libraries and information centres in Bangladesh. Very few private universities and research libraries subscribe to e-journals in this country. Some leading public university libraries, for example Dhaka University Library, Rajshahi University Library, and Bangladesh University of Engineering and Technology (BUET) library are planning to subscribe to e-journals in the near future. It seems that the few libraries that are subscribing to e-journals, are not aware of issues such as analysis of users needs, speed of Internet connection, adequate workstations with Internet connections in the library, provision of easy access to e-journals, and orientation and training programmes for staff and users. To investigate these issues, the authors therefore conducted a study to analyze the organisation and management issues of e-journals in Bangladesh.

## **OBJECTIVES OF THE STUDY**

The study was carried out to determine the following objectives:

- a) To explore to what extent libraries and information institutions subscribe to e-journals in Bangladesh;
- b) To analyse the current organisation and managing practices of e-journals in Bangladesh;
- c) To explore the infrastructural facilities for subscribing e-journal in those libraries;
- d) To assess the importance of e-journals in Bangladesh perspective;

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- e) To discover the barriers to e-journal subscriptions in Bangladesh; and
- f) To offer suitable suggestions and recommendations for the development of e-journal services in Bangladesh.

## **METHODOLOGY**

A total of ten libraries and information centres were selected as participants in the study (Table 1). A structured questionnaire was developed with a view to gather information through field visits. During the field visit, interviews were also used to gather more information regarding e-journals. Therefore the study gathered data through questionnaire, interviews and observations, collected from 1 January to 30 January 2006. Due to time and funding constraints, the authors could not investigate users' capacity to use, and their satisfaction with the e-journals and the services. The organisation and management issues of e-journals are emphasized in this study. It should also be noted that the survey was conducted at selected libraries and information centres in Bangladesh. Not all libraries that are subscribing to e-journals are covered in this study.

Table 1: Participating Libraries and Information Centres

<ol style="list-style-type: none"><li>1. American International University - Bangladesh  (<a href="http://www.aiub.edu/">http://www.aiub.edu/</a>)</li><li>2. Archer K. Blood American Center Library <a href="http://dhaka.usembassy.gov/information_resource_center.html">http://dhaka.usembassy.gov/information_resource_center.html</a>)</li><li>3. Bangladesh National Scientific and Technical Documentation Centre (BANSDOC) <a href="http://www.bansdoc.gov.bd/">(http://www.bansdoc.gov.bd/)</a></li><li>4. BRAC University ( <a href="http://www.bracuniversity.ac.bd/">http://www.bracuniversity.ac.bd/</a>)</li><li>5. British Council Library, Bangladesh (<a href="http://www.britishcouncil.org/bangladesh/">http://www.britishcouncil.org/bangladesh/</a>)</li><li>6. East West University (<a href="http://www.ewubd.edu/">http://www.ewubd.edu/</a>)</li><li>7. Independent University, Bangladesh (<a href="http://www.iub.edu.bd/">http://www.iub.edu.bd/</a>)</li><li>8. International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), <a href="http://202.136.7.26/">(http://202.136.7.26/)</a></li><li>9. North South University (<a href="http://www.northsouth.edu/">http://www.northsouth.edu/</a>)</li><li>10. SAARC Agricultural Information Center (<a href="http://www.saic-dhaka.org/">http://www.saic-dhaka.org/</a>)</li></ol>
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## **FINDINGS**

The first e-journal subscriber in Bangladesh is the Library and Information Service Unit (LISU) of International Center for Diarrhial Disease Research, Bangladesh (ICDDR, B) that started subscription in 1994. Subsequently, the leading private universities namely North South University Library, Independent University, Bangladesh Library, East West University Library, American International University, Bangladesh Library came forward to subscribe e-journals.

Table 2 shows that the ten library institutions or organisations that subscribe to e-journals in this study have sufficient computers, but seven (7) libraries have dedicated computers only for use in the library and three (3) libraries do not have enough dedicated computers to access to e-journals in the library. The speed of Internet connection in four (4) libraries is 512/256 KBPS and that of six (6) libraries is 256/128 KBPS. The libraries indicated that they do not have dedicated speed allocation for access to e-journals in the libraries. The data reveals that two (2) libraries are not providing printing facilities, which the authors see as an essential service because users prefer reading hard copy of articles to reading on screen. Sometimes the cost of printing is expensive and users are interested to write the downloaded articles into CD-ROM for further use at their convenience. However, it was found that five (5) libraries are not offering CD-writing facilities.

