

# E-Publishing: Impact on Library and Information Services

Poornima Narayana

Deputy Head, Information Center for Aerospace Science & Technology,

National Aerospace Laboratories, Bangalore 560 016

poornima@css.nal.res.in

## 1. INTRODUCTION

The dawn of the printing press in 1452 ushered in an era of transposing movable type to paper that continues to this day. The emergence of desktop publishing in the mid 1980s as a viable alternative to traditional printing techniques may have diminished demand for those methods, but it hardly hindered the cachet associated with being published. If anything, the more immediate accessibility of publishing tools fed a desire among all writers to make their ideas available to the masses. By the early 1990's however, anyone could conceivably share it with the world via the Internet, which ultimately gave countless writers-in-search-of-publishers a forum in which to share their work with others. Known as "self publishing" the process has turned the traditional publishing paradigm on its ear. When it comes to expressing our thoughts as vividly as we can, not only do we dare to dream, we move ahead, turning our dreams into reality by combining software, text, images, video, and sound to create dynamic expressions of our thoughts and knowledge.

Electronic publishing or e-publishing is the publishing process where the manuscripts are submitted in electronic form, edited, printed and distributed to readers via computers and the network of networks the Internet. It means that e-publishing realizes the dissemination of information through electronic media in all its various stages. Two major fields of e-publishing are electronic journals (e-journals) and electronic books (e-books). Electronic journal is a periodical available online or in CD-ROM format. In an electronic journal all the activities of publishing viz., submission of manuscript, editing, layout, and distribution including access can be performed using electronic media. Portable electronic book reader will bring about dramatic changes in the field of e-publishing.

The creating, using and supply of scholarly documents in a digital way by the Internet is a new, additional and improved kind of scholarly communication in comparison to traditional paper-based procedure of publication.

## 2. WHY E PUBLISHING?

The new world of information exchange is complex; its possibilities are exciting. To understand where publishing is headed, we must not only consider the existing environment defining the roles of authors, consumers, publishers and third-party institutions in the publication process, we must also consider the

possibilities of what can be achieved with new technologies that enable the exchange of knowledge and information in unprecedented ways. Understanding these possibilities will enlighten the complexities facing us during the transition to new models of publishing.

*Some of the problems are:*

- How will they affect individuals, institutions, communities and society as a whole?
- What changes to policies and laws will be required? What skills will be needed?
- Which of today's skills will become obsolete?
- What will the costs for the new models be?
- How will the new publishing models be sustained and preserved?
- What is the best means of managing intellectual capital?

Space, financial constraints, increasing subscription rates and limited scope for publication have necessitated the emergency of electronic publication. Electronic publishing include application by publisher of computer aided process by which informational content is found, captured, shaped, stored and updated in order to judiciously disseminate to a chosen audience in a broader context electronic publications comprise the production of computer programs, film, compact disks and other such media. The distinct properties of electronic publications are fewer practical limits on data set size lower per unit publishing cost, longer medium life with out data loss, the ability to utilized derived data and the ability to utilized hyper media links.

## 3. PROCESS OF ELECTRONIC PUBLICATIONS:

*There are three phases of composing electronic document they are*

- ☞ The data needs to be digitized,
- ☞ An application must be selected for presenting the information and
- ☞ The information must be linked together to provide structure and define hyper links in order to give it value in an electronic format.

Preparation of electronic document requires investment in equipment, expertise and time. Accessibility of computer with accessories is necessary besides learning new procedures and terminology.

The computer should contain multimedia and support some standard multimedia graphics output. Electronic publishing should secure at least four times the

amount of space available than the final production. Digitizing information is a major task in assembling the electronic publication. Cost of digitalization and requirement of adequate expertise play an important role in electronic publication. Typing allows input of text and database information. Transferring a graphic image from a document, photograph, slide or film requires some sort of computer scanning accessory. Digital graphic images also can be obtained by taking photographs directly with digital camera. Video capture board is needed in order to transfer video from a VCR tape. Depending upon the type of publication, the necessary equipment can be employed. To digitize appropriate software is required. A word processing program is needed to help to enter, organize and correct the text for publication. Creation and design of figures and editing the photographs requires graphics package. Universal standards have to be adopted for the publication of format.

