

Issues, challenges and scope in e-Book environment with special reference to India

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ABSTRACT

This paper covers eBook readers, eBook usage and barriers in eBook usage. The benefits of eBooks versus Print books are elaborated in a comparative manner. It further explains the business models and licensing, their standardization, copyright and DRM issues. The paper explains the benefits of buying the eBooks through the aggregated eBook platform. eBook subscription issues for Librarians are listed. It covers the ranking of the countries in eBook usage and shows a glimpse of global eBook scenario. The eBook scenario in India is detailed, touching some of the key points and overall trends in the county. The paper also explores how an eBook consortium may help in better utilization and promotion of the eBooks. The study further tries to find out whether the eBooks are cannibalizing print books. It also reports on the assessment of factors that are influencing eBook usage. The question on everybody's mind is, "What direction will book publishing take?"; " Will printed books survive in the next generation, or is it destined to be replaced by eBooks?". The author see that the issue of eBook adoption and use is a complicated matter especially for a country like India and concludes that - eBooks are the future of printed books as printed books were the future of manuscripts.

Keywords: Electronic Books, eBooks; India; eBook Reader; eBook Consortium

INTRODUCTION

In principle, an eBook is quite similar to a print book; only the medium is different. An eBook is the digital representation of the printed material (print book); the medium can vary from a computer (laptop/desktop) to a digital eBook reader, PDA, mobile phone or even traditional paper. Usually the content is available in PDF or HTML format, and also plain text or XML formats. This makes the content much more versatile and flexible than the traditional print book. An eBook is a digital object with textual and/or other content, which arises as a result of integrating the familiar concept of a book with features that can be provided in an electronic environment; and eBooks typically have in-use features such as search and cross reference functions, hypertext links, bookmarks, annotations, highlights, multimedia objects and interactive tools.

While any book-length electronic document could be considered an eBook, a true eBook reader and software is optimized for reading rather than developing contents, and most eBook readers attempts in some way to simulate the experience of reading a paper book.

There are websites that sell eBooks where you can buy them and load them right on to whatever device you choose. The eBook makes it possible to take reading with you, without the mess of lugging dozens of books around with you. Perfect for traveling, trips or even the long commute to work. All these features enable an eBooks to be fully indexed. Readers can also find these books through search engines (such as Google), the library catalog (OPAC) or the publisher platform.

ISSUES, CHALLENGES AND SCOPE

Formats

On the basis of above discussion, we can summarize eBooks as:

- Printed book issued or re-issued in e-format. It can be called an e-hybrid book
- Available in PDF or HTML format, but also plain text or XML formats
- Can be fully indexed, fully searchable
- Readable on any PC/Laptop, eReader or PDA, IPod, Mobile, etc.
- An e-reference book with text, images, audio, and video, which is updated continuously, as warranted
- eBook which is available only on Internet in digital form or it may be called on-line book
- An eBook available free on-line
- A printed book with URLs directing readers to the web for supplementary material or material that completes the print version, etc.

Technology Required

Important components under this part includes; eBook hardware, eBook reader software and eBook creating software.

eBook Reader Issues

An eReader is an electronic device, designed primarily for reading digital or eBooks. A typical eReader supports 6 to 9.7 inch display screen, weighs between 300 and 600 grams, uses either e-ink monochrome display, used in devices like Amazon's Kindle and Barnes & Noble's Nook, or color LCD screens like those used in Apple's iPad. The present price of eReaders in India ranges between Rs 10,000 and Rs 35,000. Color screen eReaders like iProf costs about Rs 15,000, with iPad yet to be popularize in India. A Bangalore-based digital publisher EC Media International has unveiled its e-book reader, Wink (www.thewinkstore.com), which allows users to read in 15 languages and makes available 200,000 titles for selection.

More dedicated eBook readers such as "electronic ink devices", as well as mobile phones and PDAs are becoming more popular every day. Amazon Kindle, the Sony Reader, the iLiad, the Cybook, the Radius from Polymer Vision and the Barnes and Noble Nook are also available. All of these use e-Ink, although some have touch screen and LCD components (Figure 1).