Table 3 indicates that only four (4) libraries, on their own initiatives, are offering training programmes for staff. The libraries indicated that no e-journals publishers are giving training facilities for the information professionals. It is also observed that only two (2) libraries are organizing formal orientation programme “on how to use and access to e-journals” on regular interval. Although nine (9) library organisation or institutions have web sites, five (5) of them do not provide links to e-journals and eight (8) do provide alphabetical listings of e-journals in their web sites. No library maintains a catalogue for e-journals. Only the British Council Library provides remote access to e-journals.

Table 4 shows that seven (7) of the surveyed libraries subscribe AGORA and HINARI, five (5) have JSTOR, four (4) subscribe to Oxford University Press and ACM package, two (2) use IEEE and only one (1) subscribes Emerald, ProQuest, EBSCOhost, ASLIB, EOLSS and Blackwell. E-journals should be accessed by registered IP and password, but it was found that many journals publishers are not giving access through IP address, and this is not convenient for the users. It was also found that no e-journals are available in CD-ROM/DVD version, therefore if the

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libraries discontinue to subscribe, they will have no access to back issues after the end of the subscription period.

Table 2: Infrastructural Facilities

Library	No of Computers in the organisation	No. of Computer with Internet connection	No of Computer in the library	Type of Internet connection	Speed of Internet connection (Kbps)	Dedicated speed for library's commuter	Printing facilities	CD-write facilities
LISU (ICDDR, B)	500	15	15	Own VSAT	512/256	No	Yes	No
BANSDOC Library	42	40	05	Broad-band	256/128	No	Yes	Yes
British Council Library, Dhaka	125	123	22	Broad-band	256/128	No	Yes	No
North South University Library	567	250	39	Broad-band	512/256	No	Yes	Yes
American International University Library	700	700	04	Own VSAT	512/256	No	No	Yes
East-West University Library	460	460	16	Own VSAT	512/256	No	Yes	Yes
Independent University, Bangladesh Library	700	700	31	Broad-band	256/128	No	Yes	Yes
BRAC University Library	300	300	40	Broad-band	256/128	No	Yes	No
SAIC Library	30	30	01	Broad-band	256/128	No	No	No
Archer K. Blood American Center Library, Dhaka	16	16	16	Broad-band	256/128	No	Yes	No

Table 3: Orientation, Training and Links to E-Journals

Library	Staff orientation	User orientation	Website (Local Intranet)	Website (Internet)	Links to E-journals in the library's site	Remote Access to E-journals	Catalogue of E-journals	A-Z List of E-journals
LISU (ICDDR, B)	Yes	Yes	Yes	Yes	Yes	No	No	Yes
BANSDOC Library	No	No	Yes	Yes	No	No	No	No
British Council Library, Dhaka	No	Yes	Yes	Yes	Yes	Yes	No	No
North South University Library	Yes	No	Yes	Yes	Yes	No	No	No
American International University Library	No	No	No	Yes	No	No	No	No
East-West University Library	No	No	Yes	Yes	No	No	No	No
Independent University, Bangladesh Library	Yes	No	Yes	Yes	Yes	No	No	Yes
BRAC University Library	No	No	Yes	Yes	No	No	No	No
SAIC Library	No	No	No	No	No	No	No	No
Archer K. Blood American Center Library, Dhaka	Yes	No	Yes	Yes	No	No	No	No

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Table 3: Subscription Types, Policy and Access to E-Journals