#### **4. PARTNERS IN PUBLISHING PROCESS**

To understand who has something to gain or something to lose by adopting one publishing model over another, it is necessary to understand the roles involved with publication and the social infrastructure that is affected by changing publishing approaches. The under mentioned are involved with the publication discussion as members of one or more of the following groups:

- Authors
- Publishers
- Third party institutions
- Consumers

These roles, however, are not distinct; they intermingle in interesting ways, especially as we traverse from the traditional model of publication to future models for sharing and disseminating knowledge. The variations and dependencies between the old and new account for the difficulties in moving smoothly between the traditional and future models. e-Publishing will have a great role in making the libraries and information centres digital. e-journals and e-books would become very practical media of dissemination of information. It may be a funny thing to see a student having a dozen of books in his pocket! A kind of 'mobile reading' could be realized. In future, we may give our digital signature without using a pen and get an e-book reader and some e-books downloaded, without a single paper, from a digital library.

To wonder about the next step in book production, one should examine where in process the costs accumulate. Thirty to fifty percent of a book's costs are related to either distribution, inventory maintenance, or inventory risk (i.e., the book does not sell well). To be profitable in many markets (low-volume scholarly monographs, text books, rapidly changing subject matter), publishers are developing on-demand publishing strategies and technologies. The fundamental

assumption of on-demand printing is a short time frame between order and delivery for small production runs of an item. *This arrangement addresses:*

- ✓ Costs associated with inventory-overhead and taxation in many countries
- ✓ Turnaround-brief after the composition and layout stages
- ✓ Risk-no more product is produced than will be sold
- ✓ Obsolescence-no large printed base that cannot be revised other than by errata sheets, and
- ✓ Delivery-distributed printing technology will bring the printing on-site for many venues by combining finishing (collation and binding) with printing at a site.

When on-demand printing delivers a high-quality product, the savings for publishers and the degree to which they are willing to assume more risk in publishing potentially low-volume titles is very promising. It is important to realise that on-demand printing is not coming, but that it is here now and is making deep inroads into many printed materials. The successful move into monograph publishing is occurring as this article is being written. The final obstacles being spanned are quality colour illustration reproduction and reliable finishing operations contiguous to the print process. Short run, on-demand is not meant to replace traditional long run, offset printing, but is an expression of the needs of the market base for printed materials. Libraries are one part of that market for some of the materials acquired. New publishers will enter the market, but established publishers who respond to the innovations will have the advantage of a market reputation and an in-place sales and production operation. On-demand publishing is discussed in depth elsewhere in this issue and will not be examined further here. The remainder of the article will discuss the likely impacts on libraries when on-demand materials become a common part of the workflow.

With traditional publishing, the *publishers* have served as honest brokers between *authors* who wish to disseminate their thoughts, ideas and knowledge and the *consumers* of those works (readers; learners; in general, interested parties). *Third party institutions* include the schools, professional organizations, research labs and companies with whom the authors are affiliated. Bookstores can also be considered third party institutions, especially more recently where their buying power has provided them with sufficient influence to determine which authors' works are sold to the masses. The relationship of publishers to third party institutions has been one of providing legitimacy for those associated with the institutions and for the institutions themselves, with published authors wearing the mantle of the institution that bestows upon them the integrity and legitimacy by which they are acknowledged in the world at large.

The emergence of the Internet (especially the Web) as an alternative means for disseminating knowledge challenges the relationships that previously existed

between these interested parties. As honest brokers of knowledge, publishers have provided peer review of materials authors would like to publish. The author's peers in their respective disciplines are recruited without pay, at no cost to the publisher and through a reward system by the third party institutions with which they are affiliated, to cast a vote of approval or dissent for the work under consideration. This process is long, resulting in delayed publication of new findings. Thus, the rapid sharing of knowledge is compromised. Nonetheless, the integrity of the information is assured through this rigorous process. With the Web, however, authors can publish their findings immediately, with their peers weighing in just as immediately on the legitimacy of the new knowledge. The widespread dissemination afforded by the Internet subjects this knowledge to the scrutiny of many more experts who can confirm or deny the claims of the author. What is still lacking, however, is the legitimacy needed by the third party institutions and the general audience of consumers who are not members of the peer review community.

