

Frostburg State University
Lewis J. Ort Library
Electronic Books Primer: Acquisition, Access and Processing

Introduction

Various forms of electronic books have been in existence since the inception of Project Gutenberg in 1971, which digitized the United States *Declaration of Independence* as the first item in this collection of books available primarily in the public domain. Consumers and library patrons were gradually exposed to an increasing number of electronic books, or e-books, as they became available in CD-ROM format in the 1980s and later via the World Wide Web in the mid to late 1990s. However, the explosion in the availability of commercial titles, as well as that of consumer demand, began with the introduction of dedicated e-book readers, particularly the Kindle from Amazon in 2007. Concurrently, smart phone applications have also driven user demand for books in electronic format.

E-books, like electronic journals, provide students and faculty with increased access to scholarly information. These publications may be accessed on a 24 hour/7 day basis in a format that is increasingly preferred by students and faculty. In a 2008 survey of Frostburg State University faculty conducted by the Ort Library, 79% of respondents favored an electronic publishing format for journals. While similar data is not available for Frostburg's faculty regarding monographs, growth of the Ort Library's e-books collection will clearly provide more support of the University's online programs and classes. The e-book contents may be searched as well as read and several vendors offer services such as individual accounts to enter and save notes, features that make these publications increasingly attractive to users.

However, e-books also currently provide libraries with unique challenges regarding their management, from selection and acquisition through technical processing and access. While solutions for some of these issues are informed by the established practices utilized in the management of journal article databases, new and existing acquisition models are evolving on an almost daily basis. In addition, current integrated library systems' acquisitions modules are organized around the procurement of materials in physical formats and are not equipped to facilitate the efficient management of the processing of individual e-books. Until the latter problem is resolved, the purchase of or subscription to e-book packages comprised of multiple titles is the most realistic option for the Library to consider.

E-book Acquisition Models

The process for acquiring electronic book titles for a library is not nearly as straightforward as the purchase of their print counterparts. First, there are four major procurement models to consider, including purchase, subscription, lease and patron/demand driven acquisition. Each of these respective categories may include several additional options such as the number of simultaneous users who may access a purchased title, subscription and/or lease interval, or the establishment of an institutional profile defining the types of e-books available to students and faculty to select for use in a patron driven acquisition model. In addition, the library is limited to acquiring titles from vendors who make provision for the lending of e-books. This includes the authentication of users as well as the establishment and execution of loan terms. Currently, there are only a few established vendors who provide this type of service, including (but not limited to) ebrary (ProQuest), eBooks on EBSCOhost, MyiLibrary (Ingram), Ebook Library (EBL) and OverDrive, the latter primarily serving the public library market. Major academic publishers such as Sage and Elsevier also provide this type of library-supported platform.

The prices for acquiring and accessing e-books are determined by the publishers of these works. To date, publishers have been much more selective in making electronic titles available to libraries and the vendors that support lending of e-books than they have for individual consumers. The purchase cost of e-books for libraries is typically more expensive than their print counterparts, despite the opposite being the norm for individual consumers. This is due primarily to satisfying digital copyright requirements as well as the basic fact the e-books may be loaned to multiple users who would otherwise purchase these titles on their own. Large sets of e-book titles, usually numbering in the thousands, are available from some vendors through a subscription model. While the subscription model offers academic libraries many titles at a very low cost per unit, the total price for an institution such as Frostburg State University would require a commitment in excess of \$10,000 annually for the Ort Library. If a subscription is canceled, access to all e-book titles in the vendor package is removed. Specific examples of pricing schemes for these models are detailed below.

Publishers also determine the use and accessibility parameters for the electronic versions of their books. For example, publishers dictate the number of simultaneous users who may access titles, determine whether e-books may be downloaded or printed, in full or in part, and if they may be downloaded to a compatible e-book reader. Publishers may also choose to restrict some of the content of a print book in the electronic version.

Acquisition Model Fundamentals

While each of the vendors and publishers that host library supported e-book platforms provide unique services and procurement options, there are common themes that define each of the four basic acquisition models. Brief descriptions and examples are provided below.

Purchase – This model most closely resembles that of traditional print book procurement. The most common method of acquisition is to purchase one e-book title or a package of titles that may be accessed by one simultaneous user for a loan period determined by the library (a maximum loan period ceiling may be set by the vendor or publisher). The major academic e-book vendors have been negotiating with publishers to allow access for additional simultaneous users for at least a portion of their titles. Price points rise as the number of simultaneous users is increased.

