What is Inhibiting the Proliferation of E-books in the Academic Library?

Alanna Jenkins, FIS2309, Design of Electronic Text

Abstract
In the mid 1990’s many academic libraries began the transition to electronic holdings, specifically e-serials and e-books. Since this time services such as JSTOR and OVID have come to play an integral role in the dissemination of journal articles. E-book platforms such as Springer and MyiLibrary have also made an appearance in the academic library however not to the extent that e-serials have. This has left many wondering if and when e-books will achieve what their serial counterpart has. What is inhibiting the expansion of academic e-books collections will be examined, including issues surrounding their lack luster history, Digital Rights Management, reading tools and advertisement.

Keywords: E-text, E-books, academic libraries

Introduction
Electronic books (e-books) can be defined as “any piece of electronic text regardless of size or composition, excluding journal publications, made available electronically or optically, for any device, hand-held or desk-bound that includes a screen” (Dinkelman & Stacy-Bates, 2007). The idea of e-books has been around since there have been computers. Within the past twenty years the need for e-books however has grown exponentially with desktop publishing, increased internet access, the ease of electronic publishing and dissemination as well as sustainability issues that have increased citizens awareness of the need for paperless publishing (Rao, 2005).

E-books are considered the third wave of electronic publishing. The first wave included the conversion of indices from secondary publishers to searchable online databases such as Dialog developed in the 1970s. The second wave came when the internet became popular and journals began converting articles to Portable Document Format (PDF) and including Standard Generalized Markup Language (SGML) to allowing users to link out to references for further study. E-books followed providing many of the benefits of their earlier counterparts, particularly 24/7 remote access.

Much has been written on the impact of electronic-serials (e-serials) on the academic library with little attention to e-books. This is in part because e-book purchases represent a very small fraction of the total book market. Walt Crawford (2006) points out that early predictions believed that e-books would render print books obsolete by 2001, or at least dominate half their market. In fact, in 2003 e-book revenue generated only $10 million of the $24 billion American book market (Own, Tiessen, Weir, DesRoches & Noel, 2008). As Connaway and Wicht notes in their 2007 article “What Happened to the E-book Revolution?: The Gradual Integration of E-books in Academic Libraries” the e-book environment is in a constant state of flux with frequent changes in e-book providers, technologies and library digitalization initiatives. As a result the presence of e-books within the academic library appears to lag behind that of e-serials.

The following essay will address the reasons for this lag as well as recommendations in improving the presence of e-books within
academic libraries. The difficult history of e-books will first be discussed followed by specific issues which have inhibited e-books in libraries including lack of standards and hardware development, rights and operability issues, unrealistic price and access models, and limited discovery options.

The History of E-books

A 1945 article published in *The Atlantic Monthly* by Vannevar Bush called for the use of technology to enable mass storage and retrieval of information. He conceptualized the “memex”, a device that could store and display personal documents, records and books. In 1967 a Brown University computer scientist, Andries van Dam, developed the Hypertext Editing System (HEP) allowing text to be read on a computer screen. Alan Kay, another computer scientist, envisioned a “Dynabook” device similar to a laptop. He defined its uses as broad and stated that “just as the book was an extension of the oral medium, so is the computer an extension of the print medium” (Connaway & Wicht, 2007).

In the 1990s when the Internet became increasingly available to the masses publishers and vendors began contemplating developing and selling e-books. At that point to develop an e-book a print publication would have to be scanned or keyed, proofread and then converted to HTML, a laborious and expensive task. In 1999 Netlibrary was launched with more than 2000 e-books commercially available to libraries. Its competitors, Questia, ebrary, Librius, ZeroHour and Glassbook soon followed. In 2001 NetLibrary began having financial problems and was absorbed by OCLC in 2002. Librius, Zebohour and Glassbook faced similar demises. In 2003 RoweCom, an e-serials provider, filed bankruptcy after been unable to fulfill numerous journal subscriptions. Although RoweCom was not an e-book provider its demise combined with the numerous e-book company fold-ups caused librarians to begin to view e-books as a financial risk.

With the ambiguity surrounding the viability of e-books it was not until 2004 that two new e-book platforms, Ebook Library (EBL) and MyiLibrary were established. In December of 2004 Google also began its Google Print Library Project (now called Google Books Library Project). Via this project the New York Public Library’s and the universities of Michigan, Harvard, Oxford and Stanford’s digitized collections were made available through Google Books. During this period publishers themselves also began e-book initiatives. These included such publication houses such as Elsevier, Springer, Taylor & Francis and Oxford University. They now sell e-books directly to libraries, including e-book collections formerly belonging to EBL and NetLibrary (Connaway & Wicht, 2007).

These successful e-book projects have been around for four years now proving stronger. However, if such projects wish to have four more years of success it is vital that they remain aware of the various barriers that academic libraries and their users face with respect to e-book acquisition, operation and use.