To combat the failure of Web publications to provide the level of legitimacy demanded by consumers and third party institutions, publishers have maintained in their e-publications all the aspects of traditional print publications. This has trapped publishers in 20th century publishing models; it's time to look ahead. Making articles available online is only a first step in moving toward the possibilities afforded by the Internet. While publishers have been brave in taking this bold first step, they are already being outdistanced by those who are experimenting with new models of publication. Consumers and authors alike have much to gain from the free exchange of knowledge, especially with regard to the intellectual satisfaction of rapidly impacting the growth of enlightenment.

## **4.2.ROLE OF LIBRARIES**

As mentioned earlier, a means of circumventing paper book production is arising with eBooks available via the internet, CD-ROM, and DVD. Some of these means offer the reader animation and interaction that are unavailable in the traditional paper book, however user acceptance of these means as a distribution method for large amount of information is still modest. But eBooks illustrate that lower overhead costs are the key to making information more accessible and affordable.

## **4.3.IMPACT ON LIBRARIES**

The impact on libraries of on-demand materials will be varied and both enhancing and difficult. Libraries will be enhanced by the gradual elimination of concept of the out-of-print (OP) item. Currently with short print-runs to lower inventory risk, a book may only be available for eight months to a year. If awareness of the item or budgetary limits prevents the purchase, the library bears the risk of being unable to acquire the book and add it to the collection.

With on-demand printing, after the initial print runs (likely to be produced on offset presses), the book contents are easily stored by the publisher and are ready for reproduction on-demand. The costs associated with on-demand publication are generally modest when the book is produced with a perfect-type paper binding. These costs savings may or may not be passed to the library purchaser. Generally, the pluses for libraries of on-demand printing center on the disappearance of the OP items and the potential for cost-savings for libraries.

#### **4.4. CHALLENGES FOR LIBRARIES**

What are the potential challenges for which the library should be alerted? The basic idea of what makes a book may begin to blur. If content is stored in electronic form and is accessible among publishers, why should a book be a monograph? Content may exist piecemeal, ready to be assembled with any other content available. Professors have long done this with course packets bringing together photocopied articles, chapters, personal notations, etc. If content is freed from the paper page, why not assemble it in customized assemblages to suit a reader or end users' purposes.

Libraries in their current conception are designed around most holdings having a static, permanent nature. A book once printed has a fixed content and that book is to have a single International Standard Book Number (ISBN) identifying that content form. For other end users of information the idea of static concept is unimportant and may even be undesirable. Users of scientific and technological literature will be happy with dynamic, up dating of content. A library's interest in fixed content to describe for a MARC cataloging record or similar metadata will have to bend to the variable content model of on-demand printing. Adopting cataloging records for inclusion in an online catalog may require more rigorous evaluation of the record versus the item in hand. Determining slightly changed or updated content will be impossible in most cases unless the publisher provides that information as a version or edition statement.

### **5. ISSUES CONCERNED TO E PUBLISHING**

#### **5.1.ROLE OF COPYRIGHT**

Copyright has presented challenges to the world of publication for as long as it has existed. Law has bestowed the ownership of a published work to its author, with all of the inalienable rights that accompany those laws. What constitutes ownership in the world of publication today is not, however, so clear. The [US Copyright Act](#) is a complex piece of legislation. It attempts to provide authors with a definition of ownership and rights for managing their works. At the base of the law is the notion that authors own the material they record, "in any tangible medium of expression, now known or later developed, from which [the work] can

be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device" ([Library of Congress, Copyright Office 2000](#)). Ownership suggests that authors have the right to make decisions about how their works can be used. This causes concern for publishers and third party institutions; how can they assure financial and authoritative credits if someone else owns the resources? To protect their investments and credibility, publishers and third party institutions alike presently demand that authors hand over their copyright, precluding original authors from disseminating their works as freely and widely as they may. As long as their institutions continue to associate the authors' value with what and where they have published, there is strong incentive for the authors to bestow the ownership of their works on these entities in order to gain legitimacy.