As described above, publishers typically assign prices for e-books that are intended for library use at a more expensive level than the print versions. In a review of the new e-book titles available in September 2011 [REDACTED], the price for a single simultaneous user of the electronic versions of 14 chemistry titles averaged 70.6% greater than their print counterparts as sold from Amazon, while for 12 United States history e-books the average cost was 73.6% higher. Prices for the individual e-book titles within these two subject areas ranged from 24% to 160% greater than the print versions for chemistry and 5% to 332% more for history. Purchasing all 14 chemistry e-books would cost the library \$1,544.15 more than acquiring them in print format; the history e-books price would require an additional \$327.40.

The purchase model for e-books may be utilized for title-by-title selection, pre-defined package acquisition (usually by subject area) or working with a vendor to create a custom package of titles. While these are the main purchase options, specifics will vary by vendor. The current challenges to the Library in the acquisition and management of individual e-book titles described in the Introduction and Processing sections of this document make packages the more attractive option for Frostburg State University in the short term.

A final important characteristic of the purchase model for e-books is the issue of perpetual access to the title. Typically, the library will continue to have access to a purchased title until it is specifically selected for “withdrawal” by the library, although this should be verified with a vendor prior to acquisition. In early 2011, publisher HarperCollins established a cap of 26 loans for purchased e-books. Upon reaching this limit, the library would need to purchase the title again to provide access. To date, this is the only major publisher to have established such a limit, and it is one that primarily serves the public library market.

Subscription – This model functions similarly to a periodical subscription whereby the library is provided access to content until the termination of the subscription term. Subscriptions to e-book packages can provide libraries with a large amount of content at an inexpensive cost per title. The most popular example of a large e-book subscription package for academic libraries is the Academic Complete collection from ebrary. This growing collection is comprised of over 70,000 titles in a wide variety of subject areas from academic publishers. The Ort Library was quoted [REDACTED] – for this package in July 2011. Similar smaller subscription packages are available and are particularly popular in subject areas such as computer science where new editions of e-book titles are automatically made available to the library upon publication.

Perhaps the greatest strength of the subscription model is that it offers the library an effective method to rapidly build its nascent e-book collection at a very low cost per title. However, the total subscription rate is expensive and is an ongoing cost incurred by the library. Since access to all of the e-books in a subscription collection would be disabled upon termination of a subscription, this model is most appropriate if the institution is committed to funding it for an extended period of time. Other issues to consider are related to the library ceding control of e-book or content selection in such a package, such as the point at which a vendor might cap the addition of new titles and the possibility of the removal of titles. In addition, the growth rate of the subscription rate each year is a major consideration for the library.

Lease – The leasing of e-book titles is a newly established model where titles may be accessed for a short period of time, usually ranging from 24 hours to as long as approximately 28 days. The fee structure is typically set on a scale that represents both a percentage of the purchase price of the e-book plus the desired lease period. The primary purpose of a lease is to function similarly to an interlibrary loan service. While some publishers will allow libraries to copy a chapter from an e-book to fulfill an interlibrary loan request, the lending of an entire e-book is not feasible within currently established technical parameters. The leasing of an e-book title would allow a faculty member or student the ability to temporarily access a work that is too expensive for the library to purchase.

Patron Driven Acquisition (PDA) – Patron or Demand Driven Acquisition is a model that allows the library to expose faculty and students to a large number of e-books while empowering users to make selections for purchase based upon the actual use of the titles available in the collection. The major academic e-book vendors have established widely varying parameters for the implementation of this model, but a few guiding principles apply to all of them.

First, the library works with a vendor to establish a profile to define the types of e-book titles that will be available to users. Several factors must be considered in creating a portfolio, some of which include subject areas, type of book (e.g. reference, serial titles, single monographs, etc.), publication

year and defining a cost threshold for purchasing individual titles. Depending on the vendor, the library may also be able to negotiate the threshold that triggers a purchase based on the use of an individual title (see below). Once a profile is established for the institution, a deposit account is created for the library with the selected vendor. After this account is funded, the vendor makes the appropriate e-books available to users on its platform. Most libraries also choose to load the MARC records for these e-books into their online catalogs. Many vendors offer the corresponding MARC records to libraries free of charge. This service as well as the quality of the MARC records are important factors to consider when investigating the available packages on the market.

The second part of the PDA equation involves making selections for the library to purchase. As stated above, these selections are entirely in the hands of users based upon the e-books they choose to borrow. However, each vendor has established unique protocols for determining when the library's deposit account is charged for e-book title usage. These range from an e-book purchase being triggered after one use to several accesses being required. Other vendors utilize time of use as the major benchmark for determining when an e-book is purchased. A combination of both number of accesses and time thresholds are also used by some vendors, such as either 10 access or 10 minutes triggering a purchase. Some PDA models allow for free use of an e-book until the purchase point is reached, while others may charge a percentage of the book price for each use until the title is automatically procured.

