Assessing the Borrow Direct engineering e-book pilot

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Abstract

Purpose – The purpose of this paper is to provide an assessment of a one-year pilot exploring the joint purchase of e-books via demand-driven acquisition (DDA) conducted by engineering librarians from seven members of the Borrow Direct interlibrary loan partnership. Also provided are observations that may inform future initiatives of a similar nature.

Design/methodology/approach – The author presents a case study approach and examination of the results.

Findings – The pilot was discontinued as a result of dissatisfaction with its configuration, but it did offer significant financials savings as well as provide accessible copies of mutually acquired titles to each member. The pilot also offered several lessons that can inform future joint e-book endeavors.

Originality/value – Multi-institutional joint e-book DDA acquisition has been attempted elsewhere; however, what is unique about this pilot is that it was managed by seven independent institutions without a central legal entity to oversee it. This paper is a follow-up to the author's presentation at the 80th IFLA World Library and Information Congress, August 16-22, 2014, in Lyon, France.

Keywords E-books, Borrow Direct, Collaborative collection development, Demand driven acquisition

Paper type Case study

Introduction

Current e-book acquisition practices at individual institutions have led to rapidly growing, but highly siloed, collections. While sharing of e-books in their entirety is technically feasible via such means as paying short-term loan fees or through restricted access initiatives such as Occam's Reader (Howard, 2014), such measures are not universally available to any given title at present. An institution wishing to provide access to an e-book still means either leasing or purchasing it outright to a large extent.

Borrow Direct (BD) is a partnership in expedited interlibrary loan service comprising libraries from 11 US universities and the Center for Research Libraries (CRL). It began in 1999 as an experiment between Columbia University, Yale University and the University of Pennsylvania (UPenn) in leveraging technology to streamline the delivery of print books and similar physical materials among them (Krall, 2000). Resulting advantages from this experiment included unmediated searching and selection of materials by patrons from a joint catalog, wider engagement of lower-level staff and releasing higher-level staff to engage with more challenging transactions (Collins, 2012). Due to its early success, the partnership has expanded over the years beyond the original three members to include Brown University, Cornell University, Dartmouth College, Duke University, Harvard University, Massachusetts Institute of Technology (MIT), Princeton University, the University of Chicago and the CRL.

While it is an active collaboration among these institutions, BD is not in itself a separate legal entity. There is minimal administrative staffing, an assistant program manager and senior manager, to oversee day-to-day operations of the joint catalog and delivery mechanism, but the actual transactions are predominantly handled by in-house library staff (Nitecki *et al.*, 2009). Despite the lack of a central organizing body, it has not prevented the affiliated universities from seeking other collaborative opportunities in collection development. Subject librarians have been strongly encouraged to find new ways to develop inter-institutional means of broadening the scope of material available to their patrons.

Toward this end, engineering librarians from eight of the member schools began to explore the feasibility of jointly acquiring e-books that all of their respective patrons could have access to in 2009. It had been recognized that rapidly growing e-book collections, under their current licensing terms, would be a challenge to traditional interlibrary lending of monographs. In particular, e-books, as typically presented to patrons by libraries via publisher or aggregator platforms, are viewed as reproductions and not as tangible objects by present copyright law in the USA (Müller, 2012). As such, Müller notes, they do not fall under the library exemption for further distribution (i.e. lending) of works under the first sale doctrine. Rather, libraries are restricted by the licensing terms they sign with individual companies that determine the extent to which they may provide access.

Absent any pending changes to copyright law regarding e-books, libraries are left to negotiate licensing on their own

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with content providers to secure the best possible terms of access for their communities. One highlighted model suggested by a survey of various efforts to balance the needs of both libraries and publishers (Xu and Moreno, 2014) is the joint acquisition of e-books via demand-driven acquisition (DDA) pursued by consortia such as the Orbis Cascade Alliance in the US Pacific Northwest region. This is the approach the BD engineering librarians elected to follow and assess for their pilot (Popescu and McGee, 2014). Presented here are results from the completed pilot, including lessons learned that may inform future efforts to expand shared e-book collecting.

Pilot structure

The BD engineering pilot began with the intent of establishing a blueprint for our member libraries toward building shared e-book research collections. After much deliberation, engineering librarians from eight members of the BD partnership, Brown, Columbia, Cornell, Dartmouth, MIT, Princeton, UPenn and Yale, drafted a request for proposal (RFP) and a shared subject and non-subject parameter profile from which DDA titles would be selected in 2011. Highly desired elements within the RFP included multiple simultaneous user access, limited digital rights management (DRM), dual platform access where applicable, a multi-institutional trigger mechanism without the use of short-term loan fees and a lengthy list of publishers.

Initially, the BD engineering librarians envisioned working directly with publishers, but early contacts determined that they were not prepared at the time to work with multiple institutions on DDA acquisition models. Aggregators, on the other hand, had been experimenting with this mode of acquisition. Despite initial reservations from the group regarding the licensing terms they offered, the group opted to submit the RFP to the four main e-book aggregators at the time, ProQuest/ebrary, EBSCO, Ingram/MyiLibrary and EBL.