In today's world, current copyright law seems to assume all authors would like to have their knowledge impounded rather than allow the free and wide distribution of their ideas and discoveries. Furthermore, many publishers and institutions are increasingly demanding that authors assign them their copyright so they can ensure the "protection" of the knowledge the author desires to share widely. It's interesting that the easier it gets to share knowledge (from printing press, to photocopies, to bits), the longer the copyright terms become and the greater the demands of publishers and institutions to hold the copyright rather than allow the author to retain.

## **5.2.COST**

Any discussion of publishing models will inevitably lead to the very real, very bottom-line concern: who will pay? Regardless of the medium, regardless of the licensing, regardless of the interactive vs. static content, there are costs. No publishing model is free. Online publications require financial resources to sustain an infrastructure of equipment, software and basic services and to ensure that intellectual resources will be available well into the future. The traditional publication models have the cost issue all worked out; thus, they challenge the new approaches that are emerging. It is important to note, however, that these challenges are not stopping the rapidly evolving behavior of those wishing to advance knowledge and learning by freely sharing their knowledge.

Starting a new direction, if deemed viable, can have the advantage of attracting philanthropic funds to support initial startups. Philanthropic funding is even more likely when it is possible to demonstrate the feasibility of achieving a noble objective such as the free exchange of information to improve societies around the globe that have previously been unable to share in the wealth that results from advances in knowledge and learning. Foundations such as [The William and Flora Hewlett Foundation](#) have been extraordinarily generous in their support for new projects that might demonstrate new ways of providing knowledge globally to enlighten and advance civilization.

Unlike traditional book and academic publishers who reject millions of manuscripts each year, online publishers are more inclined to publish content – at considerably less cost and with far fewer strings attached. Indeed, writers of all kinds of content are now finding an audience online who may never have seen their work otherwise.

## **6. CHANGES IN PUBLISHING PROCESS**

### **6.1. Author's interest:**

- Modern text available for different platforms and free of charge or very cheap;
- It should be a prompt publishing and a wide dissemination;
- They attach importance to protection of intellectual properties; authenticity and integrity
- Worldwide availability;
- Long term archiving

### **6.2. User's demands:**

- Because they know that is possible they want the free access to information resources worldwide;
- They expect new possibilities for retrieval;
- Their worry about the authenticity of the document which they find on the web

### **6.3. Archiving:**

*Requirements:*

- In order to realize a long term archiving, authors should not use proprietary file formats;
- They should use standard file formats or common rules which make it possible to convert files to standard file formats like XML or SGML;
- They should structure their documents in order to support a qualified structured retrieval
- That are only examples also like a citation system and so on, important is that the authors undertake responsibility for the publishing procedure.

### **6.4. Traditional vs E Publishing:**

#### **6.4.1. Traditional publishing:**

- Stable technology;
- Long publishing cycle;
- Quite small availability;



- An established referee system for journal and some other publications;
- Immutable paper based documents

#### **6.4.2. Electronic Publishing:**

- No established technology;
- Short publishing cycle;
- A comparable referee system is to built up in most cases;
- New procedures are necessary in in order to guarantee authenticity and integrity like time stamps and digital signatures

#### **6.5. Librarian's Role in e publishing:**

- They developed the DC metadata set and try to integrate this in OPAC;
- They developed the rules for the authors in order to collect metadata and discussed if this really the right way to success;
- Some Institutions produced Templates in order to structure documents (DTD)
- They discuss standard file formats for different media types;
- They organized the OAI in order to realize the technical possibilities to access
- They established the Budapest Open Access Initiative in order to make it possible for everybody to access

#### **6.6. Retrieval Factor:**

##### **E publishing gives a chance of higher quality and quantity for retrival.**

- Quality that means:
  - The chance of better hits;
- To find it easier what you are looking for;
- Also the integration of multimedia documents

##### **Quantity that means:**

- Basically worldwide access to literature
- Process of search is quicker
- Availability is extremely broader

### **7. ADVANTAGES OF ELECTRONIC PUBLICATIONS**

1. No loss in quality overtime for the information in digital format.
2. The data in digital format can be quickly and perfectly duplicated into new media.

