

Managing Electronic Resources in the Modern Libraries: An Overview

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Abstract

Electronic Resource Management (ERM) is practice used by libraries to keep a track of important information about ERM particularly internet and its related resource such as e-journals, database, and e-books. The rapid growth of information of e-resource and the complexity in managing these resources has posed new challenges for the LIS professionals and hence requires to be addressed properly. The advent of Information Communication Technology and utilization of electronic resources is the main task in the present scenario. As such, the library environment has undergone a rapid changes leading to new generation of libraries with an emphasis on electronic- resources. Moreover, as the popularity of electronic-resources, 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 Library and Information Science for better digital information services and challenges facing with e-resources.

KEYWORDS: E-resources, Electronic libraries, Consortia, Information Technology, Electronic Resource Management.

INTRODUCTION

Libraries play an important role in the academic world-class e-resources and services and help to stimulate research by promoting e-collections and services widely. The digital revolution driven by information communication technologies has transformed academic Libraries. It is an impact on every sphere of academic library activity. e.g the form of the library e-resources, development strategies, Library buildings and consortia. Computers and networked e-resources have become an integral part of the academic library during the past decade. This has been underscored by the phenomenon of knowledge or information common in academic libraries, which refer to specific environment in the library where a designed number of pc workstations are made available to student's library users are no longer obliged to visit the library to meet all their information needs. They may search the library's online catalogue; use a subject guide databases to access a citation from the internet or access full-text articles from, web-based journals, they may browse an electronic journals, fill out an interlibrary lending form, e-mail a reference question via the ask-librarian service or borrow an e-book all by remote access.

These guidelines are intended to assist librarians who provide and publicize new electronic information resources to users and potential users. This document applies to Web-based, networked, and stand-alone resources that users may directly or indirectly access in an electronic format. The guidelines primarily apply to electronic information resources provided for end users and secondarily to mediated services. They apply to resources created by the library, commercially licensed, or freely available. Directed at information service staff who coordinate and manage the introduction of new electronic information resources, this document offers practical

guidance to any library staff concerned with strategies for implementation, policy, procedure, education, and/or direct provision of electronic information resources. Though intended for all types of libraries, not every statement will apply to a particular library or type of library. Accordingly, this checklist contains suggestions and recommendations that may be adapted to local library environments. In order to cope with the present development in IT, modern libraries are now adopting various electronic resources for its collection developments to fulfil 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.

Learning objectives

- To understand the key elements involved in journals and e-resources management, including how they are purchased, promoted and managed.
- To understand the key processes within commercial journal and e-resources publishing, including editorial and marketing, pricing and licensing.
- To understand the roles of both the traditional subscription agent and new intermediaries, and the growing range of electronic access services offered.
- To gain a broad awareness of the technical aspects of managing e-resources

Features of some ERM systems include:

- Supporting acquisition and management of licensed e-resources
- May be integrated into other library system modules or may be a standalone system
- May have a public interface, either separate or integrated into the OPAC
- Providing descriptions of resources at the package (database) level and relate package contents (e.g. e-journals) to the package record.
- Encoding and perhaps publicly displaying licensed rights such as e-reserves, course packs, and inter library loan
- Tracking electronic resources from point of order through licensing and final access
- Providing information about the data providers, consortia arrangements, access platform
- Providing contact information for all content providers
- Logging problems with resources and providers
- Providing customizable e-mail alerting systems (e.g. notices to managers when actions are expected or required)
- Linking license documents to resource records

E-RESOURCES

The library and information services of the 21st century are fast changing with the rapid development of electronic publishing; libraries are not only acquiring reading materials such as printed books and journals but also arranging for providing access to various learning resources in electronic form. In the new situation, the role of library professionals in collection development and management has become restricted. In fact, they are now playing the new role of access manager of e-resources rather than

acquisition manager and custodian of scholarly resources in print form. In academic libraries, the main attraction of the researchers is articles of learned journals and chapter of advanced treatises. Most of the scholarly resources are now available only in electronic form. Most of the electronic journals (e-journals) are now providing a lot of useful linking facilities where in citations are linked to their full text or at least abstract of the cited documents.

The electronic resources of information are proliferating at an alarming proposition in the last decade. Several types of electronic resources have been reported with the advantages over traditional resources. These are increasingly acquired with in libraries; particularly those are available in web enabled medium. Hence, knowledge on the e-resources is essential to those who are in information handling profession.

