

MANAGEMENT OF E-RESOURCES IN THE ACADEMIC LIBRARY: POLICIES, ISSUES AND CHALLENGES

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Abstract: *The invention of the World Wide Web in 1991 has profoundly changed the way we access information. As such, the library environment has undergone a rapid changes leading to new generation of libraries with an emphasis on e-resources. Moreover, as the popularity of e-resources increases, the librarians and staff are also concerned about e-resources, their methods accessing, evaluation, selection, organization etc. The present paper is an aim to know how to manage e-resources in the modern LIS for better digital information services and challenges facing with e-resources.*

Keywords : E-resources, Electronic libraries, Consortia, Information Technology.

1. INTRODUCTION

The Internet is changing the way we live and do our business. Some researchers and practitioners believe that business, technology and society in general are in a true “Digital Renaissance”. The advent of IT has made a clear and pervasive impact in almost every area of library services. Over the past few years, libraries and information centers have been greatly affected by IT, and the changes is still accelerating in this era. IT is now able to create:

(i) new products and processes that can be used independently, customized information packages, home information products, personals computers and reprographic equipments (ii) external dependents, database online information system (iii) cooperative library information networks and (iv) electronic information processing system such as the electronic book. IT has been able to abridge time and space dimension in communication. In order to cope with the present development in IT, modern libraries are now adopting various electronic resources for its collection developments to fulfill the requirements of different users in a better way. However to achieve the goals of an ideal information system there is a need to select, evaluate and organize the e-resources in the best possible way as to provide maximum ease, both to the users and the staff for its access and retrieve at all times.

2. AIMS AND OBJECTIVES OF E-RESOURCE MANAGEMENT

The main aim of the e-resource management is to explore the challenges and issues arising in purchasing and managing the e-journals in the academic libraries and the possible ways and means to purchase and maintaining them in such a way that the e-resources should be accessible for use by future generations with in the budget of the academic libraries.

Following are some of the objectives of consortia based purchase of e-journals and its management in academic libraries:

1. Libraries can solve the ongoing Serials crisis and to share the resources among libraries.

2. The main objective is to make awareness among the academicians about the on-line availability of e-journals through intra-net, internet and www.
3. Libraries can provide better information service regarding the various e-journal retrieval facilities available in India through consortium.
4. The collection of digital documents can be maintained in academic libraries.
5. Consortia purchasing offers for the single library the opportunity to get access to more journals than they currently have subscriptions to, thus eliminating the continuous cancellation operations.
6. For the consortia members -the specific group of libraries- it offers reduced costs in the inter- institutional document delivery processes for specific journals

3. E-RESOURCES

According to the Dictionary of Library and information Science, the electronic resources may be defined in the following way:

“Materials consisting of data and /or computer program(s) encoded for reading and manipulation by a computer by the user of a peripheral device directly connected to the computer or remotely via a network such as the internet”

E-resources are those electronic products that delivers a collection of data, be it text referring to full text basis, e-journals, image collection, other multimedia products and numerical, graphical or time based, as a commercially available today that has been published with an aim to being marketed. These may be delivered on CD-ROM/DVD, on tap via the Internet and so on.

According to Barker, there are three types of documents used in digital resources. (a) Static: Static are the most basic, they contain fixed information and never change their form (such as traditional online data)

(b) Dynamic: Dynamic documents also contain fixed information but also able to change their outward form, the way through which embedded material is presented to users (such as multimedia CD-ROMs/DVDs).

(c) Living: Living documents are able to change both their form (outward appearance) and this embedded information available on the web.

4. WHY TO MOVE FOR E-RESOURCES

Electronic publishing has open up to new era of communications and information sharing. It creates and provides common platform for users as well as authors and publishers. Academic libraries of all kinds have been spending larger and larger shares of their budgets to improve services in a variety of ways. Librarians are trying to meet the needs of the user and identify new resources like e-resources. There are so many reasons for accessing for electronic resources:

(a) **Easily searchable:** Most e-resources come equipped with powerful search-and-retrieval tools that allow users to perform literature searches more effectively and efficiently. Some documents are more useful in electronic form due to enhanced search ability, e.g. in allowing statistical calculations to be affected.

(b) **Speed:** Articles can be put on the Web as soon as they are ready, without having to wait maybe months for a space in a journal issue. The American Chemical Society put articles on their Web site "as soon as publishable" which can be up to 11 weeks before print. This all means that the information is much more up-to-date than can be achieved with paper.