Early on, one key benefit of working with an aggregator quickly became apparent in the negotiations with multiple publishers they undertook on the group's behalf. A key concern for the BD group was how many publishers would participate and at terms that both parties would find acceptable. The answer turned out to be relatively few, with 11 publishers agreeing to participate.

After reviewing proposals, the group elected to work with ProQuest/ebrary and engage YBP Library Services to manage our funding as well as the collection profile. In the absence of a central BD authority, member schools signed separate licenses directly with ProQuest/ebrary and YBP and drafted a memorandum of understanding among themselves under which the pilot was to be conducted. The BD Group also lost a member during the negotiation process. Columbia dropped out of the pilot, as it became apparent to them it would largely duplicate other e-book collecting practices they were already engaged in.

For the underlying mechanics of the pilot, the partners had the choice of receiving DDA catalog records generated by the profile from either ProQuest/ebrary or YBP. Once loaded into our respective catalogs, titles could be triggered through use at any institution, as opposed to our desired for a multi-institutional trigger mechanism. Purchases were triggered by any one of the following actions: in a single session with a title; a user spending either 10 minutes or viewing ten pages other than the table of contents or index; or conducting any printing, copy/pasting or downloading of content from that title.

Triggered titles generated an invoice from ProQuest/ebrary, which was forwarded to YBP for payment from a joint deposit account set up for the pilot. The initial funding amount was $5,000 per member for a total of $35,000. An additional $2,500 per member was contributed in the ninth month of the pilot to ensure funding would last an entire year, bringing total funding for the project to $52,500.

Rather than a truly shared collection of titles as envisioned early on, each member received a discrete copy of each triggered title at a significantly discounted price based on an agreed-upon multiplier of the list price in a "buyers' club" acquisition model. This resulting model did provide a reasonable solution, however, to the issue of joint ownership of these titles among independent institutions.

The pilot commenced with the deposit of the first DDA catalog records into the participating schools' catalogs in early December 2013.

Assessment

Collection size and cost

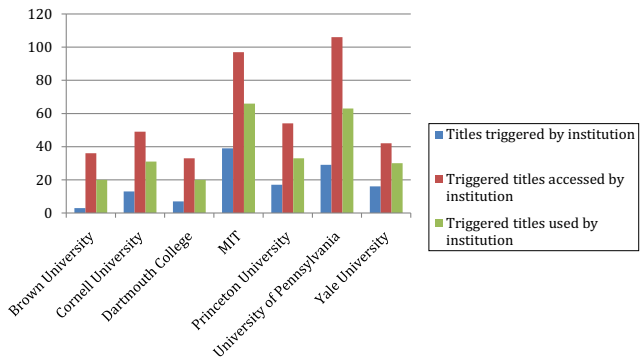
Given the small number of participating publishers and focus on just engineering as opposed to a wider array of disciplines, it should come as no surprise that the resulting collection is quite small. Of the 11 publishers that signed on, DDA titles from only six were generated by our subject/non-subject parameter collection profile. The collection grew slowly with an average of five to ten titles generated each week over the course of the year. When the pilot concluded, records for 463 titles eligible for DDA were available to patrons.

Overall, 245 titles were accessed by patrons at member institutions, and of those, 124 titles saw use that triggered a purchase. Based on our buying club model, all seven members obtained a single user copy of each title, resulting in the total acquisition of 868 copies. The average list price for the triggered titles was $106.78, but under the terms of the pilot, the resulting average purchase price per institution was $60.08. The total cost per institution for the material purchased was $7,449.88. By comparison, the full price for the same collection per institution would have been $13,241.22, a savings of roughly 44 per cent.

Collection use

The following two figures examine the group's interaction with the triggered titles of the collection, both individually and across institutions. Figure 1 shows the number of titles triggered, accessed and used by individual institutions based on the 124 purchased titles. Here, access is defined as a title seeing at least one page view at an institution as reported by COUNTER data supplied by Proquest/ebrary. Use is defined as a title having had at least ten page views, or any portion printed, copy/pasted or downloaded. Access and use data have been compiled from the period of December 2013 through March 2015.

Figure 1 Titles triggered versus triggered titles accessed versus triggered titles used by institution (124 titles in total)

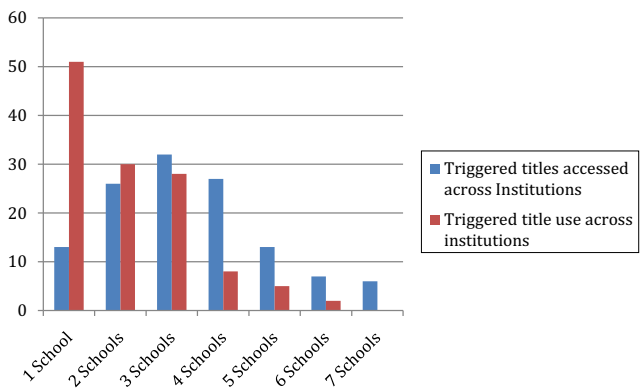


Notes: Access is defined as any entry into a book at any institution, including only one page view. Use is defined as a title having had ten or more page views, or any downloading, printing or copy/pasting at an institution

