Running head: FUTURE OF DIGITAL BOOKS

The Future of Digital Books

Sarah Tenfelde-Dubois

April 9, 2008

LI 804

Emporia State University

The Future of Digital Books

In 1450, the invention of the printing press by Johannes Gutenburg created a new way of making books more easily accessible. Before this discovery scribes would hand write the books, which were copied from previous handwritten copies. The printing press was revolutionary for its time because this technology enabled mass literacy, and world-wide manufacturing. This ground-breaking development is still regarded to be one of the most important inventions ever assembled.

Now, five centuries later, a new technological revolution is starting. With the explosion of the internet and other electronic resources, the digital book is gaining momentum in the technology community. The future of the digital book is debatable because we just now are beginning to understand what impact it will have on our society, as we see it now. The purpose of this paper is to discuss the possibilities of the digital book as a new development, and the impact it will have on the world in the future.

Many physical libraries, whether public or academic, are steadily running out of room on the shelves because of all the new materials continually being published. While searching for information regarding digital collections in libraries, the most obvious plus to the technology revolution, through the implementation of digital books, would be to create much needed space while still providing up-to-date service for the patrons. In response to this need, new technologies have arisen and Amazon.com, a major provider of book services online, has recently come out with a new device called the Kindle. The Kindle is a machine that allows a reader to download a book onto this device and read it from there. One library is now making the Kindle available to its patrons by downloading books and saving them to a Kindle, which can hold up to 200 books. As Oder (2008) explains, "the device will be used not only for best sellers but also to access books that otherwise would take a long time to get through interlibrary loan" (p. 1). If one library is already making digital books available to the public with success, it seems that digital books are already impacting library space and end-user services.

While searching for information on the internet concerning the use of digital books, it was apparent that paper consumption is another important aspect to consider when discussing digital books. Environmental issues are forefront in today's news, and while most in the information profession believe books will never fully be replaced by new technology, it is important to understand the impact digital books would bring to the environmental issues being discussed today. Books, magazines, and newspaper are frequently held responsible for mass production using paper. Whether recycled or not, paper does not come from an easily renewable resource and if digital books were to become the norm, paper would used much more sparingly. As reported by CNN (Sept. 25, 2000), "One disk will hold all the reading material you'll need. Environmentally speaking, that means less cutting down of trees".

The environmental cost of transporting physical books to their destinations is another aspect important to the future of digital books. The fuels, and wear and tear on delivery vehicles, are monetary costs, but those can turn into environmental costs easily. With a digital book, it can be delivered to a patron via email, portable document format (pdf) versions, or to the reading tool they are using without using a vehicle. Just a few clicks of a mouse, and the book is delivered to patrons almost instantly, with no waiting required. Agreeing with this delivery idea, Breede (2006) states, that books "will increasingly migrate to non-paper media forms because of their more efficient content delivery" (p. 43). In looking at the environmental impact of the use of digital books, one can see why it is important to factor in all considerations of this new technology.

Digital books will also have an impact on the future regarding how patrons will learn to interact with them. One example of this is students' education through the use of the library. With digital books becoming more readably available, research is made easier. With a library's access to online materials and its own collection of digital materials, searching for the information a patron needs is accessible at once. In a traditional library, the information is normally housed within the physical building, or if not, one can retrieve the data through inter-library loan (ILL). This can sometimes take days for the information to be delivered to the researcher, whereas the digital book would be available to the user instantaneously. Pomerantz and Marchionini (2007) clearly recognize this when they state "Electronic materials…are accessible far more rapidly; even with the slowest dial-up connection, accessing electronic materials stored remotely takes on the order of minutes, not days or weeks" (p. 510).

Digital books are already influencing readers everywhere by making the information more widely available at a rapid pace. This not only affects libraries, but also publishers. Before electronic resources were employed by users, it would take months for a book to get from the publishers to the bookshelves. Kular (2006) provides an example of how digital technology is beneficial to publishers when he states, "an outdated document can remain on the bookshelves for a few months to several years" (p. 65). Now, with digital books, patrons can easily access books published in different countries or cities without having to wait.

