



Library Hi Tech News

E-books in the mobile age: advocacy and acceptance in India
Maitrayee Ghosh

Article information:

To cite this document:

Maitrayee Ghosh, (2016), "E-books in the mobile age: advocacy and acceptance in India", Library Hi Tech News, Vol. 33 Iss 6 pp. 5 - 10

Permanent link to this document:

<http://dx.doi.org/10.1108/LHTN-02-2016-0006>

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E-books in the mobile age: advocacy and acceptance in India

Maitrayee Ghosh

Introduction

India is moving to become a mobile society, but a series of challenges remain such as socio-economic and cultural barriers, poor information and communication technology (ICT) infrastructure in rural areas and a digital divide between information-poor and information-rich population. Mobile access to content is hugely popular in India because of the young next-generation group. The future of books is electronic and used on mobile devices. In a country like India with a high density of mobile users can develop an ecosystem for consumption of digital content through hand-held devices. Today, libraries aim to provide access to digital resources that can be used with mobile devices. At present e-book consumption in India is much slower than that in the UK or the USA, but the future of e-books is promising because India is the world's third largest English-speaking country with a huge English language book market.

The mobile environment, affordable mobile devices and cloud platforms are restructuring the libraries access system. GPS satellite technology has increased the access to information relating to edutainment (education + entertainment) and health, and promoting reading habits within rural communities. The growth of internet penetration in rural India is driven largely by mobile devices; 70 per cent of rural India's active internet access is via mobile phones. (*Times of India*, 14 November 2013). The mobile phone has become the *de facto* internet access method where there is a low penetration of personal computers and laptops.

Berners-Lee, the inventor of the World Wide Web, called for use of mobile technology to make the Web available to a large number of people in countries with low levels of internet

penetration like India. He underlined the need to teach people to build websites which work well on mobile phones and how entrepreneurs can build an economy using this technology. (20th International World Wide Web Conference at Hyderabad (*Times of India*, 2 April 2013).

The publishing industry has undergone huge transformations due to the electronic e-book revolution. The availability of local language e-readers and cheap mobile devices has led to a tectonic shift in reading preferences. Today, libraries are trying to impress their clientele with a mobile version of their Web presence and tailor-made content. Research and developmental institutions in India are creating websites, better optimized for mobile devices.

The e-book ecosystem – characteristics and models

Authors, publishers, aggregators, libraries and readers together constitute an e-book ecosystem in India which is slightly different from other countries but is also growing at a very fast pace in India.

E-books are cost-effective for publishers; their production and distribution costs are lower than print. The e-book ecosystem includes creation, distribution, purchase models and digital right management, etc. There are many moving parts to the e-book ecosystem. Publishers may be working as vendors for other publisher's e-books, or a commercial firm may acquire digital rights to market e-books published by another publisher. The vendors, aggregators and patron demand-driven acquisitions (PDA/DDA) are vital for building e-book collections in libraries. The aggregators' value proposition is a single platform for librarians to acquire e-book titles from various publishers,

governed by the same pricing model and license agreements.

Esposito (2013) discussed the characteristics of the evolving e-book ecosystem. Small pieces that are loosely joined together. Relationships among the players in this ecosystem are nonexclusive but often mutually supportive. Anyone can join this network and there is no top-down source of power. There is quite a bit of scepticism about digital rights management (DRM). According to Esposito, the e-book ecosystem requires social media to survive, as e-books are, for the most part, sold directly to consumers.

The availability of regional language e-books and e-readers provides new channels, as well as integration, into an ecosystem that is appropriate for e-book production and consumption for local and international audiences. Digital textbooks can be integrated into student courses along with illustrations and figures. E-book workflows include downloading in different formats or made available on IP-authenticated platforms. Titles can be procured in large bundles or individually. Concurrent access can be limited to a single user or multiple users, and titles can be purchased by subscription or as outright purchases.

E-book publishers have taken advantage of the changing digital environment to weaken the legal framework that has traditionally supported libraries. Licenses vary considerably, and the lack of standardization is a significant impediment to cost-effective e-book management (Jadhav, 2013).

