

Impacts of ICT in LIS: Electronic Publishing

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Abstract

Just like all other aspects of life, the digital revolution has taken on the world of publishing also. With digital publishing coming to the fore, the publishing world has undergone several fundamental changes. Electronic publishing is basically a form of publishing in which books, journals and magazines are being produced and stored electronically rather than in print. These publications have all qualities of the normal publishing like the use of colours, graphics, images and are much convenient also. Electronic publishing empowers all writers in ways that no technology has ever done before. The use of licensed electronic information resources will continue to expand and in some cases become the sole or dominant means of access to content Without violating any issues of privacy or confidentiality we can dramatically enhance our understanding of information use. The paper attempts to discuss the impact of electronic publishing on Library & Information Science area and radical changes in the publishing industry especially with impact of electronic media and Internet. This paper attempted to explain and predict 'LIS' intention of adopting this technology.

Keywords : Electronic publishing, ICT,

1. Introduction

The impact of information technology has been all pervading. It has changed the way that information is stored and disseminated and has threatened the traditional approaches to the library and its services. The ultimate objective of any information system is utilization and exploitation of information that raise levels of education, strengthen community links and stimulate participation in decision making for development of mankind. Information is an intellectual resource that has the capacity to change the image of recipient. In the postindustrial society, it has been said that what counts is not row muscle power or energy but information. Consequently, large investments are being made in the information technology industry for the purpose of generating, processing and disseminating information.

The information produced is disseminated by different model of publishing information. New technologies have transformed the process of publishing and distribution of information. In view of growth information, electronic publishing has become a foundation for the new information society to get the right information to the right person at the right time. Changes in the publishing industry have a direct impact on the information systems and services. This information technology has altered the mode of publication in such a way that though the traditional sources of information continued to be flooded with the attractive electronic form of publications. In the changing scenario, libraries and librarians will have to play a crucial role in handling conventional and electronic resources.

Thus the era of electronic publishing has begun affecting producers, distributors, library and information professionals. The ultimate goal of electronic publishing is to provide fast and easy access to the information contained in the objective publications with simple, powerful search and retrieval capabilities. Thus, e publishing can be used effectively in the context of Dr. S.R. Ranganathan's fourth law " Save the time of user" for many purposes.

2. Electronic Publishing

F.W. Lancaster is one of the first pioneers who have been cited more in library literature for his vision of E-publishing, predicting that electronic publishing would eventually displace paper-based publishing methods in one of his latest article.

Lancaster noted, "True Electronic publication implies that authors would compose for a different medium and in so doing would no longer be constrained by the static limitations of the printed page that the printed book will be replaced by something quite different from anything we have yet seem, and this will occur because the medium replacing it will be widely perceived to be better".

Electronic publishing is the process for production of typeset quality documents containing text, graphics, pictures, tables, equations etc. it is used to define the production of any that is digitized form. It uses new technology allowing publishers to deliver documents and other contents quickly and efficiently as well.

Electronic Publishing can be represented as

Electronic Publishing = Electronic Technology + Computer Technology + Communication Technology + Publishing

One of the most complete definition of Electronic Publishing appears in a popular electronic encyclopedia (Grolier Electronic Publishing, 1995).this wholly electronic publication defines electronic publishing this way "the term E-publishing refers more precisely to the storage and retrieval of information through electronic communications media. It can employ a variety of formats and technologies, some already in widespread use by businesses and general consumers and others still being developed. E-publishing technology can be classified into two general categories:

- ◆ Those in which information is stored in a centralized computer source and delivered to the users by a telecommunications systems , including online database services and videotext represents the most active area in E publishing today", and
- ◆ those in which the data is digitally stored on a disk or other physically deliverable medium.

3. Models of Electronic Publishing

3.1 Electronic Books (E-Books)

The book is quiet popular document to meet the academic and general needs of user community. Project Gutenberg, perhaps the best know publisher of book length electronic texts, began in 1971

with the goal of encouraging the creation and unlimited distribution of 10,000 electronic texts by the end of the year 2001. These books fall into several main categories including light literature, the classics, reference books, and other literary fields.

Publishing a book electronically is to achieve quick publishing and dissemination of information. A book may not have contemporary value that a journal has but it certainly has an archival and reference value. A number of encyclopedias do come out on CD-ROM. It is felt that the Internet is not a satisfactory platform for publishing full text of documents but CD-ROM is appropriate medium for publishing books. Book length E-text is also available on Floppy disc and CD-ROM, although distribution by floppy disc is decreasing due to the convenience and growing popularity of CD-Rom. Most E-Texts published on CD-ROM are public domain works including encyclopedias. Using the E-publishing language on Internet like SGML presented and published attractively with multimedia effect especially for documents like Yearbooks, Encyclopedias.

3.2 Electronic Periodicals

This new media is a vehicle of scientific communication and purely a product of scientific research. This category includes electronic journals, newsletters, magazines, zines and discussion lists. Perhaps no other area in E-publishing has received more study than the area of E-journals, particularly as they apply to scholarly research.

3.3 Electronic Database

With the emergence of computers & communication technologies the strength of information system in the development of modern database has taken new shape. Information originating from a database has become a large segment of Electronic publishing that provides a base for procedures such as retrieving information, drawing conclusions, and making decisions.