Digital technologies also help authors self-publish their work, because with the help of online publishing providers, they are involved in their project from start to finish. Authors can change the existing documents, ask questions, and follow up after the publishing process is finished. Because of the ease of online self-publishing, more writers are considering online digital books as the way to get published. As Kular (2006) explains, "most writers consider digital print on-demand technologies and Internet applications to be the only viable venue for publishing" (p. 65). This is not always the case, but it is a convenient and immediate approach to getting the work published.

Digital books are also adapting to our increasingly electronic lifestyles. While searching for articles related to digital technologies implementation, the main focus seemed to be the impact for the end-user. With our lives revolving around everything electronic, digital books are at the forefront for service to the users. One way digital books in the future can help users is by offering translation into different languages with a click of a hypertext link. In today's globalized world, multilingualism is very common, but there is also the other side, where someone might only know one language, and that language is not necessarily English. Digital books can offer an important opportunity to someone by translating a document into their language expeditiously. As Cope and Kalantzis (2006) indicate, "Machine translation also makes the job quicker, particularly when it is linked to texts which have been deliberately designed for multilingual delivery" (p. 207). There are numerous services (such as Babelfish) which will translate a document online, but the potential for machine translation, one example being through Kindle, is enormous.

Another implementation using digital books is the project that Microsoft and Digital Accessible Information System (DAISY) are currently working on. DAISY was created to help the blind by going from analog to digital. The project consists of a new tool for the blind that will translate Word documents into a digital talking book. Reuters.com (November 13, 2007) reports that the partnership would create, "a free, downloadable plug-in that would translate documents based on Open XML... to DAISY XML". This medium may be talking books, but the concept of digital technology is present in that a book that can be delivered immediately and satisfy the endusers needs through current machinery. Braille is a wonderful knowledge, but for people who lose their sight later in life, it is very hard to learn and it is not easily accessible everywhere. Therefore, digital talking books help the blind who need access to information but cannot see to read.

Through researching digital books and their future, it was apparent most scholars do not think the physical book will become a thing of the past. Most agree that digital books will complement physical books much like DVDs and movies do. Many readers are not ready to give up what a physical book experience entails; the crispness of the pages, the smell of the book, and the ability to curl up on the couch with a cup of coffee and a book. That being said, technology is moving at a rapid pace, and while we cannot exactly tell what the future holds, digital books will continue to be an important part of the coming times. The impacts digital books will have on reader's busy lives and the possibilities to develop further are why we have to see where this new technology will lead us.

References

Breede, M. (2006). Plus ça change...print on demand reverts book publishing to its pre-industrial

beginnings. In B. Cope, & A. Phillips (Eds.) Future of the Book in the Digital Age, (pp.

27-45). Great Britain: Chandos Publishing.

The author of this article explains the history of books before printing, moves to the invention of moveable type, then continues with the mass-production of the printing of books. He talks about the economics of book printing before moving on to the economics of digital printing. This is important because with digital books becoming so prevalent, digital printing will also have to be monitored to ensure it changes to keep up with the current technology. It is important to note this article included the processes of changes the book has gone through for the past few centuries, and how the book will continue to change in the future.

Cope, B., & Kalantzis, M. (2006). New text technologies, globalization and the future of the

book. In B. Cope, & A. Phillips (Eds.) Future of the Book in the Digital Age, (pp. 191-

209). Great Britain: Chandos Publishing.

This article focused on the written word and globalization of language to include the digital book. The article talks about multilingual metadata and the different tags associated with the different content of each document to allow for each document to be easily located on the internet. They discuss how this tagging will allow for a certain card-catalog form for the internet. Along with globalization of language, the article also talks about machine translating of these languages to provide instant access for people of all languages. This article also discusses the economics of machine rendering versus human translation what each represents to the global world.

CNN.com (September 25, 2000). The pros and cons of e-books. Retrieved April 17, 2008, from

http://archives.cnn.com/2000/books/news/09/25/ebook.primer/.