Journal / Database	No. of library subscribing	Subscription Types			Access to E-journals			Subscription policy	
		Online Only	Print +Online	Free with print	IP Only	Pass-word only	IP + Pass-word	Only for 1 year	1 year with CD/DVD
Emerald	1	√	×	×	×	×	√	√	×
JSTOR	5	√	×	×	×	×	√	√	×
ProQuest	1	√	×	×	√	×	×	√	×
EBSCOhost	1	√	×	×	√	×	×	×	×
AGORA	7	√	×	×	×	√	×	√	×
HIRARI	7	√	×	×	×	√	×	√	×
ASLIB	1	√	×	×				√	×
Oxford University Press	4	√	×	×	√	×	×	√	×
ACM package	4	√	×	×	√	×	×	√	×
IEEE	2	√	×	×	×	√	×	√	×
EOLSS	1	√	×	×	√	×	×	√	×
J. of Finance (Blackwell)	1	×	×	√	×	×	√	√	×
J. of Small Business Management (Blackwell)	1	×	×	√	×	×	√	√	×

**WHY E-JOURNALS IN BANGLADESH?**

E-journals offer many advantages: they add enormous resources to the collection; save libraries shelving space; satisfy users' expectations for user friendly, convenient and remote access; and provide powerful searching tools and features linking to more resources (Abdulla, 2005). Libraries in Bangladesh are also subscribing to e-journals and the benefits of e-journals that were determined by the survey, observation and practical experience in this study, are discussed as below:

- a) **Low cost:** Bangladesh is a developing country where cost is always an important and a considerable factor. Usually print journals are very costly. Most of the libraries in Bangladesh cannot afford to subscribe print journals (foreign) or have to be very selective in their choice of subscription. Due to the low cost of e-journals (especially bundle of journal), many libraries take the opportunity to subscribe to them. Also some e-journal publishers give discount price for the developing countries, which is usually not available for equivalent print.
- b) **No more missing:** In print journal subscription, missing is really a big problem in Bangladesh. In many cases, publishers send the hard copy through postal service, which sometimes is not reached to the library. So this creates problem for both the subscriber (library) and the supplier (publisher). The hard copy of a journal can be missed or lost by theft from the library anytime. It is also a big problem as no library maintains standard security system (such as Radio Frequency Identification and other automated security systems) that can prevent the unauthorized from taking the journal out from the library. But in case of e-journals, such problems will not exist.
- c) **Timely reached:** So often a print journal does not reach on time to library subscribers in Bangladesh. On the other hand, an e-journal reaches instantly to the user anywhere in the country if the Internet connection is available.
- d) **Multiple Access:** In an institutional library multiple accesses to the resource are necessary. If a print journal is issued to a user, then no one else can access the journal in time. However, e-journals provide multiple access facility to users. This is a unique benefit of e-journal.
- e) **Wide search option:** Indexing of journal articles is very essential. Unfortunately most of the libraries in Bangladesh do not have index of journal articles. So finding an article is laborious and it takes long time. On the other hand, e-journals provide wide search option (by author, title, key words, etc), so users can easily and quickly search and retrieve the desired articles.
- f) **Remote access:** Remote access is one of the main features of e-journals. In Bangladesh where library opening hours is very limited, remote access to library resources can be good solution to meet the users need. Due to this, e-journals can be a good replacement of print journals.
- g) **Save physical space and human resources:** E-journal saves shelving space in a library because it requires no space, thus it does not require human resources for shelving and rectification.



## **BARRIERS TO E-JOURNAL SUBSCRIPTIONS IN BANGLADESH**

E-journals have some demerits against print journals. Here the authors have highlighted only the main problems and barriers, which are applicable to their country setting or may be common to other developing countries.

- a) Low bandwidth: Bangladesh has already been connected to the Information Super Highway through submarine fibre optic cables in 21 May 2006. However till date the benefits of the fibre optic cables have not reached to the users level. The current bandwidth is not sufficient for the Internet dependent works in the country.
- b) Lack of computers and computer user: Computers are becoming popular in Bangladesh, but the country is still lack of computers and computer literate users. The number of computers in the country is about 0.5 million (Khan, 2004). Many senior researchers and educationists do not know how to operate the computer. This has led to them being not interested in using e-journals in the libraries.
- c) Inadequate telephone connectivity: There are currently 750, 000 fixed lines operated by Bangladesh Telephone and Telegraph Board (BTTB) with a projected demand for fixed-line service over the next five years of about 3.5 million (Reddi and Sinha, 2003). But as for Internet connection, most parts of the country depend on dial up connection where having a fixed telephone line is essential.
- d) Lack of Internet connectivity and users: The country has only 2.43 million Internet users (Islam and Rahman, 2006). Even many organisations and libraries do not have any Internet connection, which is a vital barrier for e-journals subscription in Bangladesh.
- e) Uninterruptible Internet connection: Bangladesh's dial up and broadband connection are frequently interrupted due to technological disruptions of Internet service provider and so often cables are cut down by the theft of wires.
- f) High cost for infrastructure development: Although e-journals are less expensive than print journal, the former require good infrastructure such as adequate number of workstations with Internet connection, high bandwidth, laser printers, dedicated web servers, Uninterruptible Power Supply (UPS). Many libraries cannot afford the high cost of this equipment.
- g) No access after subscription period: It was found in the study that the e-journal publishers/suppliers do not give access to the e-journals after the end of the subscription period, or do not provide the CD-ROM/DVD version of the journal.

