

# The End of the Printed Page? Amazon's new Kindle

Larry Frederick 1/3/08

Santa brought me an early present. It arrived just before the holidays, Amazon's new electronic book reader, the Kindle. I had read the reviews and believed I saw the possibilities, but I needed hands-on experience. At only \$400, I felt it was worth checking out, even though I was aware it was severely back-ordered. Santa didn't disappoint.

In terms of a disclaimer, there is a large body of work on electronic books and eBook Readers. The concept is not new. The Kindle is not the first eBook reader and Amazon is not the first eBook distributor. At project Gutenberg ([www.Gutenberg.org](http://www.Gutenberg.org)) you can download any of over 20,000 eBooks to your palm organizer or smartphone at no cost. As another recent example, for \$100 less than a Kindle, Sony has the Reader Digital Book. However, Sony's Digital Book lacks a keyboard, is dependant on having a PC with Internet service or a cell-phone with Data Service and requires a degree of computer savvy. While Sony hosts a digital book store, Amazon probably has the largest consumer mind share, possibly the greatest market share and also offers digital publishing for the masses. Still, according to project Gutenberg, "about 3 million free eBooks are downloaded each month, just from iBiblio [[www.iBiblio.org](http://www.iBiblio.org)]." The eBook/eReader concept is well known, it's the instantiation and business model that differentiate these products.

## The Kindle

While I offer a brief description here, your best source of information on the Kindle can be found at Amazon.com. The Kindle is a sleek 7.5"x 5.25' device with a 3.5 x 4.75" electronic paper screen and a pda/cell-phone style keyboard. It's a half inch thick tapering left to right to quarter inch and weighs less than 11 ounces. Its intent is to roughly replace a paperback. Like the Sony device, the revolutionary e-paper screen and crisp high resolution font make reading very comfortable. It's far better than a computer screen and can be viewed in any light and at any angle, just like real paper. That in itself sets these devices apart from their computer heritage. What's more, Amazon claims the Kindle will hold 200 books - before you add an optional memory card.

## The Good News

The Kindle is always connected to the Sprint cellular data network — at no cost and with no subscription. One can wirelessly download books from Amazon and subscribe to wireless newspaper, magazine and blog delivery anytime. You pay for the content only, not the delivery. Charges simply flow to your Amazon account.

There are over 90,000 titles currently available, generally at a much lower cost than their printed cousins. The majority seem priced at \$9.99 but many are less. Each kindle comes with its own email address. You can send your own documents to Amazon, have them converted to Kindle format and wirelessly downloaded for only ten cents per document. Alternately, you could have them converted and sent back to your computer for free, to be loaded to the kindle via USB connection. I wirelessly downloaded the complete IT

Security Policies of my institution and read them with ease (ok, at least until they put me to sleep.)

Because the Kindle enables the reader to pick the font size, the concept of a page number was abandoned and replaced by a series of location numbers (tied to the underlying data.) Choosing a comfortable font size, I was able to read novels and documents faster and, I believe, with higher comprehension. The combination of larger, more legible, font with rapid page turns seemed to propel me along.

One can navigate by a document's index, user-set bookmarks or by jumping to a location number. One can highlight passages, create marginal notes, search for words, clip pages and store them for reference. One can look up any word on the integral New Oxford English Dictionary or wirelessly check out Wikipedia or Google it on the Internet using an included browser. For those who comprehend better with music playing, MP3 files can be moved by USB connection to the Kindle for background listening, although the selection is currently a random shuffle.

### **The Bad News**

The Kindle has only a single font and, although it renders pictures (in B&W), it is a long way from faithfully reproducing a robust MS Word File. However, many workarounds exist. Despite the claims of other eReader vendors, PDF files may never convert perfectly on any eReader that flows text because PDF is a static format that is unable to anchor non-text objects to flowing text.

Right now, these limitations often mean that significant care must be taken to assure a professional look in a Kindle conversion. Many files (i.e., complex texts) will not convert successfully without significant HTML manipulation or without going through some intermediate format. However, I suspect that 80% or more of straight texts are perfectly compatible.