This article was a perfect fit for this paper because it discusses the pros and cons of digital books in the world today. It starts talking about popular books being released as e-books and how the publishing industry would react to the book being downloadable almost instantly. The hype surrounding the popular books would all but disappear because it would be accessible from your own home. The article does go on to discuss the pros of the e-book over the paper form and that many people do not consider the new technology to overtake the old paper book. The article ends with a discussion of the future of digital books and how they will become the norm in society because they will weigh less, and be available automatically.

Kular, C. (2006). The venues for vanity: Methods and means of self-published books. In B.

Cope, & A. Phillips (Eds.) Future of the Book in the Digital Age, (pp. 57-67). Great

Britain: Chandos Publishing.

This article was an interesting concept concerning the ability to self-publish work on the internet. It started talking about the desire to publish and why many people want their work known to the world. The freedom of press is a right that is available throughout the majority of the world, and in the digital realm, newer technologies are available for the chance to self-publish. The author of this articles details the protocols for self-publishing and other legalities before going into the actual workflows of the production of a self-published digital book. The article ends with the thought that self-published authors are accountable only to themselves because they do not have to go through a peer- review. Self-published e-books will continue to be part of the future as long as people are willing to put themselves out there in the world of publishing.

Oder, N. (2008). A library starts to lend kindles. Library Journal, 133(1), 20(1).

This brief article lends itself to the world of electronic resources by discussing the new technology called the Kindle. This article focuses on the Sparta Public Library in New Jersey that has recently purchased two \$399 Kindles for patrons to check out. The library will even buy the book (only one) patrons are wanting and keep it in their collection for future use. This article also mentions the space saving feature of the Kindle and the quickness of the device to receive the books. The Kindle is a relatively new device that is already making headlines as the next technology to replace regular paper books. Whether that is true remains to be see, however, the Sparta Public Library has had a decent following of the device.

Pomerantz, J., & Marchionini, G. (2007). The digital library as place. Journal of Documentation,

63(*4*), 505-533.

This article discusses the variety of both digital and physical libraries. It starts by discussing what a physical library has and the access to information that patrons need. The design of libraries is researched as part of the affect it has on patrons as well as the design of digital spaces within a library. The findings between the two are then discussed. Research limitations of the two types of libraries are also discussed with the outcome based on what digital libraries can accomplish and what their limits are found to be. The article then goes on to discuss future development for digital libraries and what those developments will mean to the patrons using the information provided.

Reuters.com (November 13, 2007). Microsoft to develop document translator for blind.

Retrieved April 17, 2008, from

http://www.reuters.com/article/technologyNews/idUSL1371784420071113.

This brief article was amazing to find because it focused on another type of digital book that is somewhat overlooked, that would be the digital talking book, used for the printdisabled. It is interesting because Microsoft and DAISY have combined efforts to create a free service for the blind that entails translating documents digitally from analog so the analog versions of documents can be updated to include new technology. This collaboration will be especially beneficial if the creation was developed and marketed internationally because then the sight impaired people of the world would be taken to a whole new technology. With audio talking books being overlooked, it would be great if the digital format could shed some new light on this problem.

Appendix

For my search process, I started by figuring out what direction I wanted to go with my paper. I knew I wanted to do the future of digital books, but I also wanted to incorporate some items that were a bit different than just your regular electronic online books, hence the mention of digital talking books and the Kindle.

To start the process, I went to Emporia's online electronic resources and searched in Academic OneFile and Wilson Web for "digital books" and "future of digital books". I did find some articles relating to these subjects on both sites. It was not particularly hard to find the articles and they were relevant to what I was searching for, so I printed them.

I then went to Google and did an online search for the same two subjects. There were many articles that popped up and the most time consuming area was reading each one to see if they were relevant. I also expanded my search to the "use of digital books", "implementation of digital books", and "digital collection". Each of these seemed to narrow down the field a bit and made it easier to read about each subject.

As a final search, I looked over our class resources for LI 804 and found two articles I had previously read that fit my subject search criteria. I used one of these articles in my paper.