With e-books and social networks, users can now engage with authors and publishers on site. Self-publishing is another popular trend, the budding authors, as well as established writers, are able to self-publish their own creation, without going through the

grind of submission and editing process.

Production, advocacy and acceptance of e-books in India

India is the world's second most populous country with 1.2 billion citizens, accounting for 17 per cent of the world's population (http://en.wikipedia.org/wiki/List_of_countries_by_population)

There are 22 languages officially recognized in the eighth schedule of the Indian constitution (http://mha.nic.in/hindi/sites/upload_files/mhahindi/files/pdf/Eighth_Schedule.pdf), each of them constitute of different character set, impacting the spread of e-book technologies in India. The literary festival at local, regional and national levels and aggressive promotional techniques adopted to enhance reading culture are being used to educate people about e-books.

Till now, Indian e-books market has no single dominant format or supplier, varieties of e-book readers are available with different features, the patron-driven pricing models are gaining popularity and DRM is one of the challenging issues. Apple, Android, Amazon and other channels of e-book distribution have separate DRM technologies and policies.

Smartphones are driving ebook sales in India through free e-book reading apps, such as Kobo, Aldiko, Google Play Books, Rockstand, Flyte and Kindle, are performing better than stand-alone devices. "Indians love a multitasking device" (*Times of India*, 3 May 2015). An ambitious Central Government initiative to provide high-speed broadband connectivity to 2.5 lakh (0.25 million) gram panchayats in villages across the country will help promote an e-reading culture. The majority of Indian readers buy e-books from Flipkart, Infibeam and Pothi. The online store iMusti Inc., has developed an e-book app that is compatible with regional languages.

Mehta (2012) identified three prime factors that limit the purchase of e-books in India that include the high price of devices, piracy and mindset: a huge section of people (online) have not yet evolved to consume books in the digital format. Also, the habit is not

developed from early on, as most of the education is imparted via hard copies. Students do read from eBooks, but this trend needs to go up drastically if consumption of eBooks needs to be increased.

E-books are generally stored on the cloud, enabling readers to access and the synchronize books across a number of devices. A reliable library management and lending system is essential for libraries to achieve the level of integration of eBooks or transparency in lending.

E-books allow reading over multiple devices and fonts are adjustable; readers can discuss titles with peer groups, as well as authors on site, as most apps are linked to social networking sites; high mobile penetration has completely redesigned the reading experience in India.

The Society for Natural Language Technology Research (SNLTR), has digitized the entire literary works of Tagore including his poems, stories, novels, dramas, essays and songs and developed an app to connect users to the website (www.nltr.org/). The app is accessible through Android devices. RockASAP – Handygo Technologies has teamed up with publishers like Diamond Comics Books, OM Books, Rajkamal Prakashan, Katha, Times Group and Pratham to give new authors a chance to publish their books directly on the Rockstand apps. Rockstand is a free e-book and e-magazine reading application with an innovative user interface that offers e-books in 18 Indian regional languages. e-Shabda is a regional e-book portal. The e-Shabda project, the first of its kind in India, is launched by Cygnet currently focusing on Gujarati books, but their future plan is to cater to other regional languages, as well as address issues like DRM.

India has one of the largest higher education systems in the world with 677 universities (<http://mhrd.gov.in/university-and-higher-education>), and if one adds a large number of affiliated colleges, the number grows to 50,000. Because of the high cost of academic e-books versus print editions, libraries in many educational institutions are acquiring a large number of e-books through consortia. There are two major consortia: INDEST-AICTE for technical institutions and UGC INFONET for

universities. National Library and Information Services Infrastructure for Scholarly Content (N-LIST) subsumed in 2014 under the UGC-INFONET Digital Library Consortium. The college libraries in India are getting access to e-resources under NLIST Programme.

Technology companies like Accenture, Tata Interactive, Aptara and hundreds of smaller players are involved in digitising local content. "Flyte" is an Android app for e-books launched by Flipkart. To read classical Tamil literature, the Central Institute of Classical Tamil (CICT) Chennai has published English translations of Iraiyanar Akapporul and Muttollaiyiram in e-book format. Rotary Club Pune distributed an audio e-book reader "Sunetra" to visually challenged persons.

