

## Research Paper



## IMPACT OF ELECTRONIC INFORMATION SOURCES ON LIBRARY SYSTEM: A CONCEPTUAL ANALYSIS

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### ABSTRACT

**E**lectronic information sources are changing library usage patterns. The electronic medium could be the internet, intranets, extranet, satellite TV, CD ROM and etc., E-resources primarily include e-books, e-journals, e-theses, e-newspapers, e-databases and several other materials in electronic form. Open Access Journals available in electronic forms require no space at all and provides fast and easy publishing option. There are many E-databases and all these databases have various features of searching techniques and tools, which are being used by the Librarians to help the users in finding best information in less time. Library 2.0 is a transformation in the way library services are delivered to library users. It provides new tools to make the library space more interactive, collaborative and driven by community needs. A digital library is a live organization that comes to existence through a series of development steps that bring together all necessary constituents. Digital library consortium is a fast means of distance learning to facilitate spread of quality education all over the country and provide large range of e-journals to help the scholars. Libraries play an important role in effectively managing and preserving the open access resources so as to adopt to the information needs of not only today's society but also to the future understanding of the past.

**KEY WORDS:** Electronic resources, Digital library, Open access, Journals, Database, Virtual resources, Technologies, Gate way

### INTRODUCTION

Libraries have a long history of collaborative information sharing with the growing role of digital technologies, related to access; interpretation and production of printed texts have been magnified. Libraries are facing with the challenge of delivering electronic reference and information services in a new context in which information explosion, with technological revolution are expected to play a key role. Besides the existing electronic resources, the e-resources which are likely to emerge in the near future may include notes and video of lectures from past courses, home assignments in e-forms like e-term papers, e-project reports, context based e-references, e-indexes, e-subject bibliographies and such other materials. E-resources primarily include e-books, e-articles, e-theses, e-newspapers, e-databases and several other materials in electronic form. Electronic services are changing library usage patterns. Library and information centres act as the hub of information dissemination for the all round development of a nation. Digital libraries are emerging electronic entries that are becoming important in both information resource and information cycles.

### E-Learning

It is the delivery of education through various electronic media. The electronic medium could be the internet,

intranets, extranet, satellite TV, CD ROM and etc., there are many open source projects dedicated to e-learning, LRN, e Front, ATotar, Caroline, Dokeos, Fle3, Moodle, OLAT are few such examples. Open Access Stakeholders are authors, researchers, Teachers, Students, General Public, Libraries, Universities, Publishers, Funding Agencies, Governments etc., In order to meet the information requirements of the resource persons and the trainees at the institute of library, from time to time gathers information resources from various organizations and institutions at national and international level related to areas of its domain. Some of such organizations are: Ministries and institutes of Government of India: State Administrative Training Institutes, Associations and Academics: RBI, ADB, World Bank, UNDP, UNESCO, OECD, UNPAN, ILO etc.

### E-books

More and more traditional book publishers as well as those catering to the professional and business communities are launching their e-book collections. The electronic books market consists of two distinct components, i.e., 1) electronic books consisting of digital materials or contents and 2) electronic book hardware including e-book reading appliance, PCs, Laptop or PDA. Most publishers like Springer, Wiley Inter Science, Taylor and Francis, Cambridge University Press,



Oxford University Press etc., offer their e-book collections on subscription / one time purchase basis. Besides, there are a number of e-books aggregators that make thousands of books available online for libraries and individuals at relatively lower cost. Three major e-books aggregators are Questia, Ebrary and Net Library. Research has shown that in 2010 the book industry in the UK and USA alone produces about 1.8 million tones and about 11.27 million tones of Carbon-dioxide respectively (Chowdhury, 2010). It is therefore certain that the environmental production and distribution costs of eBooks are slight when compared to the costs of production and distribution of printed books.

### **E-Journals**

Open Access Journals available in electronic forms require no space at all and provides fast and easy publishing option. It also provides user rights to read, download, copy, distribute, and print search or link to the full text of these articles available. Open access Journal portal is a method employed by academic libraries to provide e-journal access to their users. There are a number of portals through which open access journals can be accessed. They are: Open J-Gate, DOAJ, Epress, Digital Library Archives (DLA), Highwire, J-Stage, Redalyc, HRCAK, The Scientific Electronic Library Online (SciELO), Bentham OPEN, EMIS, Project Euclid and more. The Open Journal System (OJS) was first released in 2002 as a research development initiative of the Public Knowledge Project (PKP) at the University of British Columbia (UBC). E-journals are the most important resource for the research and academic community. Accessing online journals saves time of the users.

Electronic journals are used for those journals and newsletters that are prepared and distributed electronically. It may be defined very broadly as any journal, magazine, e-zine, webzine, newsletter or type of electronic serial publication which is available over the internet and can be accessed using different technologies such as www, gopher, ftp, telnet, e-mail or listserv. Several traditional journals are now being published both on the web and in print. The libraries and information centres made them accessible through their gopher site. Moreover, e-journals can also be searched not only on their metadata but also in full-text through sophisticated search interface. Currently there are more than 50,000 peer reviewed, scholarly electronic journals that are available on the internet.

