

E-RESOURCES: A VITAL ROLE IN LIBRARIES

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ABSTRACT:

E-Resources are short term for Electronic Resources or electronic information resources. An electronic resource is any information source that the library provides access to in an electronic format. The library has purchased subscriptions to many electronic information resources in order to provide you with access to them free of charge. This paper is mainly highlights for Definitions, Features, Types, Need of E-Resources, Purpose, Reasons, Advantages & Disadvantages, ICT Based New LIS Services, Strategic Asset, Approaches, Pros & Cons of E-Resources, Framing E-Resource Policy, Vendor Support, Users Expectations, Suggestions and so on.

KEYWORDS: *E-Resources, Types, Advantages, Policy, Users Expectations, Libraries.*

1. INTRODUCTION:

UGC-Infonet, Indest-AICTE, CSIR consortia etc., have already established themselves and found favour in different educational and research institutions resulting in huge savings to the exchequer in foreign exchange. An added advantage of E-Resources is that there is no chance of the source documents getting mutilated, pilfered or stolen which is a common sight in most of the traditional libraries having print collection. Electronic resources represent an increasingly important component of the collection-building activities of libraries. “E-Resources” refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the Internet or locally. Some of the most frequently encountered types are;

- Bibliographic Data base
- CD-ROM
- DVD-ROM
- E-Audio/Visual Resources
- E-Bibliographic databases
- E-Books
- E-Data archives
- E-Images
- E-Journals
- E-Magazines

- E-Mail
- E-Manuscripts
- E-Maps
- E-Newspapers
- E-Research Reports
- E-Thesis
- Full-text (aggregated) databases
- Indexing and abstracting databases
- Numeric and statistical databases
- Reference databases (biographies, dictionaries, directories, encyclopedias, etc.)
- WWW

E-Resources represent an increasingly important component of the collection-building activities of libraries. The guide concentrates mainly on academic and research library purposes, but nonetheless will be of high value to many types of libraries.

1.1. DEFINITIONS OF E-RESOURCES:

- **AACR2 Rule 9.0A1 States:** “E-Resources consists of data (information representing numbers, text, graphics, images, maps, moving images, music, sounds etc), programs (instructions, etc., that process the data use), or combinations of data and programs.
- A collection of on-line publications giving author, title, date, place of publication, publisher, details of edition, pagination, series and some idea of the contents.

1.2. FEATURES OF E-RESOURCES:

- Accelerated publication
- Accommodate unique features such as links to related items
- Alerting service
- Automatically generate alerting and other secondary services
- Availability of proper hardware and software
- Can be used simultaneously by more than one user
- CrossRef/Digital Object Identifier
- Do not require physical processing
- Does not require maintenance by library or the content providers
- Does not violate the privacy of the users
- Environment friendly
- Independent of Space and Time
- Interactivity
- IP blocking by the Content Provider
- Likeability to, from, within, between articles
- Long term access: archival issues
- Multimedia objects, Data files and other Supplementary materials
- Occasional breakdown of Internet
- Protects the IP of the content provider (CP)
- Provide timely access

- Save physical storage space
- Searchability
- Should be simple for users to implement
- Stability and Accessibility
- Support searching capabilities

2. TYPES OF E-RESOURCES:

E-Resources have been divided into three different categories, **Static**, **Dynamic** and **Living**.

2.1. STATIC: The most basic that contains fixed information and it cannot be manipulated, i.e. online traditional data, Online Journals, E-Books, etc.

2.2. DYNAMIC: That contains fixed information but it can be manipulated their outward form, the way embedded material is presented to user i.e. Multi Media, CD-ROM, Diskettes, etc.

2.3. LIVING: That which can be manipulated both their form (outward appearance) and the sort of information is available in the Web.