To call the eBook world messy would be an understatement. eBooks sold on Amazon will only work on the Kindle. Google Books can be downloaded to a variety of eReaders, but not on the Kindle. Apple's iBooks work only on its devices. Want to "share" an eBook? Sorry! Sharing is supported on just a handful of readers, and always with strict restrictions on how long you can lend out a copy. Would not it be nice if we could have one eBook

- Tech Support: With every electronic device there is a potential for problems. Before we purchase an eBook reader, know what kind of support you can expect.

What Drives Ebook Usage

Several factors drive usage. Obviously the usage of online content is driven by visibility and discoverability of the contents in major search engines such as Google. Also, the library website or blog and catalogs and the contents of the eBooks are huge drivers of traffic to the contents of eBooks. Libraries play a very important role in making contents visible and findable for their patrons.

eBook Usage Barriers

Some of the barriers in the eBook usage may be as listed below:

1. Contents/Books of choice are not available in e-format, especially the text and popular books
2. Screen resolution, contrast and brightness
3. Harmful for eyes, brain and health
4. Hardware for eBooks is fragile, non-flexible
5. There is no compatibility across different hardware/ software for using titles
6. User's current reliance on prints neglects the benefit of eBook
7. Purchase/subscription policies are different and difficult to understand. Pricing models are varied from publisher to publisher and vendor-to-vendor
8. The cost of eBooks for single use is very high
9. Many publishers are reluctant to produce eBooks/make their products available in eBook format simultaneously

Usage Statistics Issues

In the current state of eBook statistics, there is still a great deal of difficulty in comparing usage on different platforms as many platforms still do not offer COUNTER book reports (<http://www.projectcounter.org>). There are also eBook platforms offering usage counts for activities not necessarily counted from all platforms, such as Table of Content views. However, the library finds patterns of interest and activity here that we intend to watch closely in the near term. It is difficult to evaluate the usage of eBooks because the publishers of the eBooks hardly provide details as how they have generated the eBook usage details. The authors recommend that eBook vendors adopt consistent, comparable usage data, such as that advocated by Project COUNTER. Librarians need to encourage vendors and publishers to adopt standard usage statistics and become COUNTER compliant. Looking at raw usage statistics only provides a part of the overall picture. While we have found that our eBooks have not been heavily used, the question is now "why?". Is it the interface? Is it the selection of titles? Is it a need for us as librarians to build a greater awareness of this resource in our user community? As the next step in assessing our eBook collection, we will need to collect qualitative data from our users to help explain the quantitative.

When we initially purchase our eBook packages, we assume that the convenience of anytime, anywhere access and full-text searching would be very popular with our users, particularly our numerous campus locations and distance education students. However, experience and studies show that this initial assumption does not appear to have been correct. We may look forward to going forth and speaking to our users about eBooks to gather comments and gauge awareness, and hopefully begin to understand why these resources have not been as popular as anticipated.

eBooks Versus Print Books

In most of the aspects, eBooks offer more positive attributes, features and benefits to academic and professional users than print formats. eBook users can access book contents concurrently, and search the full text of any title. Multiple libraries can share a small number of copies. eBooks offer remote access outside of traditional library hours.

eBooks are subject to no transportation, storage, or processing costs, nor do they suffer from physical degradation or damage. Users can also add and save their own notes to the contents and cut and paste the selected text, illustrations and diagrams. This means that medical illustrations, scientific and technological formula and charts can be copied easily to users' own files to make their own courseware or Power Point paper.

Multiple libraries can easily negotiate and manage shared use of eBooks, rather than engaging in the costly and time-consuming inter-library loan programs required for print. The real cost of providing library users with effective access to contents via eBooks is clearly far lower than in traditional print formats. The usability of contents in eBook format is also far higher.

The major benefits of eBooks over Printed Books are summarized Table 1.