- h) Need continuous training and orientation: Prospective users of e-journals need orientation and training programmes frequently and it is the responsibility of the library to organise training programmes that require special resources person and proper planning.
- i) Different search techniques: Search syntax and techniques are different from one publisher to another. So it is complicated for the users to capture different search techniques of different journals and to know which search techniques are applicable for a particular e-journal site.
- j) Bound to subscribe to unnecessary journals: When a library subscribes bundle of journals such as Emerald and JSTOR, usually they are bound to subscribe the entire journal in the sites. In many cases, some journals or some articles of the journals are not relevant to the user of the library or the organisation. In Bangladesh so far, private universities are the main subscribers of e-journals and most of these universities offer only job-oriented courses such as Business Administration, Computer Science and Engineering, Pharmacy, Law and Environmental Science, and do not offer basic courses like Physics, Chemistry and Biology. So the universities are paying for some unnecessary journals when they subscribe bundle of journal sites.
- k) Need promotional activities: E-journals need promotional activities such as workshops conducted at regular intervals in order to promote the usage of e-journals. This is not so much required for the print journals. Therefore it is an extra work for the information professionals or the library to promote e-journal to prospective users.

## **PROSPECTS AND FUTURE OF E-JOURNALS IN BANGLADESH**

Bangladesh has 22 public and 54 private universities along with a large number of research institutions where journal is treated as a valuable part of higher education and research work. As mentioned earlier, e-journals have some great advantages, which encourage some leading libraries to subscribe to e-journal. The authors also do believe that the subscription and use of e-journals in the libraries of Bangladesh will be increased.

Telecommunications facilities are developing rapidly in Bangladesh especially after the approval of the government for the private sector investment. Currently four mobile communication companies and 19 land phone operators are working in this sector. It is expected the telecommunication infrastructure will go mass

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expansion and development, as a result, this enables the libraries and information institutions in the country to subscribe to e-journals efficiently. Nevertheless, all 64 districts and 35% of upazillas (sub districts) of Bangladesh have been brought under Internet coverage by BTTB through dial up connection (Khan, 2004). Bangladesh Telegraph and Telephone Board (BTTB) is also providing high-speed Internet connection at 41 districts. It is also encouraging that 50% discount is applicable for the accredited universities, colleges, madrasas (religious institutions), as well as for training and research institutions.

It has been mentioned earlier that Bangladesh is connected with international submarine fiber optic cable line, named South East Asia- Middle East-Western Europe-4 (SEA-ME-WE-4) cable system in this year. It is expected that Bangladesh will receive a 10-gigabyte bandwidth and the cost for Internet connections will decrease which will encourage more libraries or organisations to take Internet connection. Ultimately, one of the main barriers for subscribing e-journal will be solved.

The authors do hope and believe that the University Grants Commission (UGC) of Bangladesh will come forward to make consortia among the public universities for subscribing e-journals. They will also provide financial and technological support to the public universities so that the universities can increase the quality of education and research work in their respective institutions.

