

# Acquisition of E-Journals in Libraries

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## Abstract

*The purpose of this paper is to bring the audience about the whole process of acquisition of e-journals including management issues and the problems associated with them. This is followed by various e-journals providers such as Academic Press IDEAL, ACS, IOP, RSC, CUP etc. The paper concludes that subscription to electronic formats is increasing day by day but due to their high cost, a substantial number of libraries are not able to do so. A possible remedy to reduce the subscription costs is consortia approach and minimum possible customization of number of journals, keeping in mind the requirement of subscribing library.*

**Keywords:** Acquisition, e-Journals, Libraries

## 1.1 Introduction

E-Journals have increasingly become the focus of Research and Development in recent years. In response to this development, Research and Development Organizations started subscribing e-journals. Academic libraries also could not remain behind. The proliferation of electronic resources, network technology, computer technology and web technology has facilitated this developmental change. The number of quality and refereed electronic journals is growing rapidly and can serve as an adjunct to hard copy or increasingly serve as substitutes.

Electronic resources undoubtedly will keep their pace but are yet to overtake their unstandardized format makes them tedious for libraries to manage. Therefore, in practice many issues are still remaining unsorted from the point of view of management of technological, sociological, legal issues. The issues cover wide range of aspects like acquisition, access, restriction, copyright, preservation, software and the user interface.

E-Journals acquisition cannot be like the printed journals. Electronically designed content delivery via web, LAN/WAN, wireless networks have crossed earlier barriers of time, speed, and have provided easy and smooth access. Predefined procedures and policies which were used for print, or print along with e-form apply to e-formats. These forms need to be handled and addressed separately. The policies and procedures for e-journal acquisition, licensing, negotiations, order/receipts, and control of serials on CD-ROMs, via web, need to be formulated so that effective organization and management takes place. (Sahoo, 2004).

## **1.2 Selection and Acquisition of E-Journals**

Selection is one of among the premier collection development functions. It can mean different things in different contexts. Free and fee-based journal, it could mean deciding to purchase a subscription or pay a licensing fee for access rights. Selection could also mean deciding to provide access to an electronic journal through a library's gopher or World Wide Web site.

As far as the library staff regarding the selection of e-journals is concerned, two theoretical approaches satisfy this issue: one based on format; the other based on subject. Under the format based approach, electronic journals would be selected by separate staff with expertise

in automation and electronic resources rather than the similar staff who select traditional materials. In contrast, under the subject based approach selection of electronic journals would be done by the same collection development staff that select traditional resources, the history bibliographer would select e-journals in history. Physics e-journals would be selected by the physics subject specialist, and so on. Indeed, a library can use a mixed model incorporating selection by both subject and format specialists. The three stages process unlike that of traditional journals should has been taken into consideration while selecting e-journals. (Raza & Eqbal, 2003)

Identifying e-journals can be difficult because there is not good bibliographic control of what is available on Internet. A useful tool is the Directory of Electronic Journals, Newsletters and Academic Discussion Lists.

For the selection of e-journals, along with following important issues need to be taken into account:

- Quality of product
- Service Concern

In addition, the modes of access, pricing, preservation, licensing, etc. assume great importance in the selection process. (Sahoo, 2004)

### **1.2.1 Procedure of Acquisition**

An MIT subgroup on electronic journals, appointed in 1995, identified five specific acquisition functions for fee-based, later generation electronic journals:

- i. Determining the price;
- ii. Negotiation with the vendor;

- iii. Completing the license agreement;
- iv. Encumbering the fund; and
- v. Recording the order.

### **1.2.2 Approaches for E-Journal Acquisition**

There are two approaches for acquiring e-journals.

**i. Individual Library Approach:** Every library differs from one another according to its collection, information needs of users, working methods, sources of finance, processing of information etc.

**ii. Consortia Approach:** It is more practical than any other approach towards the subscription of e-journals. It is a marketing strategy of commercial publisher to get continuous longer commitment from a group of libraries for their journals. (Kanadiya & Akbari, 2009)

### **1.3 E-Journal Collection Management Issues**

Management of collection of e-journal raises a new set of issues for libraries, but these issues still fit within the classical theoretical framework of collection development and management. Electronic journals still need to be selected, acquired, catalogued, disseminated and preserved, in radically different ways from traditional journals. The type of collection management issues raised by electronic information resources vary among libraries developing on their individual missions. These issues cannot be addressed in isolation from print resources and libraries need to begin to develop integrated collection policies from print and electronic journal. In this context, the role of collection manager is pivotal in developing policies and structure that will integrate print and electronic media. The skill of collection manager will be to

create collection within balances in best features of print and electronic resources and which make them work together effectively in the interests of the library user. (Nisonger, 1997)