Figure 1: Comparison between eBook and Printed Book

Attribute	eBook	Printed Book
Concurrent users	Yes	No
Full text searchable	Yes	No
Shared access	Yes	No
Remote access	Yes	No
24/7 access	Yes	No
User can add notes	Yes	No
Cut and Paste function	Yes	No
Cost of transportation	No	Yes
Cost of storage	No	Yes
Processing cost	No	Yes
Risk of damage	No	Yes
Inter-library loan cost	No	Yes

Business Models and Licensing Issues and Scope

Libraries should be aware of the various business models offered by different publishers of eBooks. There are various business models and content types available in the market:

1. eBook vendors fall into two categories:
 - (i) Aggregators – they provide a common platform for multiple publishers and aggregate eBook contents in either PDF or HTML formats from 100 publishers or so and make available thousands of eBooks.
 - (ii) Primary Publishers – they provide on their proprietary platform the eBook contents published by them which could run from hundreds to thousands.
2. eBook contents available from various publishers also fall under two categories:

- (i) Reference works like encyclopedia and handbooks largely used by academic libraries and
 - (ii) Research books and scholarly book contents available in electronic form.
3. eBook selections for use by the library can also be categorized into two methods depending on the publishers:
- (i) Some publishers offer pick and choose model – they allow the library to pick the books of their choice based on subject to a certain minimum number and
 - (ii) Some publishers expect the libraries to buy/subscribe the complete subject collections. The library will have no choice but take the entire collection of eBooks whether they are interested in some books or not.
4. eBook licensing models are also of two kinds:
- (i) Some publishers offer purchase models where the library can purchase the latest editions of the books in a pick and choose or subject collection model. They will have to keep on purchasing these books as and when the new editions are released. The cost of the books is slightly higher than the print books. In pick and choose models, some of the publishers charge a platform access fee to permanently maintain the books on their site.
 - (ii) A few of the publishers offer eBooks on subscription license. The library subscribes to the selected books or collections at a price which is lower than the print books and gets access to the latest edition of the books. The libraries do not have perpetual access to the contents and lose the right of access in the event of non renewal.
5. Some publishers offer eBook swapping models during the period of subscription. The library can swap the book of their choice of the same value during the course of subscription. The swapping feature is normally available in subscription license models; however some publishers offer purchase models that also offer swapping features with some additional payment.
6. Another important criterion for eBook evaluation is the download options. Some publishers allow downloading of only chapters, while others allow downloading of complete books and some publishers do not allow any downloads at all.

STANDARDIZATION, COPYRIGHT AND DRM

Many attempts have been made for standardization of eBooks. Open EBook (OEB) publication has attempted to provide a common eBook 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. Still no commonly agreed format is available.

Aggregated eBook Platform Vs Direct from Publishers

Many publishers are offering libraries direct purchase of their eBook titles but it makes more sense for libraries to buy through an aggregated eBook platform. Experience in this direction reveals that librarians want one platform with options to share, discover and compare available vendors and eBook purchasing options. This would simplify the procurement process for libraries. Most publishers offer access to their eBooks only on a

subscription basis; this means that the library only has access to the contents as long as they keep paying the subscription and may end up paying many times the cost of the book over time. A perpetual purchase model gives the library ownership of access to the contents in the same way that a book does, with much more functionality.

Most publishers only sell their eBook contents in the form of large packages which often contain high proportions of backlist. With aggregated model, the entry fee is much lower – as few as 25 titles – and customers can buy a single copy or multiple copies from different publishers in a single transaction.

An aggregated platform offers users a single point of access to a vast array of contents from different publishers, whereas buying different platforms from individual publishers means that users have to go in and out of several platforms to search for and use the contents. Some libraries will say that they can use federated search engines to overcome this issue, but this is yet an effective solution.