3. Make available the data with discussion and interpretation.
4. Compels the authors to digitize all of the information to make available.
5. Make possible the practice of achieving and make available all of the information on a site to all interested readers.
6. Cost of publication is low.
7. Puts no limit on the number of users of the information and publication will be accessible to both professional and non professional.
8. Disk based distribution is a better option for storage.
9. Electronic achieving, copying at the other sites, storage in hard disk, floppy, tapes offer very secure means of achieving.
10. Allows greater opportunities both for more equitable distribution of scientific information and global contribution.
11. Electronic documents are delivered with a powerful mechanism to search easily.
12. Electronic versions of journals are available in advance of printed versions.
13. Users can browse the content tables of fourth coming issues.
14. Delay in issue of journals can be avoided.
15. Electronic documents can be accessed from any where at any time and by as many simultaneous users as needed.
16. Dissemination of information is faster in electronic publication.
17. Allows for instant correction and updating of information at any time.
18. Offers all kinds of information that will not fit into the printed document.
19. Can incorporate what is left and archival purpose.
20. Provide grater depth and range of coverage by using the hypertext capabilities of the internet. 21. Provide greater interaction with users.
22. Reduces printing and distribution cost.
23. Provide would be publishers with cheaper options of publishing.
24. Electronic papers and magazines are far more economical than the printed versions.
25. Liberates the publisher from the expensive capital investment, maintenance and operating cost of printing process.
26. Eco-friendly.

### **7.1. DISADVANTAGES OF ELECTRONIC PUBLICATIONS**

1. It does not possess a much longer shelf life when compared to paper documents.
2. Lack of restriction on the information.
3. Some archaeological information is appropriate for a fully public audience.
4. Publication is not sophisticated in terms of browsing, navigating or searching tools as it is possible with disk base publication.
5. Offers a change in distribution mechanism not in contents or standards.
6. Bad for browsing and nearly acceptable for reading online.
7. Offers the illusion of interactivity without the reality
8. Requires a power source, often get crashed and infected.

9. Discriminate between socio- economic groups.
10. Limited band width takes longer time in downloading.
11. Readers can get lost and frustrated in current hyper text systems.
12. Too many electronic products provide information without knowledge, without regard for its value, meaning or organization, without some discipline and more destructive than progressive.
13. Publishing on the web cannot make a publishing business.

## **8.E DOCUMENTS**

### **8.1 E-JOURNALS**

e-Publishing is two decades old.' The American Chemical Society (ACS) was the first professional body to publish their journals in electronic form in 1983. The American Physical Society (APS), the Institute of Electrical and Electronic Engineers (IEEE) and the Institute of Engineers offer their prestigious journals in electronic form. These and some other organizations offer the literature on engineering, library science, technology, art and medical science in the form of journals, proceedings, colloquia and reports through electronic media, that is, through e-publishing. e-publishing through CD-ROM is a well established field. The Online Computer Library Center (OCLC) provides their journals only through electronic form. The electronic Journals Online (EJO) service provides peer-reviewed journals online, free of cost, for example, World Scientific, Singapore. With e-publishing and networking nowadays, it is a privilege of an author to submit the copy of his/her research paper (scientific and technological fields) to the site xxx.lanl.gov (maintained by Los Alamos National Laboratories). From this archive, one can access research material free of cost. A mirror site of it is available in India at Institute of Mathematical-Science, Chennai. In general, individuals, universities and research centres can access e-journals through net on the basis of payment and on an agreement regarding the copyright.

An e-journal is a journal available online. A journal is a periodical that carries research papers, review articles, rapid communication, letters to the editor, tutorial papers, etc., covering a narrow field but in depth. In the conventional publishing that is print publishing (P-publishing) the following steps are involved. It begins with the submission of the manuscript to the editor of the journal. The editorial process involves in sending the manuscript to referees for critical comments. If referees demand some changes in the manuscript, this information is passed on to the author and resubmission is requested. After the acceptance, the content is formatted in the 'journal's own style'. It is then sent to the press, after a delay of three to six months or even more. The total time lag between the submission of the manuscript and its paper print, called turn-around time, is about six months in most cases. In a world of rapid progress, this delay is intolerable and even retarding for research results of great value and use. Here comes the e-journals as a boon! In the e-publishing, the manuscript is submitted online in the prescribed format. Refereeing and the related editorial processes will be fast as no postal delay will be involved. The turn-around time is mainly

due to the modification of the manuscript, postal delay and the inevitable delay of fixing the issue for the publication of the article as decided by the editorial board.