As alluded to above, the Kindle can be connected to a computer via USB where it becomes an external drive. I count this as bad news because it opens up yet another potential security hole in institutional systems, provides a vector for the inevitable malware and enables purchased copyright protected files to be copied to other devices and illegally distributed. It's yet another problem for eDiscovery, but what's new? Finally, the Kindle has a content manager, but it's too simplistic to provide much organization beyond selecting items from a straight list.

I may be happy, but others in the rest of the world are not. The Kindle and all associated services are only available in the United States. Possibly worse, at a time when the world is flattening, there is no foreign language support.

### **eReaders and Higher Education**

Have you weighed the average back pack? Have you noticed that laptops have gained mind share over desktops but that the majority of students do not seem inclined to carry them around. Have you noticed that all those AC plugs you put in for the laptops are unused but the computer labs are full? Have you checked the price of textbooks in your campus bookstore? Do your faculty members limit the number of textbooks they

associate with a course due to cost to the student? Do you make your distance education students come in to buy textbooks?

What is needed is for Higher Education to walk the talk. The questions above and others point to a problem we've all known about but collectively failed to address. If we are to continue to claim to be student centric, then something must be done. Consider some possible opportunities below.

### **Helping Students**

A January 3, 2008 article in Inside Higher Education, *E-Textbooks – for Real This Time*, by George Duda (<http://www.insidehighered.com/news/2008/01/03/ebooks>) seems to suggest that eBooks have not taken off in Higher Education because of student preference for classic textbooks. That was NOT the reaction of the students in my class upon seeing the Kindle, but I'm not surprised by the historical view. The success of eBooks, like other technologies, depends on both timing and a confluence of multiple innovations. In this case, the right technology meets the right content with the right delivery system at a time of increasing price sensitivity.

Imagine an institution that provided (or subsidized) a Kindle or other eReader to all incoming students and provided 80% of their textbooks over their college career via eBook. The cost savings and the convenience factor would certainly increase student satisfaction. The ergonomics alone would likely enhance learning itself by lowering the barriers to reading, increasing comprehension and aiding those physically challenged by small print sizes or difficulty turning pages. One can imagine ESL students making substantial use of the in-line dictionary and access to Wikipedia.

What is needed is for Higher Education to organize to promote better eReaders and more eTextbooks at lower cost. George Duda points out, "Over the past year, a consortium of major textbook publishers ... have been getting ready ... for college students." Much of the rest of the article goes on to describe a wide range of disparate efforts based on real or perceived market factors. However, I don't see the current paradigm of high prices and used book dealing changing any time soon without encouragement and focus.

I believe Higher Education needs to speak with one voice. Would your institution join an organization that required it to review all its book requirements and acquisitions and refuse to utilize those that could be in eBook format but whose authors or publishers choose not to be? Would your institution join an organization that would work with eBook Reader manufactures, eBook retailers, eBook publishers and authors to change the paradigm in this country?

### **Helping Faculty**

While many faculty will continue to make their content available on the web, in course management systems, podcast repositories and other e-Stores, I believe a niche exists to wirelessly push substantial material to an eReader. Course management systems could provide a poor-mans distribution system, but there may be better ways. And yes, students may be reading romance novels in chemistry class if the professor fails to hold their attention. They can do that now on other devices, just not as easily.

Do you have that pile of unread journals on your desk? Ever find yourself on a plane to a conference with a need to catch up on your reading? If you've ever tried to read your laptop on a plane (and I know you're in coach) and annotate a passage, you will believe the Kindle is a gift from the electronic gods. Get a content subscription or download your items before you travel. If you forgot to buy that best seller, just order it before they ask you to turn off your electronic devices.

Imagine that incoming students, having established their courses, are pushed a list of texts linked to Amazon or other sources. As a faculty member, you never again worry about Bookstore inventory errors leaving your students without your textbooks. Let your campus bookstore fall back on selling supplies and logo items. Your institution wasn't making anything on book sales anyway. Maybe eBook distributors would cut you a volume deal or provide a small return.

