



MANAGEMENT OF ELECTRONIC INFORMATION RESOURCES IN DIGITAL ERA

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ABSTRACT

*“This paper deals with Management of Electronic Information Resources and how it these EIR can access, usefulness of resources. Electronic publishing has been revolutionizing the format of the recorded knowledge. E-Books-Journals, E-databases, ETD's Electronic Theses and Dissertations ,E-Newspapers-patents and many more. Readers can access information round the clock(24*7*365). Advances in information technology have changed many activities of library particularly the collection development activity. Electronic resources are gradually replacing the print materials of library. In this changing library context it is highly essential to manage these e-resources properly for their wide and effective use, otherwise a major portion of library budget, which is spent towards this will be a waste. Also information seeking behavior of the users has revolutionized the acquisition, access and use of electronic resources”*

Keywords: *Electronic Information Resources, E-Books-Journals-databases.*

1. Introduction:

The libraries in the 21st century are confronted with the issue involving constantly increasing information overload, changing pattern of e-resource management, new and growing technologies, content resource management, specialized needs and expectation of users are very challenging in the present scenario. E-resource play an important role in libraries. These include special academic, and public libraries throughout the world. In recent past, Librarian as well as publisher thought E-resource can be managed very easily. But in reality it is not so. It has become very difficult to manage the E-resource as there are different from that of managing the print collection. Effective E-resource management demands more staff attention and time rather than management of more traditional materials. Electronic resource management requires higher skill levels including greater technical, trouble shooting and also problem solving during content delivery. This paper explained all the tools and technology initiative of Digital resources management system.

E-resources have dynamic features with which the resources can be accessed remotely. There can be multiple access simultaneously of one resource by several users. They are available in more than one format as per the preference and demand of the scholarly community. In the Internet era, the resources are instantaneously accessible globally. The emerging trend is that all types of information resources are being available in different electronic forms which mean that most of the primary, secondary and tertiary documentary sources of information are presently available on Internet in electronic form.



Origin of Electronic Resources: Due to the developments taking place in information and communication technology, a variety of information sources are appearing besides print media. In contemporary librarianship the acquisition and subscription of electronic resources became important and unavoidable. These resources have advantages over print format which encourages the libraries to move towards digital and electronic sources. The library professionals too accepted and recognized the importance of potential use of these resources for which computers and computer technology is mandatory. The beginnings of electronic resources can be traced back to 1960's with the development of Machine Readable Catalogue format. Almost, at the same time the bibliographic databases became available. The development of computers also encouraged the use of electronic resources in libraries. In 1990, the World Wide Web was created by Tim Berners Lee, this facility encouraged the use of electronic resources in libraries. To satisfy the five laws, as enunciated by Ranganathan, the use of electronic resources through which a variety of information services should be offered. The developments of technology during 20th century are convenient, economical and user friendly. As a result the libraries are coming forward to move towards electronic resources.

Nowadays we are living in the age of information. The information is a dynamic and unending resources that affects all disciplines and walks of life. Today's Information technology is applicable in not a library science but all field of knowledge. It is very impactive and aggressive in the areas of research and communication technology which is a very successive tool to get desired information. In the present scenario users come to the library and ask a pin-pointed information in a short time which is not possible without help of Information Technology. Internet and web publishing have enhanced electronic publications in variety of formats like e-books, e-journals, online databases, digital repositories, internet information resources etc. Majority of academic and special libraries are subscribing eresources for their users. As we know that most of information sources are available through subscription and some of the free of cost on internet. Subscription based resources have many kind of electronic as well as printed document are related to e-resource subscription and management which is required to manage in adequate manner. E-resource subscription, various pricing models, licensing policy, and troubleshooting, etc. Involved in the management of eresources. E-resource management is not easy task for the working librarian. To cope up aforesaid problems the librarians are appointing tend staff and providing training to latest development and skills required for the betterment of the libraries services in the digital environment.

What is E-Resources

The document that are in electronic form are saved to be electronic resources. The team electronic resource came into usage in late 1980's when first electronic journal came into origin. It was then that it was e-mailed to the subscriber and was made available through FTP and strictly in plain – text format. These e-resources include books journals, periodicals, newspaper, manuals, etc in the hyper text format. The development of e-resources happened to enhance the print version with access and presentation of them . They contain and organize many form of interactive media. Including text, still photographs, drawings, animation, audio-

video materials, multi-media etc. Electronic documents are all thus documents that are in electronic or digital media and are also known as electronic resource. These e-resources are equally or better than the original without any loss of quality, thus quality sometime also lead to problem of authenticity. These documents can be distributed over the Internet, leading to access and use at anytime, from anywhere and also from any number of users at the same time.

