E-Books: Readers, Librarians and Publishers Perspective

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Abstract
E-book is a digital medium for communication of information. The paper recognizes various types of e-books available and discusses various issues such as the technology required, standardization, licensing, and pricing etc. It also discusses the need of legal deposit of e-books and the problems facing on this issue and used Legal Deposit Database (LDD) to solve it. Advantages and disadvantages of e-books and the barriers affecting the use are also discussed. An analysis of the survey is presented, which shows the views of Readers, Librarians and Publishers about the e-books. The analysis reveals that libraries should purchase e-books because of online availability, 24x7 easy access and simultaneous use, etc. The paper concludes with the problems of e-books in India such as multiple languages used in the country. It visualizes the glorious future with the adoption of technology by users and minimizing DRM restrictions and use of open access model.

Keywords: *E-books, Standardization, Licensing, Pricing, Legal Deposit Database (LDD), Open Access.*

Introduction
A book is a medium for communicating information. The medium, as we commonly understand nowadays is paper, but included all other medium like clay, stone, birch, bark, palm leaf, metal sheets etc. The information includes facts, teaching material, discursive writing, a poetry or fiction, etc. An e-book is an equivalent with a change of medium. It is a digital medium. The paper is replaced by light screen be it TFT or LCD or its future. The ink is replaced by digital inscription. E-book is an example of new developments evolved from conception to a reality with more to come. In 1945 Vannevar Bush conceptualized a device "Memex", that could store and display personal documents, records and books. In the beginning it was only possible to display line one by one which later could display four lines at a time. The screens were small by that time so it was of little use during those days (Subba Rao, 2004). The word 'electronic book' is believed to have been coined by Andries Van Dam in 1980. He developed the Hypertext Editing System (HEP) for reading text on computer screen. Alan Kay presented "Dynabook" similar to a laptop. The earlier e-books were reference books like thesaurus and dictionary. The first widely available e-book was Random House's Electronic Thesaurus in 1981. During 1990 the first generation e-book reader devices came into existence. Also during this time print publications were scanned or keyed, proofread and then converted to HTML for developing e-books, which was a laborious and expensive task. The electronic book player played both audio CDs and books on CD-ROM. The small screen and lack of an appropriate content distribution channel made the success of these limited. Later, Franklin launched the eBookman with a larger screen and enabled titles to be downloaded from the Internet. The second-generation devices during 1998 could store multiple titles in a small space, and retain the advantages of the print medium, a high-resolution screen and turning of pages using buttons.[2] In 1999 Netlibrary was launched with more than 2000 e-books commercially available to libraries. In the year 2004 E-book Library (EBL) and MyiLibrary were established. In December of 2004 Google began print library project called 'Google Books Library Project' to made available the digitized collections of New York Public Library and the universities of Michigan, Harvard, Oxford and Stanford through Google Books. During this period publishers themselves also began e-book initiatives.[3]

Definitions
E-book can be defined as a text in digital form, a book converted into digital form, digital reading material, a book in a computer file format, an electronic file of words and images to be displayed on computer screen, or read on a computer over a network, or viewed on a desktop/ notebook/ dedicated portable device, or read on all types of computers, or formatted

for display on e-book readers. (Jenkins, 2008)˙ Electronic book is an electronic text regardless of size or composition, made available electronically or optically, for any device, hand-held or desk-bound that includes a screen. E-books are printed in light instead of ink.[5]

Types of E-books

Many types of e-books can be recognized, viz.

1. A print book issued or re-issued in e-format. It can be called e-hybrid book,

2. An e-only book which could just as easily have been issued in print format,

3. A book created through e-feedback and e-revision, but whose formally-issued version is in print format,

4. A print book with URLs directing readers to the web for supplementary material or material that completes the print version,

5. An e-only production that enhances text with images, audio, and video,

6. An e-only production that is primarily focused on images, audio, and video, with text enhancement,

7. An e-reference book with text, images, audio, and video, which is updated continuously, as warranted. It can also be considered as a series combines the excitement of latest information,

8. A web site that is the e-"u¨ ber"-text for an entire topic, gathering text, images, and audio on an ongoing basis,

9. e-book which is available only on Internet in digital form or it may be called on-line book,

10. An e-book available free on-line, and

11. An e-book available under communication common license, etc.

12. An e-invention yet to be imagined.

Technology Required

E-books are technology based books which require hardware, software and a screen for display.