2.4. OTHER TYPES OF E-RESOURCES:

➤ **ACADEMIC**

- ❖ Refereed journals
- ❖ Review journals

❖ Pre-prints

❖ Bulletins

➤ **NON-ACADEMIC**

❖ Professional/trade journals

❖ Magazines

❖ Newspapers

3. NEED OF E-RESOURCES:

The main purpose of e-resources is to provide current information to the users. We need e-resources so that;

- Background music and animations can be done
- Download can be done instantly
- Easy accessibility and dissemination of them can be done by the users
- E-Resources can be taken anywhere on portable computer
- E-Resources provide facility to hold and turn pages easily
- Font size can be changed suitably
- In buying e-resources, the overhead charges like shipping, postal, handling are totally ruled out
- More interactive in comparison to print media
- Space problem in library can be solved
- They save human resources for shelving and rectification
- User can not misplace e-books

- User does not require binding and repair
- Users can read e-resources at any time
- Users can save their time
- Users may be able to access latest information
- Visually disabled users can listen to audible e-resources

3.1. WHY OF E-RESOURCES?

- Accommodates unique features such as links to related items
- Allow remote access
- Can be digitally saved
- Can be used simultaneously by more than one person at a time
- Can reach the researchers much before the print journals
- Contains multimedia information
- Does not require physical processing in receiving and binding
- In case of any eventuality, calamity such as fire, the resources can still be in tact
- No chance of mutilation and disfiguring of pages as in the case of print journals
- Provide timely access capabilities
- Reduces certain work in library such as circulation, filing
- Saves physical storage space
- Solves the problem of missing issues
- Supports searching

3.2. PURPOSE OF USE OF E-RESOURCES BY TEACHERS & STUDENTS:

- For academic research works
- For assigning work
- For preparing lectures
- For preparing notes
- For preparing seminars
- For writing books
- For writing essay
- For writing paper
- For writing projects

3.3. REASONS FOR USING E-RESOURCES:

- Difficult to Use
- Easy to Use
- Less Expensive
- Less Informative
- Less Useful
- More Informative
- More Useful
- Time Consuming
- Time Saving

3.4. PROBLEMS, ISSUES & DRAWBACKS IN THE E- RESOURCES:

- Access may be restricted
- Accessibility
- Acquisition
- Archival issues and long term preservation
- Authentication issues
- Availability of same information in different formats
- Cataloguing
- Copy right regulation and infringement legislation
- Coverage may not be as complete as in print format
- Cultural impediments to acceptance
- Duplication
- Escalating price of information
- Fund deficiency for subscription of both Medias (Printed and Online)
- How to display the resources
- In the case of web only journals, the materials are available only as long as the organizers continue to maintain the data on the host computer
- Inadequate computer facilities & telecommunication technologies
- Information security
- IPR Issues
- Lack of trained manpower in the system administration

- Less control
- License
- Limited transmission speed
- Longevity
- Managing e-journals require much more skilled manpower
- Many authors may be unwilling to submit their work for web-only publication, as it could lose value if not published in print.
- One licensor one password
- Online journals fail in demonstrating their commitment to the standard and performance of peer review and academic excellence
- Ownership
- Payment for online subscription is difficult
- Poorly documented post publication
- Pricing of information
- Proliferation of information
- Selection and acquisition
- Stability and storage
- Temporary unavailability due to technical reasons
- Training and support for staff and users
- Undependable files
- User’s technology does not always keep up with e-journal technology

- Users’ access
- Vendors/ Publishers agreements for CD-ROM is not standard

4. ADVANTAGES & DISADVANTAGES OF E-RESOURCES:

4.1. ADVANTAGES OF E-RESOURCES:

- Accessible
- Added Value
- Convenience
- Costs
- Easily searchable
- Easy Access
- Flexibility
- Interactive
- International reach
- Links
- Multimedia
- Search ability
- Speed
- Speed of communication
- Unlimited capabilities

4.2. DISADVANTAGES OF E-RESOURCES:

- Difficulty reading computer screens
- Financial constraints
- Format that a large proportion of e-journal use
- limitations of computer monitor
- Often not included in indexing and abstracting services
- read information in the screen
- Search engines ignores PDF files
- Social constraints
- Technological constraints

5. ROLE OF E-JOURNALS IN HIGHER EDUCATION:

A Journal may be looked upon as an information shell in a subject. Besides being a formal channel of scholarly communication, journals hold crucial significance in higher education. While studies observe that journals are sought for various reasons including research, current awareness and continuing education, teaching and external communication, journal articles have been regarded as a principal source of information with respect to higher education. University libraries in India are faced with the challenges to meet the user's requirements due to various reasons such as exponential growth of knowledge, price escalation and budget restrictions. Moreover there is also a change in the information habits and spiraling expectations of users. In such a situation, the e-journals open up many existing

opportunities and potentials for higher education Institutions. “Shared subscription” or “Consortia-based subscription” to electronic resources through consortium of libraries is now considered to be a feasible strategy to increase the access to e-journals across the higher education institutes at highly discounted rates of subscription. The consortia-based subscriptions can be successfully deployed to meet the pressures in the libraries such as minimized budget, increased user demands and rising costs of journals.