2. NEED FOR E-RESOURCES IN LIBRARIES

At present it is need of the hour to provide and build electronic information resources collection for users for updating their knowledge with e resources.

Ever increasing the price rate of the print journals

- Gaps in serial publications of a journal and its availability in the market
- Problems related to conversion rate of foreign currencies
- Technological development
- Very Easy to access, search and retrieving electronic information.
- Lower price per user or free

3. Features of E-Resources E-resources are very popular due to their dynamic features as listed below:

- E-resources have simple and advance search interface.
- 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.
- Tracking electronic resources from point of order through licensing and final access.
- Providing information about the data providers, consortial arrangements, access platform.
- Providing contact information for all content providers

4. Types of Electronic Information Resources:

1. E-journals
2. E-Database
3. Institution/Digital repository
4. E-theses
5. E-manuscript
6. E-map
7. Web/Blog
8. Wikipedia
9. Internet resources.
10. Digital Libraries.
11. DVDs/ CD-ROMs.
12. Electronic Books.
13. Institutional Repositories



14. ETD's (Electronic Theses and Dissertations)
15. Internet Resources

5. Advantages of Electronic Resources

Multi-access: A networked product can provide multiple points of access (in the campus) at multiple points in time (24X7X365) and to multiple simultaneous users.

Weblinks/Hypertext: Format can be used and links to related articles, or other web sites, & URLs for individual articles and email alerts when latest issue/edition is Uploaded can be got.

Virtual reality: Advantages taken on the web is to add value by using animation, virtual reality and interactive physical & mathematical charts.

1. At a time any no of users can use theses Electronic Resources
2. Instantly access to documents any format.
3. It accommodates unique features i.e file and bibliographic formats
4. It reduces printing and postage cost.
5. It can easily merge with Current awareness Service.

DISADVANTAGES OF E-RESOURCES

Although there are many advantages of e-resources in libraries, there are many disadvantages also. Some are:

1. Initial cost is high in setting up of digital library with Electronic resources.
2. Hardware and software compatibility issues between publishers and users.

6. SELECTION AND SOURCES OF E-RESOURCES

1. Online Public access catalogue.
2. Web-Based catalogue.
3. Bibliographic databases.
4. CD-Rom databases.
5. Web based databases.
6. On-line databases. Electronic serials/Journals. Electronic books/thesis.
7. Video lectures ,MOOCs/NPTEL/MANATV

E-RESOURCE CYCLE IN LIBRARIES

- Origin, Identification and location
- Testing
- Selection and Acquisition
- Access
- Renewal or Cancellation

Types of Electronic Resources management System

These terms describe the deployment pattern for the CMS in terms of when presentation templates are applied to render web pages from structured content. There are some major types of CMS: Enterprise content management systems, Web content management systems, Mobile content management system, Component content management system Document management system and Learning management system, etc.

1. Enterprise content management systems (ERMS): An enterprise content management (ECM) system is concerned with content, documents, details, and records related to the organizational processes of an enterprise. The purpose is to manage the organization's unstructured information content, with all its diversity of format and location.

2. Web e-resource management systems (WERM) A web e-resources management (WERM) system is a CMS designed to simplify the publication of web content to web sites and mobile devices, in particular, allowing content creators to submit content without requiring technical knowledge of HTML or the uploading of files.

3. Mobile e-resources management system (MCMS) It is a type of (CMS) capable of storing and delivering content and services to mobile devices, such as mobile phones, smart phones. Mobile content management systems may be discrete systems, or may exist as features, modules or add-ons of larger content management systems capable of multi-channel content delivery. Mobile content delivery has unique, specific constraints including widely variable device capacities, small screen size, limited wireless bandwidth, small storage capacity, and comparatively weak device processors.

4. Component e-resources management system (CERMS) It is a (CMS) that manages content at a granular level (component) rather than at the document level. Each component represents a single topic, concept or asset (e.g., image, table, product description). Components can be as large as a chapter or as small as a definition or even a word. Components in multiple content assemblies (content types) can be viewed as components or as traditional documents. Each component is only stored one time in the content management system, providing a single, trusted source of content. Component content management (CCM) is typically used for multi-channel customerfacing content (marketing, usage, learning, support).