1. *E-book Hardware:* Several portable e-book devices in a range of shapes, sizes and prices are available. These may be – dedicated reading devices, multipurpose devices and desktop or laptop PCs. These use a Monitor, LCD or Touch screen device as screen.

2. *E-book Reader Software*: Functions such as search, user defined text size, colors /grayscale display, network connection, read only content, hyperlinks within the books, range of platforms and devices are supported and carried out by e-book reader software. A few important are Adobe Acrobat E-book Reader, Franklin Reader, Microsoft Reader, and Palm Reader etc. Most of the reader software is free to download and supports several operating systems.

3. *E-book Creating Software*: There are software tools available for creating e-books such as Adobe Frame Maker, Adobe. Page Maker, Adobe Design, Adobe Acrobat, Adobe Acrobat Capture etc.

Standardisation

Many attempts have been made for standardization of e-books. Open eBook (OEB) publication has attempted to provide a common e-book format. Proprietary formats such as Adobe PDF, PostScript, Microsoft Reader and DAISY Digital Talking Book are equipped with Digital Rights Management (DRM) technology, for sale to consumers. DRM is an access control technology used to protect copyright material and limit usage of digital media and devices.[6]

Licensing

There are three broad categories of e-book licensing models: *(a)* print; *(b)* database; and *(c)* Open Access licensing arrangements. The print model allows only one user to access an e-book at a time. Digital Rights Management technology can restrict printing, copying, saving and sharing of e-books between reading devices. DRM restrictions are one of the top complaints amongst academic library users with regard to e-books. The limits of viewing period and printing affect the access and use of e-books. To overcome the DRM restrictions second e-book model database has been developed which enabled simultaneous access to e-book contents. Open Access (OA) is the final model, which allows e-book content to be accessed freely with few restrictions. [7]

Pricing

The variance amongst access models affected the pricing and purchasing of e-books. There is absence of standard pricing model for e-books. It is a common assumption that e-books cost less than their print counterparts. But often it is more. Cost of hosting e-book content, maintaining platform features and providing technical support increase cost of e-book or at least grow it at par with print books. E-books can be purchased on a title-by-title basis. They can subscribe to an e-book collection or lease e-books. [8]

Legal Deposit

The publishing technology has improved considerably, books are now published more easily and more quickly thus in huge numbers. Many e-books are published in very small quantity, so that there are only few copies are available to satisfy urge of authors or to benefit authors / academicians for future promotions. The rising cost of print books and slackness of complementing agency has increased number of dishonest publishers. It is not easy to enforce legal deposit of print books as National Library, Calcutta is facing today. The legal deposit of e-books is not as

easy as in case of print books and poses many problems. Legal deposit of e-books has brought many more questions / problems, yet to be solved due to its very nature. E-books do not have any physical format in strict sense. Even if an e-book has a CD/DVD/BR, what about e-books? There is no physical format for them. Even there may not be a publisher, except private/ individual publishers around us. It is nightmare to enforce any act for legal deposit of such e-books. So many questions arise for its legal deposit, such as who are responsible for legal deposits? It is difficult to trace its real publisher. How to find addresses of depositors on net? Where to sue for violation? Does it mean national legal depositories should limit themselves or should they continue to limit to print media? How to check publishers from defaulting? How legal action be taken on how many publishers? How to sue and where and how to follow courts? Should we give up and satisfy with the material whatever is being provided by honest publishers? How to make dishonest publishers to be honest publishers? Should there be legal deposit of an e-book available in a database, as a single copy, available for public use on subscription (sale of a copy)? Should these books / e-book material be left to be stored by databases? Can a Legal Deposit Database (LDD) on the line of national libraries may solve the problems. If yes, will they do it without financial benefit and on a financial burden for web fee? What about an e-book publisher publishing book in one country and selling in other countries electronically? To our mind there may be many more such questions to be answered in future. The legal issues are difficult to solve and will be even more difficult in future and solution will be more and more hard to find and to implement.