(c) **Accessible:** Since most relevant e-resources are now available through the web, users can have desktop access to them 24 hours a day. And also the users can navigate directly from indexing databases to the full text of an article and can even follow further links from there. electronic format is sometimes the only alternative so it represents a net increase in the information base.

(d) **Interactive :** The rapid turnaround time means that articles can be read, commented on by the journal's readers, and amended much more quickly than can be done with print. The ease with which e-mail can be sent, or forms filled in means that there can be much greater feedback through the Web.

(e) **Storage:** Advantage is economy of storage. The increase in cost for keeping printed material makes electronic forms more attractive from an economic viewpoint.

(f) **Inexpensive:** Another benefit of electronic journals is availability for readers. Patrons can view journals when the library is not open if they have access to a network terminal. Also, invoicing and claiming will be on-line so, therefore, librarians will be having more time to improve their on-line skills and train users. It, also, offers speed of delivery, eliminates printing, and saves money in terms of postage costs for libraries.

5. SELECTION OF E-RESOURCES

Selection is not a new term to librarian and staff as they have been doing it since long back the libraries started acquiring printed material. Libraries are now focusing to adopt e-resources rather than printed materials as technology developed. In fact, the emergence of Internet, particularly, the www (World Wide Web) has a triggered proliferation of web based full text online resources as a new media of information delivery. As the web has grown, not just in popularity and use, but also in content, librarians are trying to meet the needs of the user and identify new resources, such as online databases, web based resources, collections in digital library, e-books, e-journals etc. The selection process should be done in relevant with the demands of the users, committee, focus group, user's recommendation etc.

Apart from this, it should take into consideration the following steps:

- a) To identify library needs.
- b) To identify content and scope of the e-resources;
- c) To evaluate quality of that particular resource and search capabilities;
- d) To estimate the cost;
- e) To check either subscription based or web based when acquiring;
- f) To evaluate the systems and technical support;
- g) To review licensing agreements;
- h) To evaluate application software and installation, updated sporadically or in regular schedule;
- i) To check the facilities for educational support and training.

6. EVALUATION OF E-RESOURCES

Evaluation of resources assumes a greater importance due to the large e-resources such as e-journals, database, e-text, etc available on the net. Authority, currency, intended audience, ease of use accuracy etc are some responsible criteria for evaluation of e-resources. Moreover, extensiveness of the content, accessibility, quality of technical support, cost, conditions of licensing agreement are also other responsible factors which should taken into account.

For the evaluation of e-resources the followings factors should be considered:

1. To identify the electronic version have the retrospective data (as mostly electronic resources do not include data prior to some year);
2. To determine particular source of information of e-resources offer any special features which are not available in other print version;
3. To check the content of the e-resources with relevant to the users as well as to the collection as a whole;
4. To check whether the information is often updated or not;
5. To determine the e-resources have affordable price or not though offered diverse pricing system by the publishers;
6. To identify the method of accessing of e-resources available;
7. To identify the e-resources needed to maintain and redesign the library website identified;
8. To check the staffing needs for training of recruiting with the existing technology.

7. ORGANIZATION OF E-RESOURCES

In any Library and Information System (either traditional or modern library system), organization of resources is also one of the important and crucial works to function smoothly the library services. As such, the system manager should have good professional skills to organize the available resources effectively. In a modern digital library information system, the professional should have skills like computing, database management, networking, and other management skills relating to IT environment. Therefore, the system manager should keep in mind the following points while organizing the e-resources:

- a) To include those resources either in OPAC or to make different list for browsing;
- b) To organized accessing under a separate authority;
- c) To provide access either by alphabetical or under specific subject headings;
- d) To organize the e-resources within the context of other resources and websites;
- e) To check the method of access to e-resources, abstracting or full.

Since most of the users' search the resources under subject heading predominantly, organization of e-resources should be in such a way that the users could be able to retrieve different sets of information or records.