5. Learning management system (LMS) It is a software application for the administration, documentation, tracking, and reporting of training programs, classroom and online events, e-learning programs, and training content. LMSs range from systems for managing training and educational records, to software for distributing courses over the Internet with features for online collaboration. Some LMSs are Web-based to facilitate access to learning content and administration. LMSs are used by regulated industries (e.g. financial services and biopharma) for compliance training. It is also used by educational institutions to enhance and support classroom teaching and offering courses to a larger population of learners across the globe.

6. Document management system (DMS) It is a computer system (or set of computer programs) used to track and store electronic documents and/or images of paper documents. The term has some overlap with the concepts of (ERMS). It is often viewed as a component of enterprise content management (ECM) systems and related to digital asset management, document imaging workflow systems and record management systems. Several web based content management systems exist both in the Open Source and commercial domains. However, this is one area where (OSS) has gained dominance over proprietary counterparts.

Advantages of Electronic Resource Management:

Text can be searched, except when represented in the form of images.

Take up little space, If small, very portable.⊗ Hundreds (or thousands) may be carried together on one device.

Approximately 500 average eBooks can be stored on one CD (equivalent to a roomful of print books) Usable in adverse environmental conditions

Robust and durable.⊗ Readable when severely damaged.

Errors are “forever”; this exchangeability sometimes adds to its value.

Has more value as “collector’s items,” e.g., first editions⊗ At the moment, print books are primarily published by established houses including numerous international conglomerates, which can result in greater funds available for promotion of a title. The primary advantage of open access is that the content is available to users everywhere regardless of affiliation with a subscribing library.

This is intended to benefit: Authors: of such articles, who will see their papers more read, more cited, and better integrated into the structure of science.

Academic readers: in general at institutions that cannot afford the journal, or where⊗ the journal is out of scope Researchers: at smaller institutions, where their library cannot afford the journal

Readers: in general, who may be interested in the subject matter⊗ The general public: who will have the opportunity to see what scientific research is⊗ about Taxpayers: who will see the results of the research they pay for

Patients: and those caring for them, who will be able to keep abreast of medical⊗ research It is one of the significant features of e-journals which offer efficient and tremendous⊗ searching facility and different types of search techniques through various options like simple, advance and interoperability along with various limiting options such as documents, subjects, years etc. which offer precise search results. One can search information under titles, keywords, author, subjects, abstract, article full text etc.

E-resources save investment on the staff, library space, maintenance, archiving,⊗ preservation and security. It is a powerful tool for teaching, remote learning etc. as it brings library to the user’s desktop. Most of them are benefited with its convenience, searching and browsing facilities.

Integration of e-resources in the library collection reflects the aims, objectives and⊗ reputation of the organisation in global scenario. E-resources allow the library staff to build smooth relationship with the users and⊗ promotes inter- library cooperation by adopting common policies.

New technology offer opportunities to archive, store, preserve fragile library materials⊗ for the future use and provide convenient dissemination through web pages, OPAC and user friendly interface.

Electronic resources are convenient, flexible, cost-effective, adoptable, having global perspectives facilitating remote access, powerful search tools and features, downloading records, electronic message services etc. without any chronological or geographical limitations. Electronic resources can also be used to develop dynamic, realistic, relevant

and flexible library collections enhancing its usage in the library. It strengthens existing library services and improves its range.

7. PROBLEMS IN MANAGEMENT OF E-RESOURCES IN INDIAN LIBRARIES

- Selection of E-Resources
- Budget
- Hardware and Software
- Training to Library Staff
- Orientation Programs
- Usage Statistics
- User Feedback
- Audit Objections

8. Electronic Information Services

Users are looking for latest format of electronic /Digital formats

- 1. Buletin Board Service**
- 2. Mobiles/TAB's/SMS**
- 3. OPAC**
- 4. Internet /WWW**
- 5. Online query answering**
- 6. E-Articles**

9.CONCLUSION : *“Accessing of Electronic information resources is need of the hour, advances in information technology have changed many activities of library particularly the collection development activity. Electronic resources are gradually replacing the print materials of library. In this changing library context it is highly essential to manage these e-resources properly for their wide and effective use, otherwise a major portion of library budget, which is spent towards this will be a waste. Also information seeking behavior of the users has revolutionized the acquisition, access and use of electronic resources. E-Resources are gaining lot of momentum in Indian libraries. Indian libraries need to change their collection development policies to acquire e-resources to satisfy the changing information needs of the user community”.*

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