### **CONSORTIA OR BUYING CLUBS FOR E-JOURNAL SUBSCRIPTION IN BANGLADESH**

Consortia or buying clubs have been established in most of the countries in the world to reduce the subscription cost of e-journals and to obtain some extra benefits from the publishers. In Bangladesh, not enough libraries are subscribing to e-journals in order to form a consortium. However, the Independent University, Bangladesh took initiative to form a consortium among the private universities in recent past, but no library has shown interest in establishing a consortium. If a consortium for e-journals in Bangladesh is established, the following benefits will be gained:

- Most of the E-journal publishers offer special price for the consortia. So obviously, when a consortium is established by a good number of libraries, the subscription fee for a single library must be lower than the regular price.

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- More e-journals can be subscribed at the same cost.
- It will help to establish resource sharing among the libraries.
- Training facilities from the vendors or publishers utilizes the resources will be available.

It is proposed that a consortium for e-journal subscription involving the following organisations be established:

- a) All the public universities libraries of Bangladesh through the University Grants Commission of Bangladesh;
- b) All the private universities who are offering similar courses or the same degrees; and
- c) Research organisations working in similar fields.

## **SUGGESTIONS AND RECOMMENDATIONS**

Electronic journals open up many exciting opportunities and potentials for research and academic libraries. The e-journals have both merits and demerits. Although it will be difficult to overcome every barrier in a short time, the authors have made some recommendations on the basis of the above problems that should take with serious consideration before and after the subscription of e-journals in all libraries and information institutions in Bangladesh.

- a) For an organisational subscription where number of users and e-journals are high, access through IP address should be confirmed. Library should start to subscribe to e-journals after obtaining approval from the e-journals authority to access through its registered IP address.
- b) Before subscription of e-journals, library should ensure information and communication technology infrastructure such as high speed Internet connection, good number of workstations with Internet connection, laser printer, UPS, CD-writer, library's own website and dedicated web servers.
- c) Library should provide remote and convenient access at anytime and from anywhere of the country where Internet is available. There is a number of software used all over the world to facilitate remote access to the user. Library should use such software to offer remote access opportunity to its user, which will encourage e-journals use.
- d) Before and after the e-journals subscription, survey on users should be done at regular interval. Library should also receive information and suggestions from other libraries, which have already subscribed to the same journal.

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- e) Consortia or buying clubs should be established among the libraries in Bangladesh, which will not only ensure e-journals subscription at reduced a cost, but also give a suitable platform to share knowledge, conduct joint survey, and training programme.
- f) Based on authors' experience, it was found that students in Bangladesh rely solely on books even at the university level. Faculty members should encourage students to read more journals, which will not only increase use of e-journals but also augment the standard of education.
- g) According to copyright act, printing and CD-writing facilities at free of cost or reasonable price should be ensured for the best use of e-journal.
- h) Library should organize training programme for the information professionals so that they can know about different search interface, latest changes of the journals site and develop sophisticated searching and retrieval skills or techniques.
- i) Before subscription to e-journals, policy and procedure should be prepared and an expert should supervise the whole process.
- j) Bandwidth of Internet connection must be increased and if it is not possible, dedicated speed should be allocated for access to e-journals.
- k) It was found that most of the academic libraries depend on computer lab to give access to e-journals where the reading environment is very poor. So, it will be better if library can provide more computer workstations with Internet connection for access to e-journals.
- l) Every library should have an own web site or the organisational web page. In the case of an organisational web page, the library's site must be included at the index page. For a quick and easy access, library should provide various types of e-journals lists, such as publisher, subject, and title (A-Z) list on the web page.
- m) It is highly recommended that libraries maintain a catalogue of e-journals and the links should be provided to access to e-journals.
- n) Every library that has Internet connection should select the most relevant free e-journals and should maintain a list on their websites.

### **CONCLUSION**

E-journals, being relatively a new trend in the information world has generated a lot of debate over its access, storage, preservation and copyright (Manjunath and Pujar, 2001). Due to the infrastructural problem in the field of library and information sector in Bangladesh, use and access to e-journals are very limited. But it is expected

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that e-journals will become more popular when each and every part of the country is connected with the world's Information Super Highway. So libraries that are already subscribing and those that have not yet subscribed to e-journals but are planning to do so, should organize and manage e-journals properly so that their users can get the maximum benefit from these resources. By establishing a consortium or buying club, libraries can reduce subscription costs and obtain other related benefits. Libraries cannot ignore the e-journals, as it has now become a reality that many journals are now being published in an electronic format only.

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