5.1. ICT Based New LIS Services:

Libraries are making use of potential of internet and computing power to provide new and innovative services. In a web enabled environment the new LIS services can be grouped into the following three categories;

- Providing access to internet and internet based services
- Providing access to web based resources
 - E-Journals
 - E-Books
 - Electronic Theses and Dissertations (ETD)
 - Patents
 - Course Material
- Providing access local or internal information resources in digital form

5.2. EMERGENCE OF NEW WORK SYSTEMS:

- Globalization
- Outsourcing
- Partnering
- Productivity of knowledge and service workers
- Quality
- Responsiveness
- Social and environmental responsibility

5.3. HOW TO MANAGE INFORMATION AS A STRATEGIC ASSET:

- Understand the role of Information
- Assign Responsibility for Leading your IRM Initiative
- Develop Clear Policies on Information Resources
- Conduct an Information Audit (Knowledge Inventory)
- Link to Management Processes
- Systematic scanning
- Mix hard/soft, internal/external
- Optimize your information purchases
- Introduce mining and refining processes
- Develop Appropriate Technological Systems
- Exploit technology convergence

- Encourage a Sharing Culture

5.3.1. STRATEGIC MANAGEMENT -APPROACHES:

- The Industrial Organizational Approach
 - ❖ Based on economic theory
 - deals with issues like competitive rivalry, resource
 - allocation, economies of scale
 - ❖ Assumptions
 - rationality, self-discipline behavior, profit maximization
- The Sociological Approach
 - ❖ Deals primarily with human interactions
 - ❖ Assumptions
 - Satisfying behavior, profit optimality

5.4. PROS & CONS OF E-RESOURCES:

5.4.1. BENEFITS TO USERS

5.4.2. BENEFIT TO LIBRARIES

5.4.3. DRAWBACKS

5.4.1. BENEFIT TO USERS:

- Accelerated publication
- Can be read by multiple users simultaneously
- Can not be mutilated, stolen, lost vandalized etc.
- Independent of space and time
- Interact with other electronic resources
- Provides value addition such as searchability, supplements, formats unavailable in print formats
- Save user's time (Ranganthan's fourth Law)

5.4.2. BENEFIT TO LIBRARIES:

- Cost savings
- Improved service
- Potentiality of accurate usage to help collection development decisions
- Provided and opportunity for concrete user education
- Public relation opportunities
- Reduced shelving, binding, maintenance, claiming
- Satisfied users
- Simultaneous access
- Superior resource delivery

5.4.3. DRAWBACKS:

- Archival issues and long term preservation
- Authentication issues
- Coverage may not be as complete as in print format
- Less control
- Managing e-journals require much more skilled manpower
- Temporary unavailability due to technical reasons
- User’s technology does not always keep up with e-journal technology

6. FRAMING E-RESOURCE POLICY:

There is strong need to have a well-defined e-reference policy in an organization for effective and efficient building of e-reference sources and also to deliver comprehensive and dynamic e-reference services. The following factors can be taken into account while framing e-reference policy;

- Fee based or free e-reference sources
- Networking printing facility
- Creation of online forms
- Usage tracking
- Restricted or unlimited users

6.1. E-RESOURCES ADMINISTRATION & MANAGEMENT FUNCTIONS:

The functions described in the section pertain to the activities required to fulfill license obligations and to administer and support resources that have acquired. The system should be able to record data at all efficient level required to avoid redundancy, relying on the relationships among the entities to make the information available at other applicable level.

