# A Study on Development and Forms of Electronic Resources in Libraries

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#### Abstract

There is a significant role for electronic resources to play in promoting higher education and in accomplishing educational goals. E-resources provide a wealth of information for students who are looking for additional learning tools outside of the classroom. In this study we have discussed about the brief ancient background and development of e-resources, forms of electronic resources, electronic resources and service in university libraries, traditional libraries towards virtual libraries, presents scenario of the library's e-resources.

Keywords: - e-resources, library, education.

#### **INTRODUCTION**

Electronic services are part of the academic library's offering and are rising. Electronic services are increasingly evolving and contributing to the modern library age. In terms of vast volumes of knowledge and on the side of the publishing media there is a rising need for high quality library selection, which is hard to sustain by means of email and internet access the need for speed of illumination. Libraries are often responsible for storing, maintaining, collecting material and delivering the required customer support.

Databases in bibliography is made accessible. Software architecture has supported the usage of electronic tools in libraries. Tin Berners Lee founded the World Wide Web in 1990, which facilitated the usage of electronic information in libraries. As a consequence, the use and use of web-based electronic services began in the mid-1990s. Web-based catalogues, bibliographic, full text databases, electronic journals and ultimately web-based electronic books were offered by libraries. Patrons were no longer needed to go to the library to study substantially. The use of electronic resources to provide a range of information services is to comply with five laws as laid down by Ranganathan. Technological advances of the 20th century are convenient, cost-effective, and quick to use. This leads to the libraries moving to electronic resources.

Therefore, all kinds of digital collections in the form of databases, journals and books, image

collections, newspapers, patent resources, technical reports, and standards, as well as these / dissertation, are part of its electronic resources. All main electronic resources like e-books, e-journals, e-indexes, e-mail, e-newspapers, etc. should be in the ideal modern library.

E-resources have over the years been restructured from libraries to access cloud services via a smartphone from a device. The importance of knowledge lies in the ability to recover and "refined" information to serve new technologies and to improve current program performance. Electronic assistance includes access to thousands of news weeklies and magazines, even better than a printed subscription might be rendered through the archive. There are several e-resources which contain instructions on how to search a variety of journals for papers on a particular topic.

Knowledge is an important factor for the advancement of society. It is an important raw content from government to individual for the right decision-making. A nation rich in knowledge is a well-known generalization in the socio-economic realms. Knowledge divides the world into rapidly moving markets which use economies that do not use it effectively. The backlog in every nation is mostly attributed to the lack of proper knowledge in the fields of science and technology. The value of knowledge paved the way for the advancement of scientific evidence and information technology. In this portion, the terms knowledge, information science and information technology are explored in their separate dimensions.

The knowledge definition consists of 2 Latin phrases, one is type and one is preparation. The minimum for any period is two terms. There are two words. The same sense gives structure to any shaping pattern. In general, synonyms of knowledge are used for certain terms used, and information regarding tools is used. However, none of the words correlate to knowledge. Indeed, details can be very challenging to correctly describe. Knowledge is the information activity, forming or moulding, as per the Oxford English Dictionary Information.

Most of the developments that clearly impact our library system is in the field of connectivity, when libraries are gaining from the rapid transformation of communication with a special and outstanding contribution to collection, procurement, processing, storage, recovery and circulation control.

At the period of mechanical printing in the fifteenth century (1450), Johann Gutenberg developed mobile type and later, John Amos Comenius published in 1658 his "Orbus-Picrus, the first textbook to be illustrated. Bibliographies that contain details in several various media have been studied following the Second World War. Books, papers, microforms, documents, audio recordings, movie lines, image sketches, sketches, realia etc. are now distributed in libraries. Currently, we continue to see the convergence into the portfolio of the facilities offered of computer terminals and video tapes.

#### **BRIEF ANCIENT BACKGROUND AND DEVELOPMENT OF E-RESOURCES**

With the advent of computers in the 1950s, data were created in electronic format, and the first searchable database was developed in the early 1960s. In India, the arrival of nonbook materials was slow. In the 1960s, non-book materials including the Microforms Cataloguing Issues of authors in 1962; the Atomic Energy Institution Microforms Bulletin based in Bombay in 1963; S.P. Singh's Library Automation 1975 are just a few examples. Hussain's Audio-visual Librarian. The first researchers to conceive of the electric form of the scholarly journal was the distribution to individual subscribers of the computer output microfiche. MEDLARS was the first computer based on-demand information recovery service that was primarily developed for the physician industry. In

1971, the first major online dial-up database search service was MEDLINE, MEDLARS's on-line version. The first public online trade database was provided by DIALOG. The introduction of CD-ROM in the mid-1980s led to a major impact on library selection practices.