Lack of Standardization

As with most new products, e-books are currently in the midst of a “standards war” (Own, Tiessen, Weir, DesRoches & Noel, 2008). Open eBook (OEB) publication has attempted to provide a common e-book format. OEB’s primary goal has been to catalyze the “rapid and widespread production and use of e-books” (Own, Tiessen, Weir, DesRoches & Noel, 2008). OEB however is not publically available. Proprietary formats including, AdobePDF, PostScript, Microsoft Reader and DAISY Digital Talking Book are sold to consumers and can be equipped with Digital Rights Management (DRM) technology. DRM refers to access control technology used to protect material that is copyrighted and to limit usage of digital media and devices. DRM has had a negative impact on multiple levels of e-book acquisitions within academic libraries and will be discussed in greater detail in the following section “Rights and Operability Issues”.

This lack in technological development standards has resulted in libraries having to maintain multiple formats, hardware and software. It is also argued that librarians are unaware of the fact that their needs are not driving the present market developments of e-books although some standards developers do consider libraries role in the final product. Standards are needed on an industry-wide level to enable the availability of e-books on and exchangeable between different platforms (Own et al., 2008).

Rights and Operability Issues
As noted, DRM technology has played a significant role in inhibiting the integration of e-books into libraries. DRM requires libraries and their patrons to manage an exuberant amount of authentication policies and procedures (Crawford, 2007). Academics who participated in an Ohio University study “Sense-making the Information Confluence” noted that accessing e-texts though their respective library catalogues rendered multiple logins, passwords and electronic walls. The reason behind the variance between access is in part the result of a lack of standardization but also because of e-book licensing models (Own et al., 2008).

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. Therefore, to increase the availability of print model texts the library would be required to purchase multiple subscriptions to the book. Print model vendors such as Libwise and Netlibrary also employ restrictive DRM technology (Own et al., 2008). DRM can restrict such actions as printing, copying, saving and sharing of e-books between reading devices, such as an individual’s laptop and Blackberry (Own et al., 2008). Springer (2007), an e-book vendor themselves, notes in their “10 Best Practices for Acquiring and Implementing an eBook Collection” that libraries should select a vendor with the “smallest possible amount of DRM” to ensure patron usage and satisfaction.

In fact, DRM restrictions are one of the top complaints amongst academic library users with regard to e-books. In a 2006 study conducted at the University of Strathclyde, participants who had experience using e-books repeatedly commented that the limits related to viewing periods and printing negatively impacted their ability to access and use e-books effectively. In the same study those who had never used an e-book stated one of the primary reasons they had not was because they would be unable to make notes, highlight the e-book or underline text within the body of the text as they would be able to using a print version (Abdullah and Gibb, 2006).

It is because of the DRM restrictions of the print model that new models have begun to flourish. The second e-book model is the database. Vendors such as Ebrary, Knovel and Safari include e-book content within a database, versus on an individual book basis, such as the print model. As a result most often simultaneous access to e-book content is enabled. Open Access (OA) is the final model. OA allows e-book content to be accessed freely with few restrictions. OA vendors such as the National Academy of Press and Project Gutenberg do not encrypt their e-books with DRM technology, therefore eliminating many of the woes associated with the print model (Connaway & Wicht, 2007).

Problems with Pricing and Purchase
The variance amongst access models has also had an impact on the pricing and purchasing of e-books. Because of this, academic libraries’ e-book holdings are a “hodgepodge” of licenses from multiple vendors that vary in access, terminology and cost (Own et al., 2008). At present there is no standard pricing model for e-books which contributes to this issue further. It is a common assumption that e-books cost less than their print counterparts; however, as Connaway and Wicht (2007) notes, publishing costs remain consistent between print and electronic formats including writing, editing, formatting etc. E-book providers
also incur the costs of hosting e-book content, maintaining platform features and providing tech support.

At present there are as many pricing models available to academic libraries as there are e-books it seems. Libraries can purchase e-books on a title-by-title basis. They can subscribe to an e-book collection or lease e-books. Each of these also includes some differences depending on the provider and the subscribing institution (Own et al., 2008). Each pricing model has its advantages and shortcomings. The lease model for example is of major concern when it comes to transforming academic libraries collections from print to e-text. This is because such a model only provides libraries temporary access to e-books based on the length of their subscription period. If they do not re-subscribe however they loose all access to the content as they are not able to preserve that content in anyway within their own system (Own et al., 2008).

The lack of a standard price model upon which librarians would be able to negotiate fair and effective subscription agreements with vendors has been inhibited as a result of the lack of standardization on multiple levels. One suggestion, put forth in hopes of progressing towards a standard pricing model is the development of model licenses. Model licenses could provide security for vendors who would be made aware of what the library plans on doing with the product and would eliminate “unenforceable clauses” (Own et al., 2008). “A library may use the license verbatim, or use parts of it to negotiate replacement clauses in existing vendor licenses clause-by-clause. A library may even choose to use existing model licenses as a basis for developing its own model license (Own et al., 2008). Some however claim that a standard license model for e-books is not viable at this stage considering e-books and the e-book market is still in its infancy. They also argue that standardizing content management should be the primary concern at this point in time (Own et al., 2008).

