E-Journals: An Effective Electronic Information Resource

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ABSTRACT

Information and Communication Technology (ICT) revolution is considered to be one of the marvels of the 20th century. The information has changed from print to digital form. The successful operation of any library depends to a large extent on the choice of library collection. In the current era of information technology, libraries and information centers are bound to use electronic information resources. The finest outcome of the information revolution is E-journals, which changes our library in every aspect. E-journals are tremendously valuable electronic information resources and have become the largest and fastest growing segment of the digital collections for most libraries. Now, E-journals play an important role in any library or information centre. E-journals form a large part of the collection of any library. This paper gives a brief introduction of E-journals, advantages and disadvantages of E-journals.

Keywords: Library, ICT, Electronic journal, E-journals, Consortia.

INTRODUCTION

We are living in the electronic age. As the information technologies are changing day-to-day and growing at a tremendous speed, the knowledge society is becoming more complex, competitive and dependent on technological changes and information explosion. The society is gradually becoming digital. Library cannot be exception to this social transformation. The library system is replacing form of traditional library to digital and electronic library. Electronic information has gradually become a major resource in every type of library. Electronic information resource is a type of E-resource which can be access from anywhere, anytime without time and geographical limit. Some major types or electronic information resources are: - E-journals, E-books, ETDs, E-Databases, and CD-ROMs etc.

Journals in a library play vital role in distributing nascent facts and primary information to users. Since 17th century journals has been the backbone of scholarly communication. Tenopir and King (1998) found ample evidence that journals are not only widely read, but are extremely useful and important to academic community, whether it is teaching, research, administration or other activities. The finest outcome of the information revolution is E-journals, which changes our library in every aspect. E-journals have become an important part of today's library. The advancement of E-journals during recent years has given libraries a powerful resource to support teaching and learning. E-journals have a special place among the electronic information resources as they are in great demand in all type of libraries. Any journal that is available on the internet can be called an 'E-journal'. Nowadays almost all libraries are replacing print journal subscriptions with an electronic service. Internet is the gateway for libraries and information centers to enter the electronic information era and provides the information, generated by different organizations, institutions, research centers and individuals all over the world. Today a wide range of E-journals are available on Internet, which we can access in our library and information centers and provides the information to our users. Academic community has understood the power of E-journals and seems to have accepted the new medium for communicating research ideas and results among

fellow professionals. This service has a vast potential of providing a quality service. The demand for E-journals has created the necessity for the librarians to change their role of keeper of the library documents to that of a navigator of information (Birdie and Alladi, 2002).

E-Journals

Before coming to the definition of E-journal or electronic journal, we have to consider first the definition of a journal.

According to Webster's Third New International Dictionary of English Language;

"Journal is a periodical publication, especially dealing with matters of current interests; often used of official or semi official publications of special group."

There is no universally accepted definition of E-journal. By simple definition, E-journals are any journal or serial publication available in electronic format. E-journals may also be defined as those, where the text is read on and/or printed from the end user's computer rather than as a print on paper. The term electronic journal or E-journal referred to journals and newsletters that are prepared and distributed electronically and they may or may not have a print counterpart. The experts in the field give the definitions on the basis of production, distribution etc. Some more definitions of E-journals are as following:-

➤ *According to ALA Glossary, 1983 "A journal is a periodical especially one containing scholarly article and/or disseminating current information on research and development in a particular subject field. If this task is done by electronic media then it may call E-journal. If the content of journal produced, stored and scanned in a database and then retrieved online then same is called online journals."*

➤ *McMillan (1991) defines an electronic journal as "any serials produced, published and distributed via electronic network such as Bitnet or Internet."*

➤ *Ashcroft and Langdon (1999) defines an electronic journal as " A journal, including indexing and abstracting services, provided by any electronic means, e.g. Internet,*

CD-ROM, although not necessarily exclusively by electronic means."

➤ *According to Joes and Pacios (2005) "E-Journals are journals whose full text is available on the web, including both those that began in paper print form but later incorporated the electronic version and those which were in electronic format from the beginning".*

The term e-journal is very ambiguous in nature and as such various terms like 'Virtual Journal', 'The Paperless Journal', 'E-series', 'E-Publishing', 'Web Journals', 'Electronic Periodicals' and the 'Online Journal' were coined, before the term electronic journal and e-journal came into light. E-journals have been in existence for so many years. E-journals appeared in the 1970s but gradually got popularized in the 1990s. By 2000, E-journals became a normal part of the cataloguing workflow, yet new means of access were also being developed. E-journals are proliferating and have become the largest and fastest growing segment of the libraries. In an ideal world, the E-journal seems to be the answer to many of the problem associated with the traditional print format. E-journal enables immediate access to articles by eliminating the lengthy publication and distribution process associated with paper journals. Consulting e-journals is faster than their print counterparts, especially when searching retrospectively. Information seeking, information retrieval, information management and communication of information are all affected by E-journals. Some E-journals are freely available while others have charging mechanisms of different types. Whalley (1996) has made a distinction between a 'pure' electronic journal, which is a journal that has been set up as a totally electronic, peer-reviewed journal, and a 'hybrid' electronic journal that has versions both in electronic and paper formats.