Though electronic publishing has existed since the advent of the Web, it is the new generation of e-readers that is likely to improve the user experience and, hence, adopt e-content, especially e-books and e-newspapers. (Suhash and Shridhar, 2010). Basically an e-reader is software that helps reading e-books; there are various devices with different capabilities for display and interaction with content, for example, newspapers, e-books and e-magazines. These contents are fitted to small-screen devices, as they are provided through mobile-optimised websites and mobile apps. Mobile apps can add value to the content and are strongly favoured by users. The initiative to develop regional language and multilingual e-reader is the latest trend in India (Figure 1).

Figure 1. Hindi Novel "Shunya" on Android mobile



Source: www.hindinovels.net/

Vyas (2014) observed that Indian consumers prefer to see value in the products they buy, and e-readers may need to demonstrate more than just offer a platform to read e-books. A tablet might do well in India because it is reading-focused but it can also do many other things.

Flipkart, India's largest online bookseller, has developed an e-book app, namely, iMusti, with a strong India slant. This application offers Indian literature in the form of e-Books. The books are in English, Hindi and other various regional languages with the option of physical book purchase from the iMusti website: (<http://imusti.com/#!/iMusti-Apps>).

iMusti's application features include: content in dozens of Indian vernacular languages, bookmarking and indexing for convenient reading and sophisticated searching tools for quick access to desired content, and the offline mode allows users to access downloaded literature without internet connection.

Mobile access to digital content: users' preferences at Mahatma Gandhi International Hindi University

The Mahatma Gandhi International Hindi University (MGIHU), Wardha, is established by an Act passed by the Indian Parliament in 1997 to enrich Hindi language and literature with an objective to become a centre for "Global Hindi". It is functioning as a residential university solely dedicated to the cause of the Hindi language. The university was accredited with an A' Grade in 2015 by the National Assessment and Accreditation Council (NAAC) that assesses and accredits institutions of higher education in India. The number of students enrolled to various courses, namely, diploma, masters, MPhil and PhD, in Wardha, is around 1,200. Additionally, there are two regional centres at Kolkata and Allahabad; altogether, the student strength is nearly 1,500.

The pervasive use of smart phones by students, the uptake of e-book readers and the increasing dependency on handheld devices have implications for libraries. The university is planning to develop a mobile version of Hindisamay

(www.hindisamay.com), BahuBachan (e-journal), PustakBarta (bimonthly book reviews), Jankritipatrika (www.jankritipatrika.com/) and Hindi Language Discourse Writing, all accessible through the university's website (www.hindivishwa.org/). All the online resources are updated regularly and are hugely popular amongst the students.

MGIHU has implemented Koha open source software because of its impressive feature set which is continuously evolving and expanding to meet the needs of its user base. A dozen online databases and open access resources are accessible through the university's website. Koha is a Web-based application and supports android; prior to implementation of a mobile version, it is desirable to enquire about the users' expectation/awareness on mobile devices, as well as availability of Hindi e-books for access.

There are around 110 faculty members engaged in teaching various courses in this university. The author had personal discussion with 21 faculty members at various occasions and surveyed a group of 66 students: MPhil (26) and PhD (40) through a questionnaire. The random sampling technique was used to select from registered library users of 250 PhD and

200 MPhil students during first quarter of 2015 to get input on mobile-friendly websites and digital content and their preferences on handheld devices. Although such studies are necessarily limited in scope, the results provide insights into usage patterns, preferences and attitudes about e-content development and suggest ways in which a library can develop tools to best meet their needs (Figure 2).

The author was able to observe how students use mobile devices within the library, learn more about student attitudes and gain insights about possible mobile services the library could offer. It is understood that 60 per cent students in MGIHU possess two mobile devices. Student expectations of mobile services are that they are all encompassing, available anytime and anywhere, immediately informative, collaborative, customized and fulfilling (Figure 3).

The findings show some interesting data. In total, 33 respondents strongly supported the supported mobile version of the website. Further, 18 persons desired mobile services by libraries; 13 respondents had no special interest in mobile-friendly services; and 2 students did not respond to the question (Figure 4).