The emergence of different CD-ROM distribution systems was the first step towards local data loadings, where publishers provided image and text data to libraries directly. The following are the three e-journal types:

1) On-line;

2) and CD-ROM,

3) Networked Reviews.

- **On-line:** On-line newspapers including DIALOG and BRS are accessible from web hosts. Owing to high prices, they possibly are not included in library collections.
- **CD-ROM:** CD-ROM articles are typically full-text papers of different subjects or compiled journals. The iterations of current written papers are mainly electronic.
- **Networked Reports:** They are program focused on mailing listing or device programs for clients/servers.

As ASC11 texting files with a basic file system and limited file sizes, researcher summarizes the features of networked first-generation electronic journals. The electronic journals of the second generation are "both HTML-based as well as WWW for the diffusion of specially formatted files."

In the early 1990s publishers and universities found ways to build interactive journals on the monitor. The number of electronic journals in these days is increasing dramatically. A 7th version of "The Electro-Discussion-Lists ARL Directory"(1997) reveals that the statistic increased from 110 in 1991 to 675 in 1995 and to 3 414 in 1997, from 110 in 1991 to 775 in 1997. Any year, about 24.000 scientific papers and 2.5 million documents written around the world have been published by researcher, a cognitive science professor at Southampton University. In comparison, there have been substantial changes in the amount and size of scholarly papers. In the five-year duration from 1998 to 2003, there have been studies of a rise of 58 per cent (LISU). In research, technology and medicine, price rises were largest. In conjunction with the 47th version of Ulrich's Journal Directory containing the current articles from around the globe, over 51.440 newsletters are accessible online.

# FORMS OF ELECTRONIC RESOURCES

An electronic resource is described as a resource requiring machine access or other electronic product providing knowledge collection. In recent years, many methods have been introduced and similar principles have allowed for the production and dissemination of records in electronic form. In accordance with the state-of-the-art technologies, librarians rely on digital tools, including electronic services for selection innovations, which better fulfill users' records.

E-resources are divided into following pieces, for example:

# 1. Electronic Journals

For certain articles and newsletters that are prepared and circulated online, electronic journals or ejournals are included. Electronic journals can be described as any newspaper, magazine, e-zine, webzine or electronic publishing form that is available digitally and accessible via a large range of technology, such as www, Gopher, ftp, telnet, electronic mail or listserv. There are also many conventional publications both on the internet and in print. The latest concerns or lists for most newspapers can be found either on the web or as email text messages for subscribers.

# **2.** E-Book

Electronic books, downloadable books and e-editions are named as well. It includes text, pictures or both, and is made accessible on a written and readable book-length basis on computers or other electronic equipment. A downloadable e-book is available. E-books may also be described as a paper book electronic edition, but without printed counterpart e-books are possible and exist. Using e-reader apps to read e-books in dedicated e-book or tablets. Tablet can also be used to read e-books with personal computers and certain mobile phones. With the introduction and growth of e-book formats, others have received sponsorship from significant tech firms such as Adobe with its PDF format and some funded by independent and open-source programmers.

# **Providers of e-books**

- Pixelar e-reader by pixelar (2008-09)
- Plastic Logic (2009)
- Kindle 2 by Amazon (2009)
- Kindle by Amazon (2007)
- Cybook Gen 3 by Bookeen (2007)
- Sony readers by Sony (2006)
- Liad by irex (2006)
- Librie by Sony (2004)

In modern, easy and economic forms, the advent of e-books gives readers several possibilities. The performance or lack of e-books not only relies on their adoption by the consumers but also on the capacity of the publishing sector to look through conventional business models. They have their own potential as a modern platform.

# 3. Online databases

The electronic database concept can be interpreted as an 'internet database' term. As a database accessible through a network including from internet, Wikipedia defines the online database. It differs from a local database that is stored or stored on a single computer, for example on a CD.

Digital technology advances, including machines, storage media and software bundles, offer convenient access to a broad variety of information in machine-readable form. The secret to developing these electronic databases is Open and easily accessible knowledge to the science community.

Community in different forms may be an automated database:

- 1. Source database
- 2. Reference database.