Advantages
The advantages of e-books are as follows:

1. The availability and access to titles is quicker and more convenient to the readers. Customization offers the opportunity to change the display brightness, font size, font style, annotations and links. Portability is possible with e-books. Integration of multimedia is seamless in e-books.

2. The instant delivery of material is a reality with e-books. There is a saving in shelf space and an end to lost or damaged titles for library and information centers.

3. The publishing process becomes quicker with electronic media. It is easier to make changes and distribute via Internet. The publishing cost of printing, binding, inventory etc. disappears. The electronic copies do not require physical storage space in warehouses of publishers.

4. It is easier for authors to publish directly for niche market, without a publisher. Enhanced feedback can be achieved by direct contact with readers

and integrated electronic feedback given by readers.

5. It provides a good means for non-textbook course material, such as trade books, distance learning course material.

6. It provides equal access to learning materials to both campus-based and distance-learning students.

7. It facilitates access in digital form to precious and rare documents that are currently under lock and key in collections around the world.

It enables updates on a daily, weekly or monthly basis, which can be useful for technology-based courses or for those on current affairs.[9]

Disadvantages
The disadvantages are due to shortcoming of current e-book technology, its derivatives and resulting costs, and the incongruence with current user expectations about handling of books. Following are the issues that make e-books less user friendly.

1. The screen resolution, contrast and brightness are major factors that want improvements in display.

2. The physical dimensions of an e-book are fixed and cannot be changed individually for each title. The hardware for e-books is fragile, non-flexible and the battery life determines access to material.

3. The dedicated e-book readers are expensive. There is a high risk in buying a technologically obsolescent e-book reader.

4. Some titles are available for downloading but are costly.

5. There is no compatibility across different hardware/ software for using titles.[10]
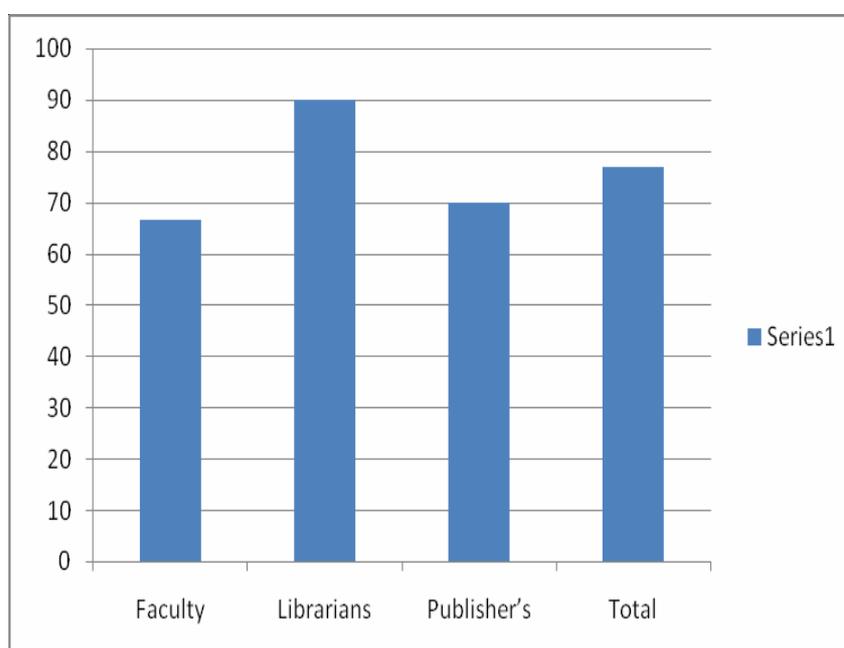
Barriers
The important barriers are