A major benefit of the PDA model includes exposing students and faculty to a much larger number of e-book titles than would otherwise be available to them when single titles are purchased based on selections made by individual teaching faculty or librarians. Further, empowering faculty and students to make selections enables librarians to gain a better understanding of these users' needs. However, the library must be thorough when establishing a PDA profile with a vendor so that the e-books available to students and faculty support the university's academic programs and curriculum. The profile must also reflect the amount of funding available for the library's deposit account with the vendor. Library experiences with the PDA model have varied from a quick expenditure of available funds to a lack of use of the e-books available in the collection. Eventually striking the proper balance in creating a PDA profile requires analyzing and applying usage data acquired from the vendor and knowledge of the academic environment that is unique to the campus. A final and sometimes overlooked challenge to libraries that have chosen to implement a PDA model is establishing a method to remove outdated MARC records from the catalog for e-book titles that have not been accessed by users, or have been chosen for de-selection from the vendor's offerings. Planning for this eventuality early in the PDA profile process will make this challenge easier to address successfully.

Selection

The process for selecting e-book titles in the purchase, subscription, and lease options fits into existing library collection development practices. Librarians, faculty, staff and students may submit requests for the library to consider and address. Librarians and teaching faculty continue to collaborate through the library's liaison program to ensure that the program and curricular needs of academic departments are being met. Selection responsibility in this traditional arrangement usually results in collection decision making performed first by librarians, followed by teaching faculty and then students.

In a patron driven acquisition (PDA) model, selection is more of a shared responsibility. Librarians collaborate with e-book vendors to establish a profile that should be broad enough in scope to meet the

academic mission of the university and its programs. If funding is limited, then the profile may be more focused in order to support targeted academic programs or other identified areas. Once a PDA profile is defined and funds are deposited with the vendor, library users make the final purchase decisions without even being aware of the transaction as procurement and access is a seamless and invisible process to the user.

E-book Access and Discovery

Users are able to search for and access e-books using existing services, including the library catalog (catalogUSMAI) and vendor database interfaces through the Research Port gateway. Authentication for off-campus users is conducted in the same manner as accessing an article database or renewing a print book, utilizing the barcode number on a student, faculty or staff ID card. Upon acquisition, e-books will become available to users first through the vendor or publisher interface when access to titles is activated. The library includes links to the large e-book vendor platforms through Research Port; publisher platforms including minimal number of titles are accessed primarily through the library catalog. MARC records will be loaded into the library catalog (see the Processing section below), enabling users to search the library's e-book and print monograph collections simultaneously. As libraries introduce discovery services that allow users to search databases and the catalog using a single "Google-type" interface, users will have an additional method for searching and finding e-books. Any faculty, staff or student using WorldCat Local or Google Books for research would also have access to these titles because of agreements with OCLC and Google to reveal the ownership of titles in their respective search engines.

Services that deliver access to e-books on mobile devices vary by vendor, but most of the large providers have enabled interfaces for smart phones and tablets. Downloading a title to a dedicated e-book reader is also possible from selected vendors, although online access is much more common. Downloading e-books to an off-line reader can be problematic due to the requirements of the loan periods established for the titles. Some vendors, such as EBSCO, utilize Adobe Digital Editions to manage the downloading of books to compliant e-book readers, which include many of the major devices available on the market.

Finally, an important, but sometimes overlooked element in the literature is that of introducing students and faculty to the availability of e-books in the collection through library instruction. The exposure of students to these resources in a class setting or through reference exchanges is an excellent method of infusing their use into coursework and research. The promotion of e-books to the campus community is another essential step to market the collection, bringing these resources to the attention of faculty, staff and students who are not involved in library instruction or face-to-face exchanges in the library.

Processing

As described in the Introduction, e-books provide libraries with unique management challenges, some of which still need to be adequately addressed in the field and by integrated library system vendors. The management of individual titles, separate from a package, is where processing complications are most predominant.

The process of negotiating with vendors and the subsequent purchase, subscription or lease of e-books follows the long-established paradigm used for all electronic resources made available by libraries. When a library purchases a package of e-books or subscribes to a service providing titles, bibliographic records to search and locate these resources are available in the vendor's native interface and usually

loaded into the library's online catalog. The typical process used to verify that these records are activated on the vendor platform and loaded into the catalog properly involves either testing a sampling or the entire set of titles based on the size of the collection. Title-by-title purchases require a more manual workflow for library staff, from the activation of titles through their availability in the catalog. Workflow management for these individual titles is currently problematic as established integrated library systems are not equipped to efficiently process e-books on a title-by-title basis. The two most important issues for the next generation of these systems to resolve in regard to e-book processing are establishing a tracking mechanism for the handling of electronic items from acquisitions through cataloging and designing a method for establishing links to the books that is integrated into the system. Until these issues are resolved, the purchase of or subscription to e-book packages comprised of multiple titles is the most realistic option for the Library to consider.