Advantages of e-Journals:

- Better use – e journals are more used than paper ones
- User convenience – e journals bring information to the user or consumer's desktop
- Minimum turn around time – great value for communicating the search results
- Better management of holdings: problems of theft, in-use by others, bindery are gotten rid off
- Improved speed of access and retrieval
- Improved space management ( no more shelving required)
- Decreases cost
- Eco friendly
- Possibility of self publishing by submitting to an archive ( For eg. Los Alamos National Laboratory E Journals)

1.1 Many of the major scholarly societies have made their journals available online. For example:

- IEEE Electronic Library (IEL) <http://www.ieee.org>
- American Physical Society (APS) <http://www.aps.org>
- American Chemical Society <http://www.acs.org>
- Association for Computing Machinery <http://www.acm.org>
- American Society for Information Science and Technology <http://www.asis.org>
- American Medical Association <http://www.ama-assn.org>
- American Mathematical Society <http://www.ams.org>
- American Society of Civil Engineering <http://www.asce.org>
- American Society of Mechanical Engineering <http://www.asme.org>

2.2 Major Publishers of Scholarly e -journals

- Elsevier Science [www.elsevier.com](http://www.elsevier.com)
- Academic Press [www.apnet.com](http://www.apnet.com)
- Blackwell-Science <http://blacksci.co.uk/online/default.htm>
- Kluwer Academic Publishers [www.wkap.n1/kaphtml.htm](http://www.wkap.n1/kaphtml.htm)
- MCB University Press [www.mcb.co.uk](http://www.mcb.co.uk)
- Springer <http://iink.springer.de/whatsnew.htm>
- Cambridge University Press [www.cup.org](http://www.cup.org)

## 8.2 ELECTRONIC-BOOKS

The term electronic book was coined by Andries Van Dam, a professor of technology at Brown University. The concept of portable e-book emerged in the

late seventies. The first e-book titled 'Dyna Book' was introduced by Alan Kay, a post graduate student at Utah in 1968. Sony attempted various versions of portable electronic books with partial success. Adobe Acrobat is the commercial software for publishing and viewing electronic text. E books have become more popular with publishers, librarians and vendors within the past two years. There are eBook readers, which can be divided into the following categories: eBook hardware, Personal digital Assistants (PDA's) and eBook Software. There are also electronic ink and paper, print on demand and online eBook providers. The major eBook hardware providers are Rocketbook, now known as REB 110, and Softbook, now known as REB 1200, which have become increasingly popular in public libraries. The most commonly used PDAs that allow for downloading ebook content are being introduced in the market by Palm Digital Media, Casio, Compaq and Hewlet Packard. The major eBook software companies include Palm Digital Media, Adobe, Microsoft and netLibrary. There are numerous online eBook providers such as Gale, Bowker, O'Reilly and UMI; libraries such as UV and content providers, such as ED (Taylor & Baker), Books 24x7, netlibrary, Questia and ebrary. The contents of an e-book are the usual text, graphs, illustrations, etc., just like that of printed version. The electronic content is transmitted and/or displayed on a device (hardware) called e-book reader (portable electronic device very similar to personal digital assistant, or palm top computer), to be read by the viewer. It is almost similar in experience to reading a printed book. An e-book is written in machine readable form. An attractive feature in using e-books is the ease of reading and using them and even the scope for scribbling notes on it. But, the practical problem is about the e-book reader. e-book hardware devices are still not quite practical or cost effective (Rs. 10,000 or more).

A variety of devices are being developed to simulate some of the virtues of printed books, including portability and network independence, so that e-books function on a variety of platforms. Two types of e-book readers available in the market are full-sized reader and palm-sized reader (Rocket e-book, Soft Book, etc.). The software called Adobe Acrobat can also be used for publishing and reading an e-book. The contents of an e-book could be down loaded into an e-book reader. It is portable and one can read it at any place unlike the reading of a CD using a personal computer. In this paper we do not address the issues of digital rights management, archiving and long term access, loaning, price, acquisition, circulation, etc., of e-books. We can search 'E-BookNet' site for consumer information about e-books titles available. A site useful for librarians is 'elibraryBook'. Some other sites are 'Book of the Future', 'Don't be afraid of E-books', 'From P-Book to E-Book' 'Electrifying the Book', etc. The top vendors of e-books are the Netlibrary and IT Knowledge. More than 50,000 e-books are produced by the University of California. Publish books and other digital content online. Set your own price. [www.Lulu.com](http://www.Lulu.com)