1. Choice between e-books and printed books at same cost naturally curb print books preference.

2. User's current reliance on printing neglects the benefit of e-book and additional cost.

3. Purchase / subscription policy are different and difficult to understand.

4. E-book purchase is not a simple purchase as in case of print books, but continues to send annual access fees.

5. The cost of foreign e-books for single use is very high for Indian readers and Internet payment is a complex method.

6. Like many things available free online, readers suspect free e-books.

7. Pricing models are varied from publisher to publisher and vender-to-vender which are difficult to understand.

8. The awareness for e-books is very little due to lack of information literacy programmes.

9. Readers do not understand various technologies adopted by various e-books.

10. Administrators are reluctant to pay for e-books since they do not make part of the shelves.

11. Many publishers are reluctant to produce e-books/ make their products available in e-book format simultaneously.

12. Proper hardware/ software requirements for various types of e-books are not standardized.

13. Due to changing hardware / software technologies, readers are still in wait and see mode.

14. Wide diversity of software causes confusion.

15. There is lack of common platform for e-books.

16. There are complex metadata issues of e-books.

17. e-book supply chain is imperfect.

A survey has been conducted among the faculty of universities; librarians of various research institutions sand national and international publishers to collect data on usefulness of e-books. A questionnaire has been designed for the purpose. 100 questionnaires have been distributed among the e-book users of which 77 per cent replied. Personal interviews were also taken as and when needed. The answers received from them have been analysed. The questionnaire was different for various categories but few questionnaires were common, which are shown in the Table 1 and 2. Other responses have been given in each category of users.

Table 1: Questionnaire Response Summary

Type Of User	Questionnaire Sent	Reply Received	%
Faculty	30	20	66.67
Librarians	40	36	90.00
Publisher's	30	21	70.00
Total	100	77	77.00

Figure 1

Table 2: Questionnaire Response Summary

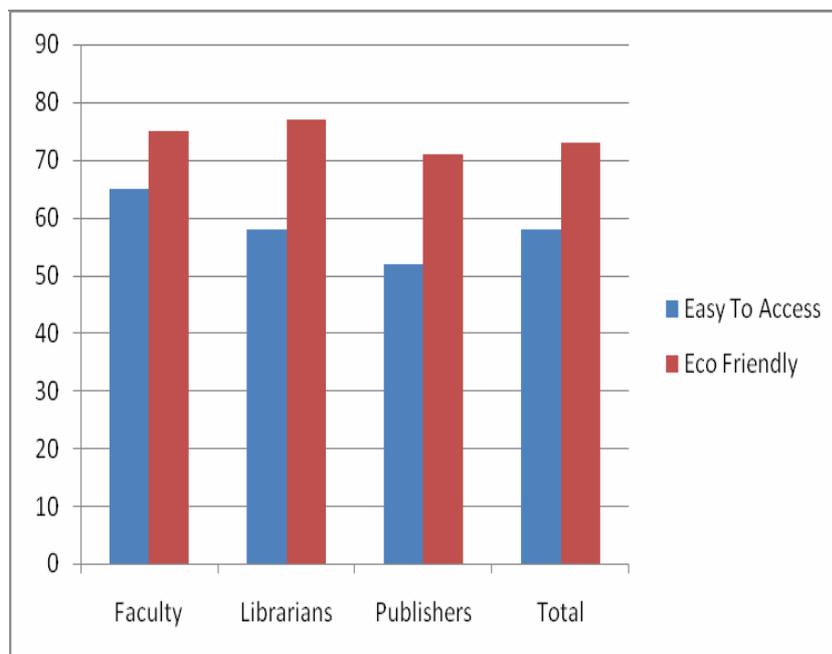|	Easy To Access	Eco Friendly
Faculty	13 (65%)	15 (75%)
Librarians	21(58%)	28 (77%)
Publishers	11(52%)	15 (71%)
Total	45(58%)	58(73%)