# 4. Websites (www or world wide web)

Since then, the internet has gradually increased as a way of delivering electronic content. Much eresources are not accessible to anyone on the World Wide Web and cannot be listed on search engines such as Google. An e-resource may be a bibliographic or a full-text databases, e-journals or journals made accessible in electronic formats, allowing us to locate appropriate article in our field. Databases of the machine, Computerized device recording is the archive. The main point is that a database requires data to be processed and received or modified. There are two forms of databases mainly static analytical databases, read-only databases, which hold archived and utilized historical data for research. Dynamically search parameters are created on web pages. During the operating databases, the data may be updated. This database forms are typically used to track knowledge in real time.

## 5. E-Thesis

An initial contribution to information is documented in a thesis. Even if an institution receives a significant number of doctoral theses. A digitally accessible e-thesis is typically defined by means of the internet. Open-data portals such as the UCC institutional registry CORA (Uniform Trade Code) would typically have access to and preservation of electronic theses. UCC establishes a curriculum for the e-thesis in order to ensure the universal dissemination of postgraduate study in the UCC. E-thesis is held in the institutional library of the UCC, CORA. The D-Space program is a free access archive.

### 6. CD-ROM

Compact Disk Read Only Memory is the complete CD-ROM type. It's an influent memory. It is an optical drive able to hold up to 1 GB of massive volumes of files, even though the most popular size is 650 MB. CD-ROMs are audio-compatible and data from CD-ROMs can be saved and read in the same way. Disk is composed of a 1mm thick plastic disk of polycarbonate which has a thin aluminum coating to make the surface reflective. CD-ROMs, like video gambling and multimedia apps, are common for computer programs while data of all kinds are stored.

### 7. E-Newspaper

An e-newspaper is a self-contained, reusable, and refreshing edition of conventional journals that electronically acquires and retains content. The task of a viable electronic newspaper is designing a system which not only has its own intrinsic benefits but also the attractive characteristics of a conventional newspaper.

Electronic newspapers are able to remotely access knowledge from internet directories, process it electronically through word processors, desktop printing kits and a range of technological hardware and apps.

# 8. ETDs

ETDs provide a modern generation of scientific evidence composed of audio-visual items, initially created, organized and sent electronically to the consumer.

ETDs are classified as digitally rather than paper-based theses and dissertations in the Online Dictionary of the Information and Library Sciences. ETDs are distinguished from TDs in this dictionary which are viewed on paper and normally translated after scanning into machine-reading format.

A variety of parties have taken into account the promise of electronic publication technology. In 1987, UMI held an ETD workshop and in 1992 and 1994 at least 10 university delegates met. 1996 was the Research Organization of the South-Eastern Universities (SURA)

Virginia Tech has built a constantly developing Document Form Description called ETD-ML for 90 000 dollars to explore ETD as SGML papers. In 1997, Virginia Tech was sponsored by the U.S to expand ETDs to the national stage. Fund for the advancement of post-secondary education of the Department of Education.

#### 9. E-Patent

For a certain number of years, the patent shall be the sole privilege given by a state to an inventor to produce, use or distribute an innovation. A product or method is an innovation that is a response to

a particular technical challenge. Intellectual Property is a type of patents.

The term patent derives from the Latin patere, meaning "to be opened" (i.e., to make available for public inspection). It is a more explicitly shortened form of the word, predating the current patent law, which gave an individual an exclusive right.

In the current application, the patent generally applies to the right accorded by those inventing novel and valuable methods, devices, industrial articles or content compositions.

# ELECTRONIC RESOURCES AND SERVICE IN UNIVERSITY LIBRARIES

Libraries are service centres. Libraries assist the users to obtain their material. To that end, a range of methods and procedures were developed by the library workers. The categorized style of books on the shelf lets consumers identify the books they like quickly. This index allows people to recognise if a library is accessible or not; in other words, it helps to find a book on the shelves using the call number of the catalogue entry. The different diagrams, schedules, directions, etc. in the library lets users navigate their way through the dynamic library mechanism. In addition, while the customer is in trouble, the reference library team offers customised support. The general resources offered by the library are lending, reference, bibliographic, inter-library lending, transfer, reprography etc. As extended providers, we will call services rather than the regular services.

### **Service Types**

The show is the most critical of all the different methods for the distribution of news of the library service.