Figure 2. Type of mobile devices used by students

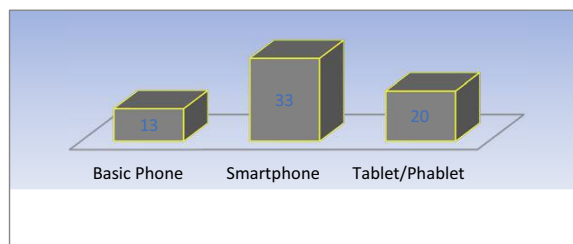


Figure 3. Users response on mobile access to university's resources

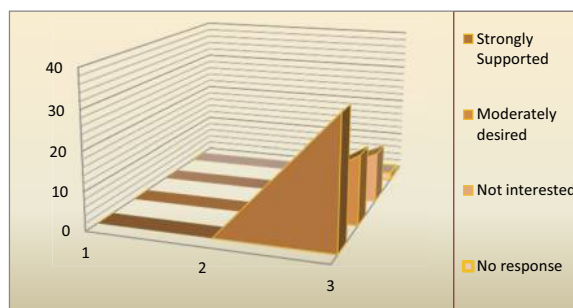
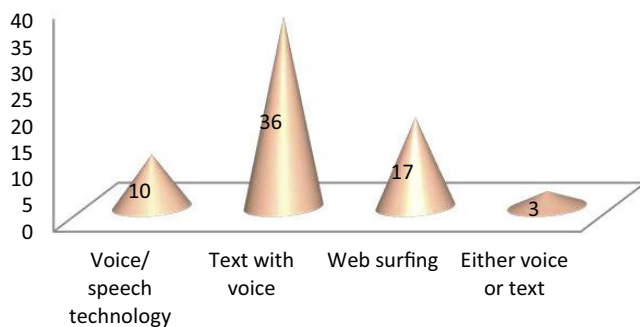


Figure 4. Use and preferences on mobile based library services

In the findings, 60 per cent respondents demand voice/speech technology along with text message, 16 per cent respondents are satisfied with text message; 20 per cent respondents preferred Web browsing of e-resources through the mobile, and 4 per cent of users were satisfied with either text or voice message (Figure 5).

The findings showed that 43 per cent users Web surf and read Hindi Samay (online journal); 13 per cent students read regional language newspapers; 8 students read Hindi-language e-books; and 9 students use digital content in Hindi language (Figures 6 and 7).

The author conducted interview of 21 faculty members on different occasions to know their perceptions on Hindi e-books. The barriers for widespread adoption of Hindi books include: 15 per cent mentioned there is no online rental for Hindi books and 16 per cent expressed non-availability of Hindi text books. The following are the websites used by students for Hindi books:

- www.hindinovels.net/
- <http://pothi.com/pothi/promotions/free-ebooks>
- <http://iasexamportal.com/civilservices/ncert-books> used by IAS aspirants

available for free reading on Android Phone or Tablet.

- http://android.informer.com/social/Hindi_Book_App.html

Concluding remarks

The trend of reading e-books on handheld devices in India started recently; however, in the coming days, there are good chances of a boom in the e-book industry and a great deal of promise is seen in the Indian book market because of digitization of content in regional languages and a huge number of upcoming writing talent. Today, libraries are using cloud platforms, digital books and mobile apps to deliver resources to remote users. The library advocacy program through mobile advertising is a great way to reach a wide and broad audience, especially distance learning students in rural India.

Constraints in mobile compatible library services include lack of knowledge/interest and the inability to develop mobile content, unavailability of infrastructure to support mobile applications, no budget provision for mobile technology application in library services and the library management software used by majority of the libraries has no mobile compatibility. Some other observations were that multi-function devices are preferred in India rather than devices that are limited as e-readers, that the digital platform is harsh on the eyes, contribute to headaches and blurred vision and that online books require costly Wi-Fi networks, and become outdated when new technologies emerge.