**i. Access**

E-Journals access is not simple. There are many issues which need to be considered: i.e. technology requirements, restricted or unlimited access vice publisher or aggregator, and making library patrons aware of e-journals access. Access management is concerned with the management and deciding policies, guidelines legal and technical solutions. Access management strategies should consider issues of privacy and accountability. (Lynch, 1998)

**ii. Pricing**

The pricing structures of e-journals vary significantly from vendor to vendor and from publisher to publisher. Subscribers or librarians should watch for variations among pricing structure and note that these pricing structures are not static. In contemporary scenario users like access instead of ownership using document delivery service to provide access to set of journals. Another solution is putting together consortia of a library to provide access to set of journals. A third solution is creation and maintenance of electronic archives of journal articles without reference to commercial publishers. (Kushwah, Jambekhar & Ashok, 2002)

**iii. Classification, Cataloguing and Indexing**

Classification and cataloguing of electronic journal has been a point of discussion since its inception. Libraries should be alert to emerging standards for cataloguing of electronic publication. Some authors suggest that libraries should allow paper and electronic form for the

same title resides on the same bibliographic record to facilitate access. In internet there are many sites, which use DDC as a Broad System Ordering (BSO). Some of them are Cyber Dewey: a catalogue for the World Wide Web, available at <http://ivory.in.com/mundie/DDHC/CyberDewey.html>, Internet Resources in Dewy Decimal order with DDC subjects: Mid-continent Public Library available at <http://mcpl.lib.mo.us/dewey.html>.

Attempts are being made to make classification scheme as a tool for automatic classification and indexing. *Scorpion* is one of the projects in this area. It is a project undertaken by OCLC, which will help to build tools for automatic subject recognition based on well known schemes such as DDC. The very concept of facet analysis can be of much help in overcoming some of the problems in indexing or searching the WWW in a reasonably effective way. (Rekha, 2000)

The rapid development in the organization and presentation of e-journals has raised a variety of basic cataloguing questions. Internet services, such as discussion lists and World Wide Web servers has challenged serials librarians to reconsider aspects of the traditional definition of serials, specially with regard to citable issues and their designations. The display of bibliographic information has also become more complex with electronic journals. Often, this information is dispersed over several files, giving cataloguers multiple sources for description that can contain different presentation of bibliographic information. The availability of multiple document formats has generated questions about computer file additions and the number of catalogue records to represent them. Many institutions have also been hesitant to include catalogue records for internet resources because of uncertainty about how to record location and holdings information. (Chad, Marian, Richard & Annelise, 1999)

#### **iv. Metadata**

The wealth of information and the quick access available provides a frustrating dilemma for libraries and information seekers alike. The information is available, but how to find it, to organize it to be found again? This availability of vast sources of e-journals on the net initiated a need to have a tool to organize them, i.e. metadata. Metadata is defined as “data about data includes information about the context of data and the content of data and the control of or over data”. (Pasquinelli, 1997), one example of which is a library catalogue.

The term is generally applied to e-resources and refers to “data” in the broadest sense of datasets, textual information, graphics and anything else that is likely to appear electronically. While the concepts include indexing and cataloguing information, it can go far beyond conventional document representation, such as MARC records. Information about authenticity, availability and accessibility, digital signatures, copyright, reproduction, etc. is also metadata.

#### **v. Number of Issues**

Publisher sometimes fails to make all issue of their journal available electronically, e.g. publisher may publish issues online sporadically or temporarily. The selector should clarify with the publisher the number of issue a particular subscription covers and ensure that no gaps in coverage occur. Only journals that have a significant run of issues should be added to collection. Likewise titles available only temporarily (trial versions for examples) should not be selected.

#### **vi. Training and Support of Staff and Users**

With the number of electronic journals being published and variety of different interface, sophisticated searching and retrieval skills are becoming necessary. People who are versed with

latest development should be appointed in library and existing staff should be trained well so that user will get proper assistance to find out the relevant information.

#### **vii. Archiving**

Archiving is preserving the document for future use of e-journals, is a facility for only right to access and not ownership. Libraries want the assurance that they will retain the right to access volumes of electronic journals for which they have paid even if they cancel their subscription at later date. User authority, audit agency also want to treat electronic journal in the same manner in which they have treated printed journal with regard to making them in the library including the right to borrow and lend via interlibrary loan, etc.