The aggregated platform also offers both librarians and library users many more features and benefits than publishers' platforms, including:

- (i) Integration into OPAC systems, making it easy to find and view eBooks alongside other information resources, supported by good quality MARC records.
- (ii) Comprehensive reporting on eBook usage activity.
- (iii) Secure DRM features to ensure that libraries and their users stay within copyright laws.

The real excitement will begin when eBooks are fully embedded in the Web or in pre-configured digital libraries, because the literacy of browsing, choosing, and searching will bring that other literacy - the literacy of the book - under the pressure of immediate contextuality. eBooks will be portals to the Web and to each other instantly. Authors, publishers and readers will have to master "eBook literacy" - a hybrid set of skills. The first "classic" eBooks may be with us sooner than we think.

eBook Subscription Issues for a Librarian

As a practicing Librarian, I think the following things are important when selecting an eBook:

- Patron Demand
- Contents
- Easy to use Interface
- Easy License Agreement
- Affordability
- Accessibility
- Space, etc.

eBook Usage Ranking/Migration to eBooks (Cawley, 2008)

- Australia
- United States
- Turkey
- Spain
- Malaysia
- Iran
- India

- Brazil
- Romania
- Canada
- Switzerland
- New Zealand
- Germany
- Finland
- Taiwan

GLOBAL SCENARIO

eBooks are, without question, an exciting and controversial topic for librarians, publishers, and users. Today, libraries and publishers are finally coming to terms with the fact that a tipping point on eBooks might be reached faster than either party ever imagined. After a disappointing beginning and a quiet time in between, in the last few years a rebirth has occurred with new products and services for libraries offering robust access models and presentation options. Some of these access and presentation models are strikingly similar to those of eJournals or involve products framed around eBook content especially suited to this format, such as manuals or reference works. In addition, personal readers from reputed brands are now experiencing a measurable degree of acceptance and commercial success, and this has certainly caught the attention of the business and popular press. The benefits to users are very clear in terms of time saving and the ability to find information almost immediately and to determine if content is appropriate to their needs or not without having to make a visit to the library. The ability to search full-text book contents in the same way as journal contents and the possibility of adding abstracting information for eBooks to currently available databases must be explored in order to enhance discoverability of this type of material. The next few years will be an exciting time in the world of eBooks. According to a USA market research company, Forrester (Richtel, 2010) - by the end of this year, 10.3 million people are expected to own eReaders in the USA, buying about 100 million eBooks. This is higher than 3.7 eReaders and 30 million eBooks sold last year.

Amazon has launched the audible eBooks (<http://www.audible.com>) and thousands of such books are available in their store for iPods, mp3s and phones, mainly for listening while on the go. How much of the same music can you listen to? This is an amazing tool and is very useful for digital libraries. Globally people are embracing the technology to make reading books easier and better. Research shows that with the advent of technology in publishing, the habit of reading is encouraged and is gaining ground, above all it is ecofriendly too.

Scenario in India

The advent of eBooks and electronic publishing is changing the way students, faculty and readers access information all over the world. In Asia, the eBook industry is fuelled by two industries: the manufacturers of hardware devices to read eBooks and content providers who are publishing in specific formats. In developing nations, the potential of eBooks is equivalent to the impact of wireless phone technology on communications. There is a huge potential for eBooks in providing materials for students in their native languages. The publication of eBooks on a commercial basis is gaining momentum in India. At the school

level, tutorials are available online and on CD-ROM/DVD for various subjects. Colleges and universities are using databases for providing information to the students.