The publishers are of the opinion that India has huge potential for e-books because of the great availability of cheap e-readers. At the same time, technological awareness is hampering the growth of e-books in India. Mobile is no longer something libraries can ignore. Today mobile devices interact with cloud services, play rich multimedia content and allow for advanced user interactivity. New hardware and technologies such as Bluetooth, accelerometers and multi-touch screens, Multi Media Messaging (MMM), smart phone applications, GPS and Wi-Fi, together constitute a

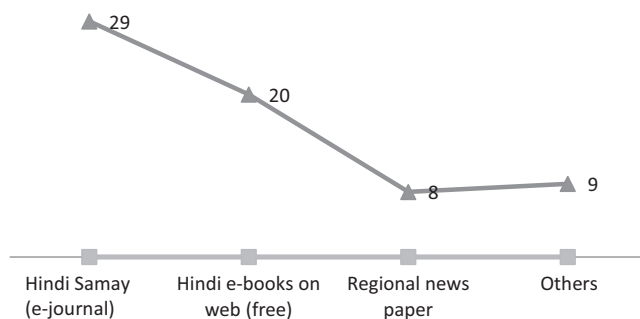
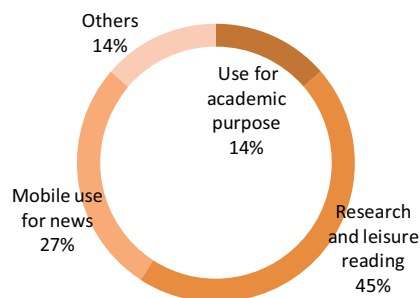
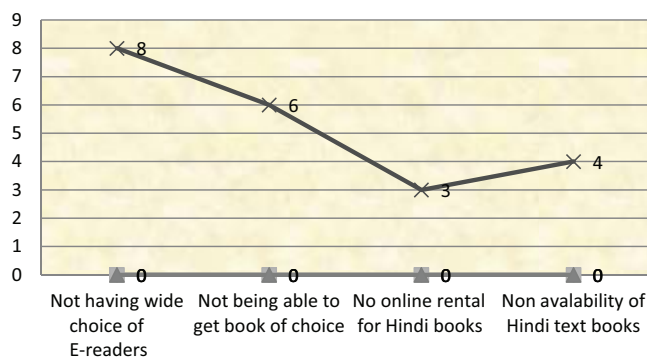
Figure 5. Type of digital content accessed by users**Figure 6.** Type of information accessed through mobile by faculty

Figure 7. Faculty's perceptions on Hindi e-books



robust mobile ecosystem. Indian university libraries are slow to develop mobile websites. Responsive sites are even slower to develop native applications (apps) for smart phones.

There are ample opportunities for digital library managers to provide mobile value-added services (mVASs). The mVASs in India are of three types: entertainment VAS, info VAS and mCommerce VAS. With the advent of the third generation (3G) mobile communication technology, mVAS library services have gotten a boost. Because mobile proliferation is much higher than personal computing, there has been a dramatic increase in online distribution of mobile-based services and consumption. As greater bandwidth is made available with the advent of 3G/4G and technological innovations in networks, platforms and end-user devices will further fuel this trend. Libraries can broadcast text messages to a large number of users for promoting services such as new databases, extended library opening hours or news/events. The tertiary institutes' libraries need to give utmost priority and undertake projects to make library's websites mobile friendly. Today, the patron-driven collection management has necessitated that library professionals need to find out how mobile technology can fulfil the information needs of young adults to support learning.

Tryble, J (2010) stated that India will dominate education and e-books along with China and mentioned that online books available on a subscription basis, the "cluster purchase" of e-book collections and downloadable e-books entered the academic field, making access to

e-books more convenient for researchers. India is a huge buyer and readers market in terms of handheld devices and digital content. Publishers do not need to go far away to source new books because both client and service providers are available in abundance; India is developing an ecosystem to make e-publishing and access easier, and the e-book industry is bound to boom in the coming years!