What is needed is for eBook sellers, like Amazon or Sony, to provide the eBook equivalent of Apple's iTunes University. It doesn't even have to be free to an institution, only reasonable. This would enable institutions to provide Institutionally Branded eContent in a cost effective manner at small scale while pointing to discounted commercial texts. The current Amazon Kindle license agreement forbids the device's owner from giving its Kindle email address to third parties for the purpose of receiving automated content distribution. That's just the very thing Higher Education would like to do. This will need to change.

### **Helping Libraries**

Almost all new content is digitally based and much of the prior content in our libraries is being retrospectively digitized. Pervasive use of e-readers will surely contribute to promoting the electronic format. Even now, the whole concept of "holdings" is threatened while the cost of subscription services is rapidly rising. Libraries are caught in the middle. When are our libraries going to stop paying for bundled content no one wants or uses when, at the same time, they lament that additional content is beyond the reach of their budgets?

What is needed is for our institutions to form or join an organization that requires a commitment to buying applicable content only in e-reader format, document by document, book by book. That organization should help content producers agree on eReader format standards. But more importantly, the business model should be centered on micro-pricing at the document/text level. The charges could accrue to the requestor, either the individual or the individual's budget, rather than representing a direct expense to the library. The faculty, staff and students could buy whatever un-bundled content they were willing and able to pay for and have it downloaded almost instantly. The free sample option would enable them to browse and focus their resources. Buying "just in case" would be replaced by buying "just in time." This is not a new idea, but we still seem to be at the mercy of commercial interests.

Libraries should still be free to negotiate for volume discounts and pools of downloads. Amazon is perfectly equipped to do micro-pricing and does it well. Others can do it, or Amazon can sell or "franchise" virtual logistics to publishers, aggregators and distributors. Publishers need to move to the "long tail" model of Amazon and eBay. George Duda's article and the blog comments that follow tend to suggest that some eBook publishers are still clinging to a higher priced model. Work need to be done to

assure everyone gets a fair share of the profits. The relative control of digital rights afforded by eReaders should help.

The trend to eBooks is inevitable. The advantages and economies outweigh the problems. In Higher Education, Libraries, like Information Technology organizations, may soon find they deal more with vendor relations and contracts than with their more traditional duties. Of course the problem of how to find exactly what you want without drowning in all that information remains a challenge and eReader content is bound to exacerbate it.

From a service perspective, it seems to me that Libraries, like IT help desks, best serve our institutions when they attempt to put themselves out of business, a goal they may realistically never achieve. If everyone could be successful accessing information and using computers without ever going to the library or the help desk, wouldn't we all want that? Wouldn't that help librarians to continue the shift from stewards of books to leaders in information management?

### **The Paperless Office**

What happened to the paperless office? How about just the paperless meeting? Ever notice how everybody hates watching PowerPoint presentations and just to make things worse, they give out hardcopy of the slides? As a personal example, even if I send the meeting material by email in advance (as most everyone does), many print it out killing trees. Moreover, many don't bring their printouts to the meeting and I, anticipating this, have to provide hard copy anyway. I toss countless unnecessary copies. This could hardly be called green.

Ever notice that Administrators, especially high-level administrators, for whatever reason, seem less likely to sit around with laptops in front of them (even when everything is wireless)? However, they're increasingly reading their email under the table (and even when they're seen on twelve foot teleconference screens) on Blackberries and PDAs. These individuals are far from luddites by any measure. It's just going to take the right device and a little leadership to change things. Imagine if, before a meeting, one could do an eReader push and assure that everyone had all the current materials as well as a compendium of the relevant historical documentation.

What is needed is a change in culture. The Kindle is not simply an eReader, it's a productivity tool. It's a spam free communications channel. With an eReader I can meet with my boss and have all the historical documents at my fingertips.

### **Helping Authors and Publishers**

Amazon offers what it calls the Digital Text Platform. With just your Amazon account augmented by a checking account number to accept your profits and a social security number for IRS reporting, you can upload your own textbook, novel or other literary work. You can be listed with the big dogs at no cost. No ISBN number is required. For each sale, Amazon pays you 35% of the sale price that you set and handles the complete transaction.