So the question arises, who should be responsible for archiving? There are at least three possibilities. One is that the publishers give commitment for archiving and providing back issues access. This cannot be taken on its face value, as we know many publications have ceased or merged with others. Other aspect is that libraries could do archiving for themselves but the issues of cost of archiving need to be seriously considered in the context of everyday changing technology which keeps the cost going up that no library can afford. The third is forming a shared archiving at national level, regional level and provide access to all members. This relates to forming a consortium for archiving and sharing the equal advantages occurring from the arrangements. (Chad, Marian, Richard & Annelise, 1999)

#### **viii. Licensing**

Publishers are not feeling convenient with copyright law; therefore license agreement came in existence. Licensing agreement that required signatures by both the licensor and licensee appeared in the early 1990 with CD-ROM product continue to be used by publisher as legal

contract prices, limit access, define use, and protect their right. It is a written contract between user and developer of the information product service setting forth the term under which a licensor grant to licensed license.

It describes the authorized uses and users of licensed information are the core of the license agreement. Following important issues should be kept in mind when e-journal licensees in negotiation need with the suppliers:

- Expressly permitted use
- What is the rule if the agreement does not specially deal with a particular use for user?
- Does the agreement provide for all the uses and users that the licensee normally accommodates?
- Whether access is limited or unlimited, open network, stand-alone or simultaneous use?
- Price for site licensing. Number of journals, multiform subscription, prints free access.
- Archiving, downloading, printing, CD-storing etc.
- What is the rule in unforeseen circumstances, such as the identification of a new use or user? (Judith, 1999)

#### **ix. Copyright**

Electronic media presents new challenges to copyright holders. Copyrighted material converted into digital form can be copied perfectly without any damage or dimension in quality of the original. Electronic copyright is an uncertain area but one, where the establishment of any easily understood legal framework is needed in the interests of publishers and library. ISI

Electronic Library project has developed a security and rights management system, which will take care at the client, local and central server level.

The system is using passwords, secure printing through encryption and water marks and guaranteed authenticity with the use of digital signatures.

In India, *the information Technology Act, 2008* is providing legal recognition for the transactions carried out by means of electronic data interchange and other means of electronic communication, commonly referred to as "Electronic Commerce", which involve the use of alternatives to paper based methods of communication and storage of information , to facilitate electronic filings of documents with the Government agencies and further to amend the Indian Penal Code, Indian Evidence Act, 1872, The Bankers' Books Evidence Act, 1891, and the Reserve Bank of India Act, 1934 and for matters connected therewith or incidental thereto.

(IT Act, 2008)

#### **x. E-Journals Inventory/Database/Catalogues**

Maintaining e-journal inventory/database details always helps when any dispute or any matter arises related to journals subscribed by the library. Library and information centres are maintaining inventory for the print form of registers, Kardex, systems or computerized system for the management to monitor receipt, reminder and budget. But e-journal subscription management may need a bit of more awareness and knowledge.

### **1.4 E-Journal Providers**

The e-journal providers on internet are categorized broadly into two types

- i. Publishers who provide full text access of their own journals and
- ii. Aggregators, electronic publishers and subscription agents who provide access to the contents of journals furnished by the publishers. Some e-journals have only text content, but the trend is towards web access to both text and images including 2D and 3D graphics using VRML (Virtual Reality Modeling Language).

Some of the major publishers along with their website addresses are:-

#### **1.4.1 Academic Press IDEAL**

(International Digital Electronic Access Library) contains all 75 Academic Press journals; around 400 New Science publications are publishing in the field of Physical Sciences like Physics, Earth Sciences, Astrophysics and Mathematics. In Biological sciences, the press is a world leader in Botany and Animal Behaviour.

[www.idealibrary.com/](http://www.idealibrary.com/)

[www.academicpress.com/](http://www.academicpress.com/)

#### **1.4.2 American Chemical Society (ACS)**

Since its inception in 1876, ACS provides the worldwide scientific community a comprehensive collection of high quality products and services, which provide practice of the chemical and related sciences. It provides searchable access to about 3 million pages of original chemistry work from way back to 1879. Citation information for articles is available free of charge with "As soon as Published" (ASAP) Alert service. Table of contents (TOC) Alerts for published issues are also available. It gives access to prominent 40 full text e-journals from first

volume. <http://www.pubs.acs.org>

### **1.4.3 Institute of Physics (IOP)**

IOP is a leading international professional body and learned society. The Institute has a worldwide membership of over 36,000 and is a major international player in scientific publishing and electronic dissemination of Physics; promotes Physics via scientific conferences, education and science policy advice. It provides access to 36 full text topmost journals in the area of Physics from their first volume. <http://www.iop.org/EJ>