- Store licenses rights and terms for references, reporting and control of services
- For services including interlibrary loans, reserves, course web sites and course packs
- Store administrative URIs, IDs and Passwords and associated notes and make them available the authorized staff
- Store subscribed numbers used to register on-line journals that are tied and print

6.2. VENDOR SUPPORT & TECHNICAL CONSIDERATIONS:

The following vendor support and technical considerations should be addressed in any licensing agreement which a library, its governing institution, or its consortium signs:

- Linking service
- Content consistency
- Bibliographic data
- Commencement date
- System integration
- Technical support
- Notifications process
- Customer support

- Web browser accessibility
- Documentation
- Guaranteed up time
- Compatibility with library systems
- Linking to the e-resources

6.3. USERS EXPECTATIONS IN LIBRARIES AT PRESENT:

The Expectations of Users vary from one environment to another environment, Institutional programs, priorities, vision, activities and specialization. Based on the experience and exposure in the area of Libraries, it has been observed that the expectations of Users in Libraries generally are;

- Clear directions and way guides
- Continual improvement
- Continuous interaction
- Disaster Management
- Display and demonstration of information about staff
- Effective & Efficient workflow
- Electronic resources access and delivery
- Information literacy
- Proper communication facilities
- Proper documentation of facilities and services provided

- Quality initiatives and accuracy
- Speedier service delivery mechanism
- Web based initiatives and resources
- Well organized collections
- Well placed users complaints system
- Well-designed forms for availing services

6.4. SUGGESTIONS:

- Training should be provided to the teachers, students and librarians for effective use of e-resources
- Infrastructure should be developed for easy access of e-resources by the users
- Sufficient and separate budget should be allocated for acquiring e-resources
- We must go to electronic form to resources to reduce the subscription cost of the library
- Sufficient number of e-resources, especially e-journals should be acquired in various subject fields

7. CONCLUSION:

The emergence of ICT has repositioned the frontiers of Academic Library resources, operations, and services as well as expectations of user groups. The practice of walking to

the library to consult the card catalogue and browse the shelves is moribund in developed countries, and this trend is quickly approaching developing countries as well. Academic libraries must embrace this scenario. The E-Resources access model can serve as a stepping stone. It has rapidly changed the way of seeking and disseminating information. The e-information has also influenced educational world tremendously. Many of the Colleges and Universities are using new Information technology to provide e-information as an important part of their learning and teaching strategies. When such a step is taken, academic libraries must remember expandability, flexibility, and compatibility.

REFERENCES:

- Advantages & Disadvantages of E-Resources, Retrieved from: [<http://asuleimany.blogspot.in/2012/03/advantages-disadvantages-of-e-resources.html>] Accessed on 20.08.2015.
- Ali, Naushad (2005), “The use of electronic resources at IIT Delhi Library; a study of search behaviours”, *The Electronic Library*, Vol.23, No. 6, pp.691-700.
- Ani, Okon E & Ahiauzu, B (2008), “Towards effective development of electronic information resources in Nigerian University Libraries”, *Library Management*, Vol. 29, No.6-7, pp. 504-514.
- Chauhan, Kaushal & Mahapatra, Rabindra Kr (2011), “A Comprehensive Evaluation of Facilities and Features of Free E-Resources in Library and Information Science”, *VSRD Technical & Non-Technical Journal*, Vol. 2, No.10, pp. 505-524.

- E-resources, Retrieved from: [<http://libanswers.utep.edu/a.php?qid=57186>] Accessed on 28.08.2015.
- E-Resources, Retrieved from: [<http://www.lsbu.ac.uk/library/html/jargon.shtml>] Accessed on 25.08.2015.
- *E-Resources, Retrieved from: [<http://www.webpages.uidaho.edu/~mbolin/anunobi-okoye.htm>] Accessed on 28.08.2015.*
- Johnson, Sharon et al., (Aug, 2012), “Key Issues for E-Resource Collection Development: A Guide for Libraries”, IFLA, Retrieved from: [[http://creativecommons.org/licenses/by/3.0/.](http://creativecommons.org/licenses/by/3.0/)] Accessed on 23.08.2015.
- Kebede, G (2002), “The changing information needs of users in electronic environments”, *The Electronic Library*, Vol. 20, No.1, pp.19-21.
- Krishnamurthy, M (2008), “Open access, open source and digital libraries: a current trend in university libraries around the world”, *ASLIB Proceedings*, Vol.42, No.1, pp 48-55.
- Madhusudhan, M (2008), “Use of UGC infonet – journals by the Research Scholars of University of Delhi”, *Library Hi Tech*, Vol. 26. No. 3. pp. 369 – 386.
- Muthu, M & Jadhav, Mahendra N (2015), “Mobile Technology for LIS Services: Some Tips and Tricks”, *Transforming Libraries and Librarianship*”, Edited by Dr.Sanjay Kataria et al., KBD Pub., Delhi, pp.461-471.