LIST OF WEBSITE ACCESSED ON 6 JUNE 2015

According to Bowker, there were nearly 25 million Indian e-book buyers in February 2012, available at: www.digitalbookworld.com/2012/e-book-adoption-in-u-s-nearing-25-india-and-brazil-best-new-opportunity/

Bagchi, S. (2015), "E-books help personalize the experience of reading", *Times of India*, May 3, 2015, available at: <http://timesofindia.indiatimes.com/tech/tech-news/E-books-help-personalize-the-experience-of-reading/articleshow/47136052.cms>

Global e-book report: available at: www.wischenbart.com/upload/Global-Ebook-Report2013_final03.pdf

Harris, S. (2013), "Libraries learn to love e-books", *Research Information*, available at: www.researchinformation.info/features/feature.php?feature_id=401

India Passes Japan to Become Third Largest Global Smartphone Market, After China & USA, available at: <http://techcrunch.com/2013/06/26/india-third-in-smartphone-world/>

Lugano, G., Mobile social networking in theory and practice, available at: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2232/2050>

Mehta, J. (2012), "Is India on the Brink of an 'eBook Sales' explosion?", available at:

<http://yourstory.com/2012/08/do-indians-purchase-ebooks/>

Nagrajan, R., IM what I am, available at: <http://epaper.timesofindia.com/Default/Scripting/ArticleWin.asp?From=Archive&Source=Page&Skin=CREST&BaseHref=TCRM%2F2011%2F03%2F12&EntityId=Ar00501&AppName=1&ViewMode=HTML>

Rechtsteiner, C. (2012), "The e-book platform Landscape", available at: <http://blueloopconcepts.com/reports/The-eBook-Platform-Landscape-BlueLoop-Concepts-August-2012.pdf>

Sandars, J. and Morrison, C. (2007), "What is the net generation? The challenge for future medical education", *Medical Teacher*, Vol. 29 Nos 2/3, pp. 85-88, doi: 10.1080/01421590601176380, available at: <http://informahealthcare.com/doi/abs/10.1080/01421590601176380>

Subhash, P. and Sridhar, V. (2010), "Will e-readers improve the adoption of e-books in India?", available at: www.business-standard.com/article/technology/will-e-readers-improve-the-adoption-of-e-books-in-india-110092000066_1.html

Tryble, J. (2010), *China and India to Dominate Education e-books*, University World News, 12 December 2010, No. 151, available at: www.universityworldnews.com/article.php?story=2010121022040248

Vyas, H. (2014), "India's e-book industry shows great potential", available at: www.digitalbookworld.com/2014/indias-ebook-industry-shows-great-potential/

Wink e-reader, available at: <http://thetechnozine.blogspot.in/2011/01/wink-ereader-multi-functional-ereader.html>

With 243 million users by 2014, India to beat USA in internet reach: Study, available at: <http://timesofindia.indiatimes.com/tech/tech-news/With-243-million-users-by-2014-India-to-beat-USA-in-internet-reach-Study/articleshow/25719512.cms>

REFERENCES CITED AND CONSULTED

Anuradha, K.T. and Usha, H.S. (2006), "Use of e-books in an academic and research environment: a case study from the Indian Institute of Science", *Program: Electronic Library & Information Systems*, Vol. 40 No. 1, pp. 48-62.

Ghosh, M. (2015), "Transforming our libraries, ourselves: ALA in Las Vegas – a brief outline with focus on international

programs”, *Library Hi Tech News*, Vol. 32 No. 2, pp. 17-19.

Pant, A. and Jindal, S. (2013), “Availability of e-books in science: case study of University of Delhi”, *The Electronic Library*, Vol. 31 No. 3, pp. 313-328.

Ramaiah, C.K. (2012), “E-books: past, present and future”, *DESIDOC Journal of Library & Information Technology*, Vol. 32 No. 2, pp. 79-82.

Rao, S.S. (2004), “E-book technologies in education and India’s readiness”, *Program*, Vol. 38 No. 4, pp. 257-267.

Soules, A. (2009), “The shifting landscape of e-books”, *New Library World*, Vol. 110 Nos 1/2, pp. 7-21.

Tyagi, S. (2014), “Analytical study of usage of electronic information resources at pharmacopoeial libraries in India”, *SAGE*, Vol. 4 No. 1, doi: [10.1177/2158244014524209](https://doi.org/10.1177/2158244014524209).

Vishwakarma, M.L., Maurya, S.L. and Govil, S. (2013), “Use of Mobile and wireless technologies in Indian libraries”, *International Journal of Engineering and Computer Science*, Vol. 2 No. 6, pp. 1799-1805.

Maitrayee Ghosh (maitrayee.ghose@gmail.com) is a Librarian at MGIHU, Wardha, India.