According to Sreekumar and Sunitha (2009) E-journals have following features:

- E-journals allow remote access;

- E-journals can be used simultaneously by multiple users;

- Electronic journal provide timely access and at the rate of 24X7X365 formula;

- E-journals save physical storage space;

- E-journals can be saved digitally;

- They can support multimedia information;

- E-journals facilitate speedy searching; and

- E-journals accommodate unique features (e.g. links to related items, reference linking).

Print *vs.* E-Journals

The impact of information technology has changed the way that information is stored and disseminated and also threatened the traditional approaches to the library and its services. E-journal is one of the products of information technology. Libraries have traditionally collected printed journals to provide access to users. The arrival of electronic journals has a number of significant impacts on the use of print resources and traditional libraries. A 2002 study by Sathe, Grady and Giuse examining the effect of journal format on the research process; found that research scholars and students preferred electronic journals, while faculty members preferred to use of print journals. The preference of print journals over E-journals and vice-versa may vary according to the needs of the users. There are two schools of thought on the subject of E-Journals *vs.* Print Journals. The first holds the thought that print journals are far superior to E-journals and it will be very difficult to replace print formats. On the other hand, according to second school E-journals will soon replace print format and in a short time the academic community will be fully dependent on electronic format.

E-journals and Print journals have their unique advantages and limitations as they satisfy the information needs of users in different circumstances. Each plays a different role and each serves the need of users in different ways. Although in future, both electronic and print format would facilitate users as a good combination. In coming days, both versions would gain their own importance; for specific information users would prefer electronic format and for deep knowledge and descriptive information users would prefer print format.

Advantages of E-Journals: - Some of the major advantages of e-journals are following:-

1. E-journals enhance the speed of communication.

2. They are easily accessible even from an individual's desktop.

3. E-journals are time saving as well as cost saving.

4. Thorough E-journals authors and readers get closer.

5. E-journals are independent of space and time limit.

6. E-journals are easily searchable as they support different searching capabilities.

7. E-journals being able to evolve quickly as they are not tied to a format, printer or distribution network.

8. E-journals reach in the hands of the users soon after their publications which is not possible with print journals.

9. E-journals provide latest and pin-pointed information about field of research.

10. Problem of rare volumes and out of stock issue/volume of journals can be solved.

11. E-journals are available with multimedia facilities.

12. No theft or mutilation problems occur with E-journals.

Disadvantages of E-Journals: - Following are the disadvantages of E-journals:-

1. E-journals need the availability of electricity, computer, internet, appropriate hardware/software etc.

2. It is very uncomfortable for users to read E-journals online.

3. Even though it is becoming cost effective, but initial investment is high.

4. Authentication is another big issue with E-journals.

5. There is a possibility of data manipulation by unauthorized persons.

6. Coverage may not be as complete as in print format.

7. E-journals may not physically present in the library.

8. E-journals are often not included in indexing and abstracting services.

9. Copyright problem may occur with E-journals.

10. Users with less ICT skills may find it difficult to use E-Journals.

11. Proper training to end users is required.

Categories of E-Journals: -

E-journals may be categorized in three groups, which are following:

❖ Online Database- Online databases provide database access to a large number of bibliographic and full-text journals. Full text databases contain the whole content of an article such as citation, information, text, illustrations, diagrams and tables. While, bibliographic databases only contain citation information of an article such as author title, journal title, publication date and page numbers. These are paid E-journals that are available on 'cost per access' basis via online database. There are many E-journals portals which provide access to various different E-journals ranging from bibliographic data to full text retrieval.

❖ Networked E-journals- These type of E-journals are available over networks, such as Internet or any other commercial networks. These types of journals are also called classic E-journals. Originally they were distributed via e-mail but now are available on the web and only alerts of new issues are distributed by e-mail. Access to this category of E-journal is free of cost.

❖ CD-ROM Journals- CD-ROM journals are far more economical than online journals, because once they are acquired; the library can provide unlimited access to numerous users (Taubes 1996). CD-ROM journals may be available in bibliographical or full text format. Libraries have often subscribed to journals both in print and in CD-ROMs. CD-ROM versions can be distributed in a similar manner to printed journals.

Procedures to Access E-Journals: -

Access to E-journals may be free, exclusive subscription, selective access and consortia access. On this basis following procedures of accessing E-journals have emerged:-

A) Remote Access: - Remote access is the ability to get access to a computer or a network from a remote distance. This allows users to work offsite, such as at home or in another location, while still having access to a distant computer or network. Remote access can be set up using a LAN, WAN etc. so that resources and systems can be accessed remotely. In remote access procedure, publishers host their journals at their Website. When any library or information centre subscribes to the E-journals, it is provided right of access through one of the following or both methods-

- User ID and Password – A user ID and password are provided to the subscriber, which can be used from any user terminal in the library.