- Muthu, M & Murugan, K (2014), “Multimedia: A Play for Vital Role in Education & Libraries”, *Vidyawarta-Interdisciplinary Multilingual Research Journal*, Vol.2, No.5, Jan-Mar, pp. 94-101.
- Muthu, M & Sivaraman, P (2013), “Online Public Access Catalogue (OPAC): An Overview”, *International Journal of Digital Information & Knowledge Management*, Vol.1 No.2, pp.79-89.
- Muthu, M & Veerapandi, M (2013), “Collection Development and their Strategies, Policies for Libraries: A Modern Era”, *Library Progress (International)*, Vol.33, No.1, Jan-June, pp.61-76.
- Muthu, M (2013), “Resource Sharing in Libraries: A Vital Role of Consortia” *International Research: Journal of Library and Information Science (A Quarterly Open Access Journal)*, Vol.3, No.1, April, pp.210-225.
- Muthu, M (2013), “User Education and their Innovative Strategies in Libraries: An Overview”, *International Journal of Professional Development*, Vol.2, No.1, Jan-June, pp.46-54.
- Muthu, M et al., (2013), “Knowledge Management in Libraries”, *Pearl: A Journal of Library and Information Science*, Vol.7, Issue.1, Jan-Mar, pp.17-27.
- Muthu, M et al., (2014), "Information & Communication Technology (ICT): A Play for Vital Role in Educations & Libraries", *World in the Digital Age: Digitization and*

Preservation “, Edited by Syed Ahtisham Raza Naqvi & Dr.Rishi Tiwari, pp.71-99,

INMANTEC Institutions & Shree Kala Prakashan, Delhi- 110007.

- Muthu, M et al., (2014), "Knowledge Management, Principles and their Strategies for Libraries in Modern Era", Proceedings of the UGC Sponsored National Seminar on Knowledge Management in Electronic Environment: Opportunities and Challenges, pp.160-165, held on 21-22 March, Paper presented at Alagappa University, Karaikudi-630 003.
- Muthu, M, et al, (2013), “A Changing Role of Libraries in Digital Era”, *International Journal of Emerging Trends in Library and Information Society*. Vol.1, No.2, pp. 55-71.
- Muthu, M, et al., (2013) “Librarianship, Competencies and their Traditional Roles for Libraries in Digital Era”, “*International Journal of Digital Information and Knowledge Management*, Vol.1, No.3, pp. 191-212.
- Muthu, M., et al., (2013), “E-Journals: an Overview”, *International Research & Reviews*, Vol.2, No.2, Apr-Jun, pp.39-49.
- Muthu, M., et al., (2013), “Information Literacy and their Strategy: A Play for Vital Role in Libraries & Higher Education”, *International Journal of Emerging Trends in Library and Information Society*, Vol.1, No.3, pp.171-192.
- Muthu, M (Oct, 2012), “E-Books: An Overview”, *Information Studies*, Vol.18, Issue.4, pp.253 -276.

- Salako, O A & Tiamiyu, M A (2007), “Use of search Engines for Research by Postgraduate students of the University of Ibadan, Nigerian”, *African Journal of Library and Information Sciences*, Vol.17, No. 2, pp. 103-115.
- Sharma, Chelan (2009), “Use and Impact of e-Resources at Guru Gobind Singh Indrapratha University (India): A case study”, *Electronic Journal of Academic and Special Librarianship*, Vol.10, No.1, pp. 1-8.
- Sharma, Hari Prasad (2008), “Moving Beyond Library Automation: Role of E-Resources in Academic Libraries”, *University News*, 46 (34), August 25-31.
- Singh, Gurdev & Arora, Taruna (2010), “Use of e-resources in college libraries of Delhi”, *Library Herald*, Vol.48, No.4, December, pp.363-375.
- Vashishth, C P (2009), “Use of Electronic Resources in Learning: Some Constraints”, *Library Herald*, Vol.47, No.2, June, pp.97-103.