#### Advantages of e-Books

- 'Everywhere ness' of an eBook

- Reducing reliance on multiple copies
- Minimizes preservation problem
- e-book reader (hardware) provides a simpler rocker switch that fits pages back and forth. With a scroll bar one can quickly go through the book.
- Using the stylus one can search for text, highlight it or even add hand-written notes.
- e-books have some added functionality over p-versions. It provides multimedia information, full text searching, citation formatting, reference linking, portability, inter-operability on a variety of devices, availability in advance of paper-print, and the ability to share or loan information.

### **8.3. IMPORTANT E-PUBLISHING INITIATIVES**

#### **8.3.1.NetLibrary**

NetLibrary (<http://www.netlibrary.com>) is located in Boulder, Colorado and was founded in 1998. As the world's premier provider of electronic books, netLibrary helps academic, public, corporate and special libraries to create a richer and more productive learning environment for their patrons.

NetLibrary is a division of OCLC (Online Computer Library Center), a nonprofit organisation that provides computer-based cataloguing, reference, resource sharing and preservation service to libraries worldwide.

#### **8.3.2.World ebook library**

The World ebook library (<http://www.netlibrary.net>) provides free unlimited public access to a comprehensive collection of public domain texts, references and links to thousands of online libraries around the world via internet. The subject coverage of this library includes literature, serials, bibliographies, dictionaries, encyclopedias, etc. This initiative is sponsored by The World Electronic Text Library Foundation, Honolulu.

#### **8.3.3.Project Gutenberg**

Project Gutenberg is the brainchild of Michael Hart. It began in 1971 at The Materials Research Lab of University of Illinois. The Project Gutenberg Philosophy is to make information, books and other materials available to the general public in forms a vast majority of the computers, programs and people can easily read, use, quote and search. Here a lots of famous and important texts are freely available to everyone in the world.

#### **8.3.4.e-books**

e-books site (<http://e-books.org>) is a non-commercial repository of information related to e-book research and products. This site attempts to encourage the sharing and analysis of ideas surrounding e-book reading appliances to create an accurate understanding of their possibilities and limitations. This is designed and maintained by the Kent State University, Ohio.

### **8.3.5.The Online Books Page**

The Online Books Page (<http://digital.library.upenn.edu/books/>) is a site that facilitates access to books that are freely readable over the internet. It also aims to encourage the development of such online books for the benefit of all. The major services of this site include (i) an index of thousands of online books freely readable on the internet, (ii) pointers to significant directories and archives of online texts, (iii) special exhibits of particularly interesting classes of online books and (iv) information on how readers can help and support the growth of online books. This site is edited by John Mark Ockerbloom and is hosted by the University of Pennsylvania Library.

### **8.3.6.e-print archive**

e-print archive ([www.arXiv.org](http://www.arXiv.org)) is an e-print service in the fields of physics, mathematics, non-linear science, computer science and quantitative biology. ArXiv is owned, operated and funded by Cornell University, a private not-for-profit educational institution. e-print archives has got a number of mirror sites in different countries. The Institute of Mathematical Sciences, Chennai, acts as the mirror site of India ([www.in.arXiv.org](http://www.in.arXiv.org)).

## **9. ARCHIVING:**

Current major initiatives in e-archiving include efforts at JSTOR, an organization dedicated to building a central and trusted repository of back issue of e journals.

## **10. SCENARIO IN DEVELOPING COUNTRIES:**

In developing countries where general literacy is low, electronic literacy is a dream. Mass spread of higher educational institutions necessitated availability of text books, monographs and journals for educational and research activities. Illiteracy has prompted Governments to give priority to Primary education. Preoccupation of primary education resulted in shortage of funds for higher education. Maintenance and Salary expenses are incurring a huge expenditure in funds allotted for higher education. Owing to increased expenditure of paper and introduction of modern technology in printing caused publishers to increase prices of all text books and journals. Within the availability of financial resources, educational institutions have compromised for few books and journals depending on their need. Storage of already available documents and construction of new buildings to house old documents is also incurring huge expenditure. Today Research has become multidisciplinary requiring large number of journals to sustain the research activities. Lack of required journals leads to poor understanding of current trends in the ever increasing scientific knowledge. Without strong foundations and understanding of knowledge made researchers in low scientific spirit. This may be the reason for poor output of scientific knowledge in developing countries. Researchers in the developing countries are

also facing difficulties in publishing their works due to long time requiring for publishing.