The premier institutions of India like the Indian Institute of Technology (IITs), IIMs, Central Universities, etc. have already started using the eBooks. INDEST-AICTE Consortium, IIT Delhi & UGC-INFONET Digital Library Consortium, INFLIBNET Centre, Ahmedabad under centrally sponsored scheme of National Mission on Education through Information and Communication Technology of MHRD, Govt. of India (N-LIST) (<http://nlist.inflibnet.ac.in/about.php>) has added a number of bundles of eBook collections ranging more than 51,000 electronic books for students, researchers and faculty from colleges and other beneficiary institutions under the consortium mode. These bundles include; ebrary, Oxford Scholarship, Net Library, McGraw-Hill, etc. As an individual institution, the IIT Delhi (<http://web.iitd.ac.in/~library/>) also subscribes to pick and choose model like MyLibrary and bundles like ebrary. There is lot of emphasis on eBooks in India as apart from their benefits. Now the Indian made eBook readers are also easily available and are convenient and less costly.

eBooks comprise a fascinating and useful technology, but do not command uncritical acceptance due to unsatisfactory interfaces and presentation principles. The eBook industry promises growing advantages over the traditional medium. The present eBook technologies contain features valuable for learners with various abilities, languages and special needs. The capabilities of eBook technologies, such as variable text size, text-to-speech and interactions, are needed by many students. The availability of this text format is increasing and many consider that electronic text will be the future of print. At the moment, viewing technology is a limiting factor but in future, the contents will become paramount. The development of eBooks is still in its early stages. Formatting and other issues are clearly unresolved with competing commercial products in the market. This will be an interesting sector to observe as it develops and matures in India.

CAN AN eBOOK CONSORTIUM HELP?

Bringing the eBooks under consortium mode can aggregate the purchasing power, resulting in better discounts, enabling participants to share the rich collections and experiences and assist in the improvement of the library collection, etc. We can take the example of INDEST-AICTE Consortium which is one of the biggest and most successful consortium initiatives so far taken in Asia with more than 1200 member institutions. An eBook consortium on the lines of INDEST may be explored, however little has been done in consortium mode as N-LIST program. It is important to mention here that a new MHRD funded project known as National Library and Information Services Infrastructure for Scholarly Content (N-LIST), has been initiated. It is jointly executed by the INDEST-AICTE Consortium, IIT Delhi & UGC-INFONET Digital Library Consortium, INFLIBNET Centre, Ahmedabad, India. The project provides cross-subscription to eResources subscribed by the two Consortia, i.e. subscription to INDEST-AICTE resources for universities and UGC INFONET resources for technical institutions; and access to selected eResources to colleges. Under this project, consortium access to thousands of eBooks from the publishers/aggregators - ebrary, Oxford Scholarship, Net Library, McGraw Hill has been provided to the colleges falling under the eligible category. This initiative has been highly appreciated and it was launched recently on 4th May 2010 by Indian Union HRD minister and recently won the "Jury Choice Award e-India 2010" in the category "Digital Learning :

ICT Enabled University/Higher Education Institute of the Year” for the Year 2010 in the e-India Conference 2010 held at Hyderabad on August 5, 2010.

CONCLUSION

Will the eBook eventually become a transformational digital library technology? Certainly, it should, given that there is such a strong preference for digital provision in today's information world. However, a number of problems must be resolved before such a transformational change can take place. The arrival of eBooks presents many opportunities for users in new, convenient and cost-effective ways. At the moment, viewing technology, contents and pricing models are important limiting factors, but in the future, contents will become paramount. The success or failure of eBooks depends not only on their acceptance by users, but also on the publishing industry's ability to see beyond traditional business models and recognize that eBooks are not just a replacement for paper-based books. They are a new medium with their own potential. eBook readers are still even now at an early stage of development and the hope is that generally accepted industry standards will soon be adopted; creating a more homogenous product for a market whose potential is yet to be fully explored.

eBooks are yet to become a major form of publication, even for students to consume and enjoy. In addition to improving the quality and reducing the cost, the eBook industry should make more relevant, popular and interesting titles available, along with wider and more effective publicity.

It is believed that there will always be a place for traditional publishing with paper books but still the future of eBooks is very good as per the various faculty, librarian and publisher surveys (Cawley, 2008). However printed books are still preferred for cover to cover reading. eBooks exists next to print books. Print books are here to stay - eBooks will enhance access to more science and research. eBooks have many advantages to offer, however print will not disappear.

“Thus eBooks are the future of printed books as printed books were the future of manuscripts”

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