8. CHALLENGES FACED WITH E-RESOURCES MANAGEMENT

The adoption of e-resources has made great advantage over the library services. In fact, most of the users are satisfied with such facilities since they can easily retrieve their required information within a short period of time. However, libraries face a number of challenges as they seek to continue offering the high level of services that users have come to expect. Some of the challenges facing with e-resource management are discuss below.

a. Preservation: Though the e-resources are enabling information to be created, manipulated, disseminated and located with increasing ease, preserving access to this information poses a great challenge. Unless, preservation of digital information is actively taken, the information will become inaccessible due to changing technology platform and media instability.

b. Lack of professional skills: Due to lack of management and technical skills, the library professional is not able to handle the e-resources. The professional staffs are required to constantly update their own knowledge and skill base so as to work in today's rapidly changing digital environment.

c. Inadequate library fund: Most of the libraries have inadequate fund for acquiring e-resources and so the users do not get their needy information at the right time. Libraries are at a disadvantage when acting alone in this environment and there is need for cooperative purchasing through library consortia.

d. Technical infrastructure:- In a digital information service system, infrastructure such as software, hardware, internet facilities and other physical equipments are required to provide easier, faster and comprehensive access to information. Therefore, libraries in the digital age need to enhance and upgrade current technical architecture to accommodate e-resources.

e. Lack of cooperation of staff members: The support and cooperation of staff members, programmers and technical staff are very essential to provide effective service in a digital environment. As such, the library staff should not only be technically competent but should also user-friendly-approach.

9. CONSORTIA SUBSCRIPTION TO E-RESOURCES

The way by which the Customers belong to different institutions or university, joined together and purchasing the costly electronic products and sharing its cost creating a common infrastructure is called "Consortia". It is known that libraries and information centers are not able to procure, organize and disseminate vast amount of information due to lack of adequate fund and budget. Nowadays, consortia subscription to e-resources through consortia of libraries is a viable solution to increase the access to e-resources at a lower cost. Library consortia refer to cooperation, co-ordination and collaboration among the libraries or institution for the purpose of resource sharing. The libraries all over the world are forming consortia of all types and at all levels with an objective to take advantage of global network to promote better, faster and most cost effective ways of providing e-resources to the information seekers. The collective strength of consortia members facilitates to get the benefit of wider access to electronic resources at affordable cost and at the bests terms and conditions. Major consortia are as follows:

1. UGC-INFONET Digital Library Consortium (160+ universities)
2. INDEST-AICTE Consortium (45+900 technical institutions)
3. CSIR E-Journal Consortium (40+ CSIR Labs)
4. DAE Consortium (DAE R & D Labs. –TIFR / BARC-18 Institutions)
5. CeRA (Consortium of e-Resources in Agriculture)
6. DBT's Electronic Library Consortium (DeLCON)
7. Electronic Resources in Medicine (ERMED) Consortium
8. HELINET

10. LICENCING, PRICING AND COPYRIGHT AGREEMENTS

License and copyright agreements are legal matters that should be considered by libraries when they subscribe to electronic journals. These agreements must be fair and practical for both

the publisher and library. Pricing is another important issue that should be considered for e-journal subscriptions. Usually, each publisher has its own policy. The most common is the one in which the publisher allows free access for a few months, or up to a year, to all of their e-journals. Converting the journal to electronic format is costly for publishers. Therefore, the publishers must raise their price for the printed subscriptions in order to cover the cost of more

updated technology. The other option that publishers offers to libraries is one in which they continue the print subscriptions and receive ten to thirty percent discounts for the electronic versions. Most articles in e-journals, when written in HTML have many advantages, which allow easy linkages within the article. There is easy incorporation of graphs, tables, photographs and images, including video and sound. Some publishers use the Adobe Acrobat PDF format instead of or in addition to HTML. Acrobat viewing software is freely available and can be downloaded but this can act as another barrier to usage by those who are not completely computer literate. Therefore, it is most helpful if the Acrobat is mounted on a network basis. Electronic journals are available in different ways. They are available directly from the publisher's site and they have complete control over changes and pricing. The other way is that they are available through aggregators. Some publishers offer their electronic journals through an intermediary service, which aggregates the titles from many different publishers under one system or interface. In this way, publishers do not have to create or maintain their own separate system.

11. CONCLUSION

With the rapid advancement in computer technology along with information technology, libraries and information centers have been blessed with electronic materials and therefore libraries are gradually shifting towards the electronic libraries with electronic resources. As such, libraries therefore are now increasingly involved in creating and acquiring e-resources. The availability of IT based electronic resources has exerted ever-increasing pressures on libraries and there is no doubt that e-resources are expanding rapidly. However, in order to meet the ever increasing demand of the user community in a digital environment, libraries have to develop ways to manage access to materials available in electronic format and to effectively share them much as they have shared print resources for over a century through inter library lending.

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