The process of cataloging e-books includes another unique set of challenges. The online catalog will be one of the avenues by which the library user can access e-books. Through CatalogUSMAI, the library user will be able to search for the e-books by title, author or subject if known, or by keyword search. The titles would be assigned a Library of Congress call number, to indicate its subject content and to place these titles in context with other titles (in any format) on the same or similar topic. Since CatalogUSMAI is a shared catalog with 15 other institutions, we will follow the agreed upon standards for the bibliographic records. It is essential that the bibliographic records be in OCLC MARC21 format and be available for use by all members in the USMAI consortium to which they can add their holdings information if they purchase the title. Some work will need to be done, with help from ITD, to update the local CatalogUSMAI display and searching capabilities for improved access to the e-book titles.

The bibliographic records are provided by the vendor or may be obtained through OCLC as part of their WorldCat Collection Set service. The vendor may provide the bibliographic records for no additional cost with the packages such as Gale Publishing did when we purchased the Gale Virtual Reference Collection. Other vendors may charge an extra fee. The literature and comments made on cataloging discussion groups have urged careful evaluation of the cataloging record. Some packages include sets of bibliographic records that are below AACR2 and OCLC standards. The records in these sets may contain the OCLC numbers of bibliographic records of higher quality. These types of records may require considerable editing by the Cataloging Department staff to assure that the records meet the minimum requirements outlined in AACR2 and the USMAI standards, although we hope that this will not be necessary. The number of e-book vendors that provide OCLC-sourced records is growing as librarians demand better bibliographic records with the packages. The OCLC WorldCat Collection sets usually charge a fee for record sets for electronic titles, although some are subsidized by the vendor. We would work with OCLC on any customization of the records, which could include the addition or deletion of MARC tags, the creation of local call numbers and URLs. These records may also require limited editing by the Cataloging Department staff to make them compatible with the USMAI loader specifications. To assist with the editing of the bibliographic records, we would use a software product such as MarcEdit to make the changes using a batch method rather than handling each record individually. Once the batch editing is complete, we will work with the staff in ITD to load and test the records in the Aleph test database to make sure that all the data is correct prior to loading the records into CatalogUSMAI.

Ongoing maintenance of the e-book bibliographic records in Aleph depends upon the type of acquisition model we decide to use. The purchase model, as was stated earlier, most closely resembles that of the traditional print book model. The cataloging process for these titles will follow the workflow briefly described in the previous paragraph. Some routine maintenance of the records or correcting the URL may be required but we do not expect any more work with these bibliographic records than what we

have with the current Aleph records for physical materials. If we choose to withdraw these titles from the collection, the process should be similar to the one we follow presently.

The subscription could cause considerable more work on the cataloging workflow for adding these titles to the catalog. These titles, as explained previously, would be available to our users only as long as we continue our subscription. The bibliographic records for these titles would be loaded into CatalogUSMAI and our holdings attached to the OCLC record. As new editions of titles are added to and older titles are removed from the subscription, we would process a new batch load to add or delete the corresponding MARC records. The timeline for this process to update CatalogUSMAI could be monthly, annually or some other period of time of our choosing. If we cancel our subscription, we would need to remove all the records from Aleph, which would require help from ITD staff who would generate reports and possibly perform a batch deletion of the bibliographic records. At the present time, batch deletion from the Aleph database is rarely done. The deletion of our holdings symbol in OCLC would require some work with each record, although there is a batch process to assist with this procedure.

The bibliographic records for the titles obtained through the lease model will not be added to CatalogUSMAI. These titles will be available for a limited amount of time, probably for a specific person or group of people. It would not be an efficient use of resources to process these publications in CatalogUSMAI.

The Patron Driven Acquisition model is a mixture of the purchase and subscription models as it relates to the cataloging process. All of the bibliographic records for the titles in the portfolio would be loaded into Aleph so users searching for particular items can select them easily by clicking on a link in the records. Users may or may not be aware that they purchased access to the title for the library. The records for the titles that were not selected for purchase would have to be removed at the end of the contract. The challenge is how to determine which titles to remove. Once the titles were identified, we would follow the process used for subscription titles.

One major issue with any of these models is the challenge of keeping track of what has been completed in the workflow for each individual title. Detailed planning of the steps for the entire process and a method by which we can communicate the progress on these steps is essential for a successful development of the library's e-book collection.