### Discrepancies in Discovery

Today, most often e-book bibliographical records are uploaded into a library’s catalog. For example, at the University of Toronto records are uploaded using mylibrary. Software such as mylibrary, in addition to basic HTML coding, enables cataloguers and library staff to enter basic entries into the catalogue as well as provide links to e-book records from various parts of the library’s website such as the recommended books section of an online research guide. Librarians surveyed stated however that in the majority of libraries there has been few additional applications to enable the discovery of e-books. This has greatly inhibited the use of e-books in academic libraries. Abdullah and Gibb’s 2006 study specifically looked at e-book awareness and usage at the University of Strathclyde. Participants included 90% undergraduate student and 11% postgraduate student from a variety of disciplines including business, social science, engineering, medicine, sciences and other. The majority of students (22%) were from the sciences while the lowest (2%) were studying within the humanities. While 72% of respondents noted that they were aware of e-books in general, 57% of respondents stated that they were not aware of the fact that e-books were available through the university library. Of the 43% who were aware of the library’s e-book holdings, 50% stated that they had found out about their availability through the library website, 13% from “other sources” and 8% from a librarian. Of those who answered “other” as to how they had found about e-book availability the majority stated it was through their participation in the survey. Others stated that they had found out through the library catalogue or peers (Abdullah and Gibb’s 2006).

These discrepancies in discovery have had a deep impact on e-book usage. 60% of students surveyed stated that they had never used an e-book before, on campus or otherwise. Of the 40% who had 57% stated they had read 3 or less prior to the survey. Textbooks were most commonly used
(68%), versus reference books and manuals or instructional books, presumably a bias of the primarily undergraduate survey population (Abdullah and Gibb, 2006). 48% of these respondents stated that their top reason for using e-books through the library was because they were free.

Other than lack of e-book holdings awareness students also do not use e-books because of the fact that they require learning new technology and approaches to reading. Many do not opt to seek assistance in learning to use e-books even if they discover them through the library catalogue on their own (Connaway & Wicht, 2007).

Suggestions
The following is a list of suggestions academic libraries and e-books providers should highly consider to ensure the development of a patron friendly e-book collection.

Minimize DRM restrictions
It is apparent that DRM technology is necessary to ensure the protection of copyrighted material. Unfortunately, at this stage DRM technology is overly protecting that data to the point where e-book usage has been sacrificed. It is critical that academic libraries voice their and their patron’s opinions on DRM technology to e-book providers and developers as to ensure that production and distribution of e-books is guided by the needs of these end users. Libraries need to specifically address their needs including preferred reading devices and tools. Another way by which academic libraries can minimize DRM restrictions in their e-book collections is by pursing database and OA models which have minimal to no DRM encryption.

Model Licenses and Content Management
As noted, model licensing has been suggested to provide standardized pricing. Others have noted that this could not be possible until standardized content management (including factors related to DRM) have been established. The fact is that you cannot have either model licensing or content management without the other. They influence one another interchangeably and will ultimately act together to develop some form of a standard e-book pricing model. It is thus suggested to librarians to continue to ensure that their needs, budgetary and content wise, are heard and met, whether it is through official surveys sent to e-book vendors or at the negotiation table when beginning or renewing their subscriptions.

Advertise, Advertise and Educate
The lack of e-book discovery methods in academic libraries has deeply impacted the usage rate of e-book holdings. By not advertising their e-books libraries are wasting the money they have invested in their collections. Libraries should continue to advertise their e-book collection through their own website however through more strategic means such as banner or link on their homepage. They would also benefit from having such an electronic banner on other university WebPages such as the students with disabilities homepage, departmental websites and student services. In addition they could notify Professors of new e-book acquisitions in their field of study and politely ask if they could mention the availability of e-books on their upcoming syllabus or make announcement in lecture.

Another means by which academic libraries could increase e-book awareness is by advertising their services at university orientations and frosh weeks. Including a representative along with the other booths present at such events would not only advertise e-books, but also the library as whole. The provision of workshops specifically geared to searching for e-books and utilizing the features of the different e-book platforms the library may subscribe to would increase not only discovery but also usage amongst those who are not very computer-literate.

Conclusion
It is indubitable that e-books will eventually play an integral role within academic libraries. E-books include a variety of benefits including 24/7 remote
access and the potential to offer readers so much more including hyper linkage, cutting and pasting, printing and multiple simultaneous user access. It is imperative that academic libraries continue to survey their patrons and their perspectives on e-books and to direct e-book subscription negotiations with vendors. Due to the fact that standardization has not yet been attained within the e-book environment, academic libraries have the advantage to steer the market in their favor, as they are the face of the market.

Works Cited