### **E-Theses and E- Dissertations**

Theses and dissertations are the useful source of information for the new and ongoing research. Doctoral dissertations submitted to Universities and academic institutions are originally created in digital format using one of the word processing software packages like MsWord, LaTeX, Word Project, Word Pro, etc. These documents are undisputedly highly valuable collection especially in digital library. Several Universities and Institutions have already implemented electronic submission of Doctoral dissertations under the overall umbrella of an International digital library initiative called "Networked Digital Library of Theses and Dissertations [NDLTD]. Encyclopedia now has articles with audio files, Video clips and animation to illustrate a given topic.

### **E-database**

It is an organized collection of information of a particular subject or multidisciplinary subject areas. Information within an E-database can be searched and retrieved

electronically. There are many E-databases and all these databases have various features of searching techniques and tools, which are being used by the Librarians to help the users in finding best information in less time. Almost all the reputed publishers have come up with the E-data bases like Oxford University Press, American academy of Pediatrics, Cambridge University Press and many more. All these e-databases can be considered as the latest technological innovation in the field of information.

### **Library 2.0**

The term 'Library 2.0' was coined by Michael Casey on his blog Library crunch as a direct spin-off of the terms business 2.0 and web 2.0. It is a model for library service, such a model encourages constant and purposeful change, and first of all it invites user participation in the creation of physical and virtual service forms and provides feedback and evaluation. Library 2.0 is a transformation in the way library services are delivered to library users. It provides new tools to make the library space more interactive, collaborative and driven by community needs. It encourages collaboration in two way social interactions between library staff and library customers. Blogs and wikis are fundamentally 2.0 and their proliferation has enormous implication for libraries. With the help of web based library services in the developed countries users are attending it round the clock.

### **Digital libraries (DL)**

A digital library is a live organization that comes to existence through a series of development steps that bring together all necessary constituents. For every digital library, there is a unique digital library system in operation, whereas all digital library systems are based on a handful of digital library management systems. DL is a widely used concept that links together other relevant literacy, including information literacy and the use of ICTs. Digital Libraries serve four roles in learning:

- 1) A practical role in sharing expensive resources.
- 2) A cultural role in preserving and organizing artifacts and ideas.
- 3) A social and intellectual roles in bringing together people and ideas.
- 4) Digital libraries serve in formal learning are illustrated by their physical prominence on university campuses and the number of courses that make direct use of library services and materials.

### **UGC INFONET Digital Library**

The UGC INFONET digital library consortium is a fast means of distance learning to facilitate spread of quality education all over the country and provide large range of e-journals to help the scholars. It is to facilitate scholarly e-resources to Indian academies through joint partnership of UGC INFLIBNET and ERNET. This includes electronic interlinking of Universities and Colleges in the country. The network is run and managed by ERNET India; Faculty members use e-resources for teaching purpose and Research Scholars use for their research work.

### **Semantic Web**

Semantic web development is the Friend of a Friend (FOAF) Project. FOAF is about 'Creating a web of machine-readable home pages describing people, the links between them and the things they create and do'. Finding ways to integrate these initiatives with existing mechanisms for name authority control in libraries can help to bring library catalogues

into the mix of tools available on the web. Additionally the availability of library authority data in a more web-friendly format has the potential to positively influence the organization of the broad spectrum of web content already available. The development of a Virtual International Authority File (VIAF) has been a key idea moving forward this initiative. When combined with developments in the broader Metadata, web-design and semantic web communities, the power and utility of VIAF outside of libraries becomes clear. Authority record data can be associated more easily with a variety of web resources, allowing users and potentially machines to immediately start to evaluate the information they are looking at. A quick search of bibliographic data related to a given resource author allows the retrieval of her dissertation, which could be mined for data about the degree granting institution.

### Greenstone

It is a suite of software for creating digital library collections and making them available locally or via the internet. A collection can contain documents of different formats, including images, post script and PDF files, audio, formatted and unformatted text and many others. A collection built using Greenstone can be customized in many ways. For example, functionality to support other data formats that are not provided with Greenstone can easily be added to a collection. There are two types of accessory in Greenstone. The first is an index that provides support for searching. The second is a classifier that provides support for browsing. The Greenstone Librarian Interface (GLI) is a graphical user interface that provides a user- friendly method to build and configure Greenstone collections.

### CONCLUSION

Electronic information products and services have been proved as the most vital resource for social, academic, economic development of a country. Education is delivered online on a mass customized basis using various electronic media is termed as e-learning. The open educational resources have played a vital role in e-learning without any fee. Libraries play an important role in effectively managing and preserving the open access resources so as to adopt to the information needs of not only today's society but also to the future understanding of the past.

Academic libraries require expandability, flexibility and compatibility, hardware, networking capabilities, flexible software and standards for information storage and retrievals, local expertise, and a plan for the next system. The transition from the printed information sources to electronic resources has dramatically changed the pattern of information seeking behaviour of students. Electronic resources have bridged information gap in universities with their counterparts in developed countries. Libraries and information centres around the globe have been accepting and changing to harness the benefits of e-resources for meeting the information needs of user community.

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