- The subjects necessarily distinguished but usually related by the classification scheme;
- Subjects ordinarily distinct, but briefly connected by topical interest;

Even topics from many dimensions may be regarded, with any of these aspects in the shelves necessarily divided. The aim is to get them together and act as a demonstration of the classification arrangement, apart from the progress of bringing readers into books and views that are unknown to them. Therefore, display exposes book material, which is why it is an abuse method of stock. The new updates to the library are also displayed on the show. The service often highlights some specific features of the bibliography service in order to encourage people to use the service to borrow books, reports, records and tapes; to use information services; to point out specific library collections, such as family planning, municipal planning, smoke reduction, study, special products, international relations, cold war, non-allotment; yoga, cyber; Many objects, gravure, photos, manuscripts, papers, broad-side maps or playbills may be allowed an occasional airing. Early printing examples.

# **Topic Screen**

Where practicable, a show should provide an object that can be seen, appreciated and remembered by the reader. Therefore, the publication of a new book by a local author, a Lok Sabha (House of Commons) or a Vidhan Sabha election, national independence events of great relevance, a Republic Day, a Silver/Golden Jubilee of Library, national festivals or the like, might well be organized, or other stuff.

The shows are designed for books of associated and allied desires to be seen together. The 'Home and Decoration' cases. Invariably, documents from and on MK. Gandhi, Jawahar Lal Nehru, S.C.

Bose, C.R. Das and other pre-Gandhian and the Gandhian era national leader will be included in the Indian National Movement books. We should provide materials and matters relevant to the position of moderates in this presentation, even fairly.

### TRADITIONAL LIBRARIES TOWARDS VIRTUAL LIBRARIES

The introduction of IT today contributed to a decline in the number of libraries. These smaller modern libraries are also a rich knowledge potential. Digitalization of knowledge has rendered it possible. The computer and electronic files are focused on digitized documents, which eliminates paper-based information gradually. As the visual information system is becoming more and more common these days relative to text-based information systems, conventional libraries becoming hybrid libraries, thus digitising their records and becoming interactive libraries. The definition of digital library comprises of several words used by writers. These words are: multimedia library, electronic library, desktop library, internet library and wall-free library etc. The word 'internet library' is the standard phrase used for most writers. A digital library is described as 'a detailed online digital collection based on one or more particular fields'

### PRESENTS SCENARIO OF THE LIBRARY'S E-RESOURCES

Libraries are an integral part of the structure of higher education. Academic libraries in India are experiencing several problems because of the library collections' static expenditure and exponential price growth. A swift and diverse change is now ongoing with the library ecosystem contributing to a new wave of libraries centered on e-resources. In recent years, attempts have been made to solve the financial crunch issue by information sharing by university library consortiums. Two main projects for university library users include the UGC-INFONET and INDEST-AICTE Consortium. These innovative moves include research services including peer reviews, databases, abstracts, etc. These initiatives must be sponsored by university library consumers, who definitely increase our country's quality of higher education. Library Consortium is a network of two or more libraries who have decided to collaborate together to satisfy common criteria, typically resource sharing. It generally concerns communication, teamwork and partnership within libraries and between libraries to exchange knowledge. Basically, consortia create a form of collaboration between libraries that electronically exchange resources. Also, in developed countries such as India it has gained traction. Any of the active consortium of libraries in India so far is:

- 1. E-Diary consortium UGC-INFONET.
- 2. Indian Engineering, Science and Technology (INDEST) National Public Archive (INDEST).
- 3. Centers of Inter University (IUC-DAEF Consortia)
- 4. Archive and Network of Health Sciences (HELINET)
- 5. Science and Astrophysics Resource Networking Forum (FORSA)
- 6. Scientific and Industry Research Council (CSIR e-journals consortium)

Besides the consortia, plans have also been made to set up related forms of consortia for the supply and connection to e-resources through ICAR, ICMR, ICSSR and other government departments. The UGC-INFONET and the consortium INDEST-AICTE are among the most relevant consortiums. These two significant projects have been initiated to rescue academic libraries to fulfill their needs. These innovative moves would add to the Indian higher education sector by offering scientific services including peer reviewed articles, databases, abstracts, procedures.

### CONCLUSION

Library provides access and facilitates in various ways. Library maintains collection in the form of books, cataloguing records, and index system, although this is outmoded for permanent collection since e-resources store current information. It indicates the users' needs and is important since libraries are current and will satisfy the future needs of students and researchers.

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