Many developments were reported over the years with respect to the electronic resources publishing, publishers are interested in the issues such as publishing costs, changing readership, changing user expectations, rights management and archiving. Authors and corporate institutions are now resorting for self-publishing, new models for scholarly publishing, quality assurance, rights management and archiving. Researchers prefer to have easy access to complex information space, including easy access to full text and reference linking. Abstracting and indexing services have started to manage the impact of electronic publishing on their pre-oriented practices, and to implement reference linking and other value added services. Aggregators, a relatively new industry, have the problem of managing content from multiple sources, providing reference linking not just within their own service but to other content providers, ensuring completeness, and rights management and archiving. Libraries have the challenges of keeping up with the flood of new content and new options, providing their users with easy access to information wherever it may happen to reside, rights management and archiving.

Library consortia have become very influential through co-operative purchasing and negotiation of licenses; they are concerned with assured access, and, rights management and archiving.

Types of E-Resources

The libraries with their traditional holdings in print format are now being added with electronic information resources in various formats like CD-ROM and DVD-ROM databases, online data bases, E-journals Databases E-books Digital repository E-thesis Help and tutorials E-journals, and plenty of internet and web resources. The content of these sources varies from bibliographic or factual to full text.

CD-ROM DATABASE

CD-ROM Database are increasing day by day in almost all fields due to their many advantages in information storage and retrieval. Majority of publishers of books and journals, online vendors and various learned societies are bringing out new titles in CD format with powerful retrieval software. Electronic information resources in CD format include abstracting and indexing services, encyclopaedias, dictionaries,

directories; yearbooks back volumes, standards, patents and many other reference works.

DVD-ROM Databases

The advent of DVD-Digital Video Disc or Digital Versatile Disc, with its 17 GB of high data storage capacity, has made it possible to include more multimedia elements like video and sound and to integrate many reference sources on single disc. The other features like higher quality of sound video, higher rate of data transfer, data security etc. are making DVD more viable option to CD-ROM.

Online E-Databases

The recent growth of internet and the popularly and ease in use of web are making libraries to subscribe to online information services. An e-database is an organized collection of information, of a particular subject or multi-disciplinary subject areas; Information within an e-database can be searched and retrieved electronically. There are two types of these they are full-text database contain the whole content of an article such as citation information, text illustrations, diagrams and tables and bibliographic databases which contain only citation information of an article, such as author name, journal title, publication date and page numbers. Contents include journals articles, newspaper articles, book reviews and conference proceedings.

E-Books

An electronic book is the content of the book made available to the reader in electronic form. According to Encyclopaedia of Library and Information Science, electronic book is “a term used to describe a text analogous to a book that is in digital form to be displayed on the computer screen” Electronic books, books, or e-books, are books in computer file format and read on all types of computers, including handheld devices, designed specifically for reading e-books.

E-Journals

E-journals or Electronic Journals are gaining more importance with the emergence of internet. The publishing world is undergoing a revolutionary change as more and more publications are becoming WEB centric. Online journals, whose full-text articles are available in the web for viewing and downloading free of charge, called open access journals. Open access to articles can be achieved in two ways by publishing as article in open access journals and depositing the same in open access archives or institutional repositories. The later is often referred to as self archiving. Open archiving or self-archiving initiative is an ambitious effort to free online full-text articles from the clutches of the commercial publishers. The use of these articles is more important to libraries in developing countries such as India as most libraries in this region are facing problems with financial crunch.

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. However libraries are now focusing to adopt e-resources information technology approaching towards the 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:

To check trials, Audience, content, collection value, functionality, Technology, user support, cost

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

E-Resources life cycle in Libraries



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 had taken into account.

With the evaluation of e-resources the followings should be should be considered:

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

ORGANIZATION OF E-RESOURCES

In any Library 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:

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

Since most of the user's 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.

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 he/she 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.

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

Lack of professional skills: Due to lack of management and technical skills, the library professionals are 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.

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.

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.

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.

CONSORTIA SUBSCRIPTION TO E-RESOURCES

It is known that libraries and information centres 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.

CONCLUSION

With the rapid advancement in computer technology along with information technology, libraries and information centres have been blessed with electronic

materials such as AICTE mandatory E-journals database like (EBSCO, PROQUEST, J-gate, IEE) it's a huge data and unlimited access journals and management of e-resources is the big task in today's modern Libraries. 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.

Library 2.0 is user-centred and it is a model for library service that encourages constant and purposeful change, inviting user participation in the creation of both the physical and the virtual services they want, supported by consistently evaluation services. It also attempts to reach new users and better serve current ones through improved customer-driven offerings. To catch up with user expectations and regain their clientele, libraries are starting to adopt new interfaces that bring together library collections and methodologies, on one hand, and contemporary use experience elements, on the other. These new solutions will be based on a decoupled architecture, drawing the line between the creation and maintenance of the data and the provision of that data to end users.

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