The holding of the library database consisting of books, periodicals, reports & theses can be converted to electronic form that allows access for public use through digital networks. The online electronic library card catalog (OPAC) shows how information could be published and that enable user to search the document with various access points like author, title, subjects.

The six major developments that have taken place since the 1960s that have squared the use of databases are: -

- 1) Networking and co-operative arrangements.
- 2) Leasing arrangements for information access.
- 3) Establishment of scientific information dissemination centers.
- 4) Increased online access (remote access via terminals).
- 5) Emergence of the online retailers (i.e. Dialog, Lexus etc).
- 6) Improved distribution (via CD-ROM or other means).

Various electronic databases publishers today account for publishing information both bibliographic and full text on CD-ROMs as well as making them available for online retrieval. The prominent online publishers include DIALOG, BRS, and EBSCO host etc.

An excellent example of electronically published databases, the ERIC (Educational Resource Information Centre) database is the largest educational database in the world that contains more than 800,000 records per year. ERIC is available in CD-ROM format as well as on the net free of charge.

3.4 Electronic Publishing on CD-ROM

CD-ROM has provided new dimension for information storage and retrieval. Publishing information mainly abstracting sources are quiet common in CD-ROM. Although much of the work on e-journals has concentrated on distribution via the Internet, there has been some work on CD-ROM as well.

The advantages of CD-Rom are-

- ◆ More material can be included, both in terms of quantity (650+ megabytes) and type (multi-media resources).
- ◆ Full text searching is relatively easy to include.

Considerable savings in cost a 1000 page book may cost as much as \$14 per copy to produce in quantities under 1000 while many replication plants will produce 1000 copies of a CD for less than \$2 each.

3.5 Print-on-Demand (POD)

Print-on-Demand is a new method for printing books (and other content) that allows books to be printed one at a time, or on demand. This method helps free publishers from the process of doing a traditional print run of several thousand books at a time. The technology involves complex laser printing systems and electronically formatted text that the printers can read. Many publishers include web upstarts, are hoping this method will allow them to more effectively print smaller numbers of a book and still make a profit. The technology is currently very expensive and the New York Times recently reported that Lightning Source, Inc., a leading provider of e book fulfillment, charges publishers over \$4.00 per book, which is a higher cost per unit than that of small print run. Prices should come down as more publishers and retailers purchase the technology. POD is very hot right now; in a sense, it is a good intermediary step between the regular method of printing paper books and electronic books. However, because POD is still a method that uses paper and can not be delivered as cheaply and quickly as electronic books, in the long run, POD could decline in popularity when consumers become comfortable with electronic reading software and e book reading devices.

3.6 Digital Content

Digital Content generally refers to the electronic delivery of fiction that is shorter than book-length, nonfiction, and documents and other written works of shorter length. Publishers of digital content

deliver shorter sized works to the consumer via download to handheld and other wireless devices. Technology used for delivering digital content includes Adobe PDF, XML, HDML, WAP (Wireless Application Protocol) and other technologies. The security of the data being delivered is the major concern of publishers who want to ensure they can deliver digital content without the risk of someone copying the work and selling or giving away the works.

3.7 Electronic Ink

Electronic Ink is a developing technology that could have a huge impact on the media and publishing industries. Electronic Ink could be used to create a newspaper or book that updates itself. In addition, this content could be programmed to change at any time. For example, you could have a billboard that rotates different ads, or you could receive a coupon in the mail that is frequently updated with the latest offer. For media companies, the possibilities are almost endless. Someday your electronic newspaper will simply update itself every day. E- Ink Corporation, a new company with major investors, and Xerox are two companies currently developing this technology.

3.8 Email Publishing

Email publishing, or newsletter publishing, is a popular choice among readers who enjoy the ease of receiving news items, articles and short newsletters in their email box. The ease of delivery and production of email newsletters has led to the development of a massive number of available email newsletters, mailing lists and discussion lists on a large variety of topics. Newsletters are also widely used by media companies to complement their web and print offerings. Many authors and writers publish their own newsletters in order to attract new readers and to inform their fans about new books and book signings.

3.9 Web Publishing

Web publishing is not a novel practice any longer, but it continues to change and develop with the introduction of new programming languages. HTML is still the most widely used web programming language, but XML is also making headway. XML is valuable because it allows publishers to create content and data that is portable to other devices. Nearly every company in the World has some type of website, and most media companies provide a large amount of web-based content.

4. Conclusion

We are living in an Information society demand for information is growing constantly and its value escalates in direct relation to that demand since the explosion in recent years of the world wide web and other electronic resources onto the information, the response is positively overwhelming by those who work with information resources.

Electronic publishing or e publishing uses new technology to deliver book and other content to students and readers, the technology allows publishers to get information to readers efficiently and quickly. It has become very popular technology in Information system today. A Library and Information Manager should familiarize himself with the emerging technologies mentioned above This technology is developing at a very fast rate and what looked impossible a few years back is becoming a reality now. The only thing we can be certain of is that there will be radical changes and in some instances there will be rapid. Thus by the turn of this century the whole scenario of library operation will occupy an important place in the 21st century.

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