### **1.4.4 Royal Society of Chemistry (RSC)**

RSC is a professional body for chemists and the learned society for chemistry. It is one of the prominent and influential independent scientific organizations in Britain. It has round about 45,000 members, which include academics, teachers and industrialists. Its educational activities provide information and training for students and teachers. It provides access to 23 full text journals with 6 Databases from 1997 onwards. <http://www.rsc.org>

### **1.4.5 Cambridge University Press (CUP)**

CUP is an Academic publisher in Humanities and Social sciences. It publishes about 1,000 new publications annually and about 400 new science publications in the fields of Physics, Earth Sciences, Astrophysics and Mathematics. It leads in the world in areas like Botany and Animal Behaviour. It provides full text to 72 journals in Life Sciences and Physical Sciences since 1997. <http://www.uk.cambridge.org>

### **1.4.6 Biological Abstracts**

It is known as the key to the world's life science journals as it provides a comprehensive coverage and context sensitive indexing information. It covers index articles from over 4,200 serials from 100 countries every year and offers over 2, 50,000 records from journals worldwide. Atleast 11.3 million archival records are available back to 1969.

#### **1.4.7 Project Muse**

This programme was started by John Hopkins Press. At present it offers over 400 quality journal titles from 100 scholarly publishers particularly in the areas of Social Sciences and the Humanities. Presently the subscriptions are available only to academic and research institutions. It provides access to about 222 full text journals from 1999 onwards.

<http://www.muse.jhu.edu/journals>.

#### **1.4.8 Chemical Abstract Service**

CAS provides pathways to published research in the World's journal and patent literature virtually everything relevant to Chemistry plus a wealth of information in Life Sciences and other disciplines of science back to the beginning of 20<sup>th</sup> century. Since 1907, CAS summarized articles from about 10,000 scientific journals in addition to patents, conference papers related to Chemistry, Life Sciences and other fields. <http://www.cas.org>

#### **1.4.9 American Physical Society (APS)**

It was founded in 1899. It provides high quality service and products to its members and scientific community. All users browse the table of contents for current and previous issues. The

PROLA (Physical Review Online Archive) search engine is freely available to all users. The access to full text articles and online journals is restricted to members only who are provided with username and password. Access is made to 8 Full text journals since 1997. <http://www.aps.org>

#### **1.4.10 Nature Journal**

It publishes original research articles, letters, and brief communications. Among all the multidisciplinary journals, Nature has highest impact factor of 31.434. It has highest number of citations per paper over the last decade (1992-2002) among all multidisciplinary journals. Since 1997 full text access for Nature Weekly is available. <http://www.nature.com>

#### **1.4.11 J-STOR**

It was established as an independent non- profit organization in 1995. It offers both multidisciplinary and discipline specific collections. The total number of participant libraries in JSTOR is 1,941 from different countries. Member universities can access to 319 full text e-journals from vol.1, issue-1 up to last two three years. <http://www.jstor.org>

#### **1.4.12 Ingenta Gateway Portal**

It covers almost all major subjects and has grown to become leading major subjects and has grown to become leading web infomediary since its inception in 1998. It provides access to more than 6,000 full text online publications including about 5,400 online journals to 28 universities. <http://www.ingenta.com>

#### **1.4.13 J-Gate**

It is an electronic gateway to global e-journal literature. It was launched by Informatics India Limited, Bangalore in 2001. J-Gate presently possesses a massive database of journal literature, indexed from more than 21,041 e-journals with links to full text at publisher sites. J-Gate is providing Table of Contents (TOC) from all these E-Journals. J-Gate provides access to 1521 online only journals, which are not available in print. <http://www.jgate.india>

## **Conclusion**

The process of selecting and acquiring e-journals is far more complex and cumbersome than print journals. It requires careful review and analysis of many factors such as licensing agreements, vendor aggregator package, consortia package or single library package, print plus e-access, electronic access only and content coverage.

Libraries are facing dual problems of increasing costs and the desire to adopt the new and ever changing technologies. Cost of equipment, training of staff and users, ease of access and time spent in updating the software etc. have to be taken into account while adopting the new technology.

Though subscription to electronic formats is day by day increasing but due to their high cost, a substantial number of libraries are not able to do so. A possible solution to reduce the subscription costs is consortia approach and minimum possible customization of number of journals keeping in mind the requirement of subscribing library.

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