Printed material garners hoards of reviewers giving some sense that the work is at least legitimate, even if it isn't actually judged as great. Supporting the notion of prior review, potential customers can download, for free, eBook samples of books *that also appear in*

*print*. Regrettably, DTP-only editions do not yet have this feature. Without it, successfully marketing an unknown author's work by means of prior review is much more difficult.

What is needed for self publishing is an initial stamp of approval, a way to separate the wheat from the chaff. It could be a book-of-the-month-club choice, a Good-Housekeeping Seal, or an endorsement by Oprah. Basically it's something that fills the void between the author's opinion and those personal Amazon reviews. While the readership is, and should be, the ultimate judge, there needs to be official reviewers to prime the pump. Otherwise, we will be deluged with the mediocre, like a hundred results in a Google search.

For those who may be considering venturing into the world of authorship, I'll share some advice. Don't quit your day job. In the real world of book creation, whether you are publishing an academic text, a non-fiction work or a novel, you have to run a literary gauntlet. In my case, the text in question is a novel at one end and a journal-like article at the other.

In the case of the novel, I can't begin to tell you how difficult it is to find an agent and a publisher. For first time authors, things can drag on for years with little to no feedback on the work or the approach. In the case of the journal-article, I was invited to write it and did receive excellent feedback on my first draft. I just saw the final draft today, four months after the initial draft. I must say they've done a good job editing it for both length and content, but the process seemed slow and much content had to be omitted to accommodate their format. It's now like an abridged version. At least the gist of it remains and the word will get out. I'm happier with that than the novel that remains in limbo.

At the end of the day, this is the sort of plodding, costly and unsatisfying business that cries out for disintermediation. In a flat world operating at Internet speed, this is just not going to do. You need to publish quickly. As an author, I need rapid feedback. I need commercial viability. I need the detailed critique by the world, while retaining editorial control, perhaps something paralleling Wikis.

What is needed is a way for the Kindle annotations to be more detailed and for Amazon to enable a mechanism for those who purchased the text to provide those annotations to the author. This should enable books to move from editions to versions. Amazon would need to allow book customers to update the versions of their holdings for little to no cost. Is this sounding familiar? eBooks (really all books) need maintenance, upgrade and replacement.

If publishers could issue eBook versions, linking printed editions only to major versions, they could get the material out quicker, test the viability and respond to the buying public. This should also sound familiar. Books need to come out in Beta in eBook format. I'm certain my novel and my article would be better received if all of the above were in place.

## **Conclusion and Action Steps**

As eReaders go, the Kindle is both an evolutionary step and revolutionary. There are hundreds, maybe thousands of very positive reviews on Amazon. If you haven't seen a

Kindle, or your institution is not planning for eBook use, it may be time to pay closer attention. This is, without doubt, the beginning of the end of print dominance. eReaders that follow will eventually cure the warts of today's Kindle. They will render documents more faithfully. They may also take on features of other devices, becoming less of a single purpose tool. They will embrace rich media content, become more interactive and have improved interfaces. Touch screens would work for me. While the Kindle may eventually become the Pong of eReaders, the printed book won't completely disappear. Acknowledging the possibility of solar power, for the foreseeable future, many will prefer or need to use, a medium that doesn't need to be recharged. However, the writing is, so to speak, on the eWall.

The recurring question seems to be, "How will Higher Education rise to this challenge and throw off the ways of the past?" I have suggested in this paper that a fee-based consortium be created, possibly under an umbrella organization. I imagine this consortium to be similar to the beginnings of Internet II. This organization would employ full time people to represent Higher Education in eBook/eReader matters. Membership would require an actual commitment to not buying (were appropriate given current technology) books, journals and other text materials in printed or database form. Given a significant number of members, the organization could significantly influence the adoption and use of this medium. Everybody could come out ahead.

*Larry Frederick is the Associate Provost and Chief Information Officer at the University of the Pacific. This paper would not have been possible without the thoughtful editing of Dr. Jim Phillips and Jane Frederick.*