Figure 2

Faculty Response

Sixty five per cent faculty members responded that e-books are easy to access and 75 per cent feel that they are eco-friendly. Sixty five per cent faculty members believe that the library should purchase e-books as they provide instant online 24x7 easy accesses, occupy no space and the information is readily available. In spite of all good, they read e-books for abstracts and contents or some information only. According to 60 per cent reading of full text is difficult and in the long run the eyesight may be affected. Seventy per cent also feel that e-books may provide larger scope for plagiarism in theses and dissertations. Faculty members are hopeful for the bright future of e-books.

Librarians Response

Fifty per cent librarians find the books easy to access and 77 per cent as eco-friendly. 60% are of the view that libraries should purchase e-books if they have facilities of ICT because e-books are easy to access by adopting new technologies. Ninty per cent feel that they take minimum storage space and, multiple copies are not required. Many readers can read simultaneously and zero file work maintenance needed. Eighty per cent librarians feel that the future of the e-books is very good and libraries have to be provided with the proper infrastructure to maintain these.

Publishers Response

The views of some reputed international publishers are also positive. Fifty two per cent are of the view that e-books are easy to access by readers and 75 per cent find them eco-friendly. According to 75 per cent of them e-books offer easy distribution and have easy search ability and e-books are specialized academic work, which do not require strong protection against sharing and piracy. However, 85 per cent feel that copyright law prohibits buyers on the Internet. According to publishers the future of e-books is good with the improvement of technology & increased familiarity to the access and use of e-books by the readers. In future the e-books will replace the paper books in market.

The views of the respondents can be summarized as follows:

1. Easily available without a visit to the library;

2. On-line 24x7 availability;

3. Provides efficient information access.

4. Can find information on a topic from many books on a single search.

5. Can be shared simultaneously by many readers. Consortium also possible.

6. Can be printed out for portions required.

7. Saves lot of space.

8. Zero file work, need no reminder.

9. Authenticity and price are negative aspects and Plagiarism is also possible.

Thus e-books are future of printed books as printed books were future of manuscripts.

Conclusion

The publication of e-books on a commercial basis is gaining momentum in India. At school level, tutorials are available online and on CD-ROM for various subjects, and colleges and universities are using offline databases for providing information to the students. E-book has many benefits such as hyper linkage, cutting, pasting, printing and multiple simultaneous user access. But much more is needed for adoption

by users, librarians and publishers. To enhance the use of e-books libraries have to advertise their e-book collections and made awareness in their members about e-book holdings and findings. E-book should be included in the syllabus since printed books are outdated too soon due to frequent change in syllabi but e-books are updated too soon after such changes.

There are 18 languages officially recognized in India, each having a different character set. It has a direct impact on the spread of e-book technologies in India. At present, very reliable optical character recognition is not available for scripts of various Indian languages and the document image processing techniques needed for the efficient representation of e-books and alternative approaches are being investigated. Despite of slower than expected evolution and adaptability, e-books will continue to prevail. Students demand will grow. Distance mode of education and off campus universities will demand more e-books than print books. There will be new simpler technologies, more liberal views of authors and publishers to enhance use of e-books. Tomorrow, it may be difficult to find a print version of book on the shelf in spite of a demand and readers may have no choice but to read an e-book only. Tomorrow, readers too may not ask for a print version and find it boring. They may become addict for screen to read an e-book. Let us hope e-book will grow and capture the market replacing print books. It may not be Utopia but a reality. The acceptance of e-books by the education community will be directly proportional to ease of access in terms of find, buy,

obtain and use. With a seamless, one-click e-book purchasing or lending experience, students may switch to digital mode. The advent of e-books and electronic publishing is changing the way students access information all over the world. DRM technology is necessary to ensure the protection of copyrighted material but it is overly protecting so much so that e-book usage has been sacrificed. To minimize DRM restrictions in the e-book collections use of database and Open Access models, which have minimal, or no DRM restrictions.

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