- IP Enabled (Intranet) – In this process the publisher's server site will recognize and validate the IP address of the subscriber's Intranet server when each time a user logs into the publisher's website of a subscribed journal.

- Combined – Some publishers provides both kind of services to users some terms and conditions.

B) On Site Access: - Publishers delivers the E-journals to subscribers through CD-ROM or through their Websites. It offers wider and better bandwidth for access than access through Internet. This process is more suitable because it is more secure to maintain the journal at its end, as it has paid for the journal and is used to the ownership concept.

C) Database Access: - The bibliographic databases interface is most popular among users for searching and locating information. Under this model articles reside in a centralized database maintained by the publisher and subscribers are given permission to access the database to locate and download articles. This access process would have and expiration date that corresponds with the length of the subscription.

E-Journals: A Consortia Approach:-

At present the more accepted system of resource sharing is called library consortia. With the advent of electronic information the concept of consortia has been mooted mainly for the acquisition of E-journals (Chander and Gupta, 2015). Consortium is a Latin word, meaning "partnership, association or society". It provides an opportunity to maximize cooperative collection building and for resources sharing over the long term. According to Reitz (2014) a consortia may be defined as:-

"An association of independent libraries and/or library system established by formal agreement, usually for the purpose of resource sharing. Membership may be restricted to a specific geographical region, type of library, or subject specialization."

The primary aim of the library consortia is to encourage and develop interlibrary communication, individual collection building, education, research progress etc. The

consortium is needed for libraries because of information explosion, diversity of user needs, limited budget and lack of self sufficiency. Consortium is cooperative venture to provide access to a wide range of e resources at least cost. The consortia are becoming popular in every country in such a way that they are being formed on local basis, regional basis and on subject basis also. Every library over the globe is coming forward to take advantage of consortia to provide easy and faster access to plenty of resources for its scholarly community. The proliferation of electronic information resources in the networked society has resulted in development of 'shared subscription' or 'consortium based subscription' to journal everywhere in the world.

Consortia in India are still a new concept that requires proper guidelines and methodologies. Library resource sharing in India signified in 1980s with advent of various library networks but at national level in the domain of higher education it was started with establishment of Information and Library Network Center (INFLIBNET). Some of the major consortia available in India are:-

- o INDEST (Indian National Digital Library of Engineering, Science and Technology).
- o CSIR (Council of Scientific and Industrial Research).
- o FORSA (Forum for Resource Sharing in Astronomy and Astrophysics).
- o ICMR (Indian Council of Medical Research).
- o HELNET (Health Science Library and Information and Information Network).
- o IIM Consortia (Indian Institute of Management).
- o ICICI Knowledge Park (Industrial Credit and Investment Corporation of India).
- o UGC- INOFNET.

There are various types of consortia available; for e.g.

- o <u>Open Consortia:</u> - This type of library consortia is very flexible. Here members of consortia can join and leave the consortium at any point of time. For ex, INDEST.
- o <u>Closed Group Consortia:</u> - This type of consortia is within defined group either by affiliation and collaboration, among them. For ex, CSIR.

- o <u>National Consortia:</u> - National consortia provide national level licensing of products. For ex, INDEST as a national consortia in India.
- o <u>International Consortia:</u> - This type of consortia may form either by individual libraries or by bringing different national consortia together. Here libraries belonging to different countries participate. Such federations are also known as Meta Consortia. For ex, International coalition of library consortia.
- o <u>Centrally Funded Model:</u> - In this model, consortia will solely depend on the parent body. For ex, UGC-INFONET.
- o <u>Shared Budget Model Consortia:</u> - In this model, the participating libraries take the lead and form the consortium. For ex, IIM Consortia.

Conclusion

The information revolution has brought about major changes in almost all the sectors of day to day life since the last decade. The new technologies have not only transformed the shape of modern libraries but created very many exciting possibilities and opportunities. The impact of E-journals on academic library collections, services and administration is complex. E-journals constitute an important part of library collection being the most important vehicle for global scholarly communication. E-journals are becoming very popular and are becoming a phenomenon in scholarly communication. E-journals have revolutionized the whole concept of traditional librarianship. The use of E-journals is increasing day by day and every library is rapidly moving towards E-journal collection. Increasing number of E-journals seems to confirm that we are facing a general change in facilitating the services from a library or information centre. Electronic journals open up many exciting opportunities and potentials for academicians as they look it as a tremendously valuable resources and the largest and fastest growing segment of the digital collections. While we can be enthusiastic about the advantages and features of electronic journals, we must also be aware of the problems related to long-term preservation and future accessibility. Librarians need to be able to identify and balance the factors that would make electronic journals a success or failure in their libraries.

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