Researchers in developing countries prefer to publish their work in international journals due to low impact factor of their journals, as the impact factor is taken as yardstick to assess the scientific output of scientists. Scientific research carried in developing countries is not known to the rest of world not even to local scientific personnel. This necessitates the creation of own databases and electronic products besides taking control over the technology. Software development in electronic publishing can ameliorate many of the problems faced by the publishers in developing countries those who have the technology at hand, the capacity and the material to publish and for those users who are plugged in. Making information online starts with e-mail communications among colleagues. Governments in developing countries have to play a major role in infrastructure strengthening, promulgating regulations and tariffs. Implementing and using electronic connectivity can be accomplished without huge outlays of funding. Sharing cost among institutions for high speed links may be cheaper and more efficient.

## **11. INDIAN SCENARIO**

Infolibrarian.com gives a detailed list of different e documents under e journals, e books, e articles in LIS, e databases, e text archiving and so on. The journals of Indian National Academy of Sciences (INSA), Indian Academy of Sciences (ISA) are now totally available online. MedInd, a database of Indian Medical full text journals, a good number of e journals in the area of Social Sciences, and other disciplines are being published online.

Knowledge bank, Manorama year book, etc. are also popular. The University of Kerala has prepared a CD-ROM version of a book titled 'Thakazhi Sivasankara Pillai' written by Dr. Ayyappa Panicker. Another title from the university is 'Saraswathy Kandabharanam'.

## **12. CONCLUSION**

A mix of technologies like print, CD-ROM, Email, interactive internet has to be employed depending on the need of the users, the nature of the product and local infrastructure conditions. Local publishers and information sources should digitized their information taking into consideration of the need to observe standards and to ensure convertibility of databases. Electronic publishing should be sensitive to the needs of developing country scientists. There remain regions where communication is still difficult but there is considerable progress being made and it will soon be possible to connect to most regions of the world. Electronic publications are likely to reach scientists in developing countries in a timely fashion. Electronic communication capability is a major means of progress for scientists in countries where resources are scarce or difficult to find. The



application of information technologies to the collection, selection, distribution and preservation of archival contributions offers the possibility of fostering international cooperation in education during each aspect of publication process. Beyond international cooperation, the transglobal awareness of innovations in education promoted by the electronic publication may increase the number of people interested in such innovation to critical mass necessary for further development and implementation.

e-Publishing will have a great role in making the libraries and information centres digital. e-journals and e-books would become very practical media of dissemination of information. It may be a funny thing to see a student having a dozen of books in his pocket! A kind of 'mobile reading' could be realized. In future, we may give our digital signature without using a pen and get an e-book reader and some e-books downloaded, without a single paper, from a digital library.

### **SUGGESTED READING:**

1. Sent EM, Klamer A. The economics of scientific publication: Introduction. J Economic Methodol 9:3, 265273,2002
2. Henry G. Online Publishing in the 21<sup>st</sup> century: Challenges and Opportunities. D-Lib Magazine 9:10, Oct 2003
3. Misek M. E Scholars of the world unite. E Content Magazine. March 2004
4. Schirmbacher P. Changing process of scholarly publishing or the necessity of a new culture of Electronic Publishing. ICDL 2004, N Delhi, India
5. Prasad B etal. Electronic Publication: A scenario in developing countries
6. Premlet B and Abdul Azeez T A. E publishing: Need of the hour. DESIDOC Bulletin of Information Technology. 24:2. March 2004
7. Gibbons S. E books: Some concerns and surprises. Portal:Libraries and the academy. 1, 2001.
8. Hawkins D A. Electronic books: A major publishing revolution: Part 1: General considerations and issues. Online. 24. July/August 2000
9. Lynch C. Electrifying the book. Library journal. 124.1999