While triggered purchases and usage varied, it is evident that interaction with the DDA collection occurred at each institution. Brown triggered the fewest titles with three purchases, while MIT triggered the most at 39. Based on the definition of usage above, Brown and Dartmouth saw a minimum of 20 titles experiencing use, while MIT again had the most with 66 titles. MIT and UPenn, as the two largest outliers of the group in both the number of titles triggered and usage, make sense, as they have two of the largest engineering communities among the group. Cornell, which also has a large engineering user community, did not exhibit nearly as much use. This can perhaps be attributed to both their subscription to the Proquest/ebrary Academic Complete collection and active suppression of duplicate BD pilot DDA catalog records in their catalog to avoid potentially triggering titles to which they already had access.

Another aspect to consider here is the title activity across institutions. Are individual titles seeing usage at locations other than the triggering institution? Figure 2 presents cross-institutional data for the same period. In terms of access, a skewed bell curve emerges from the data with a maximum of 32 distinct titles accessed by three institutions, with 39 titles

Figure 2 Triggered titles accessed versus used across institutions (124 titles, same definitions for access and use as in Figure 1)



accessed by two or fewer and 53 accessed by four or more institutions.

Applying the usage definition from above for Figure 1 here, we attempted to discern intentional use from serendipitous discovery by observing where purchased titles experienced either multiple page views or any printing, copy/pasting or downloading of the text.

A clear majority of 51 titles saw this level of use only at their triggering institution. The remaining 73 titles saw use at two or more institutions, a positive indicator of activity for a jointly acquired collection. Subsequent data would need to be collected to confirm this, but based on the present title access data, it does not seem unreasonable to suggest that more of these single use titles will see increased activity from other schools over time.

Duplication

One area of concern repeatedly raised among the BD engineering librarians regarded the level of duplication that might occur with titles purchased through the pilot that would negate any potential savings offered by joint acquisition. The group agreed to mitigate this issue to some extent by including only new titles generated from the profile and leave out retrospective titles despite the potential of having very few titles available initially. Other potential sources of duplication for members, such as approval plans and subscribed e-book collections, were not addressed to observe how extensive this issue might be.

At the completion of the pilot, the joint BD catalog was utilized to examine the holdings for the 124 purchased titles among the seven participating members. Interestingly, duplication across the group proved to be quite high, but varied widely among the individual members. Table I provides a breakdown of duplication that occurred. Overall, duplicate copies of 110 titles, or 89 per cent of the purchased collection, were found in at least one institution. One title was even found to be duplicated at all seven schools.

Individually, Princeton experienced the highest rate of duplication at 73 titles, or 59 per cent of the collection, with 64 titles duplicated in print, predominantly acquired via their approval plan. The lowest rate of duplication occurred at UPenn, with just 13 titles duplicated, or 10 per cent of the collection. All other schools saw duplication at a rate of at least 28 per cent. Except for Princeton and UPenn, electronic duplication was much more prevalent than print.

Termination of the pilot

Despite the encouraging signs of cross-institutional use and cost savings, the pilot was brought to a conclusion in December 2014 when dedicated funding was exhausted. Prior to its conclusion, the group had reviewed the program and found it to be unsustainable in its current configuration. A number of factors lead to this decision and may be used to inform future initiatives of a similar nature.

Low publisher participation severely limited the breadth of material made available to patrons. From the beginning, we were cognizant that the success of the pilot was dependent on a wide uptake among publishers on terms that made sense to both parties. We do not have a ready answer as to why so few participated, though a few possible reasons come to mind. We

Table I Duplication of triggered titles across at participating schools

Type of duplication	Brown		Cornell		Dartmouth		MIT		UPenn		Princeton		Yale		All schools	
	Titles	(%)	Titles	(%)	Titles	(%)	Titles	(%)	Titles	(%)	Titles	(%)	Titles	(%)	Titles	(%)
Unique BD PDA titles	69	56	76	61	89	72	85	69	111	90	51	41	68	55	14	11
Electronic duplication	55	44	43	35	28	23	26	21	5	4	13	10	38	31	81	65
Print duplication	1	1	7	6	7	6	14	11	8	6	64	52	20	16	75	60
Electronic and print duplication	1	1	2	2	0	0	1	1	0	0	4	3	2	2	46	37
Overall duplication	55	44	48	39	35	28	39	31	13	10	73	59	56	45	110	89

may not have adequately articulated potential advantages to publishers of our pilot, such as enabling our sizable user communities to enact direct purchases of their material. It may also be that most publishers opted to stay on the sidelines to see whether our pilot would last beyond its initial trial period. We do know that some publishers simply would not countenance anything less than each BD member paying for their own copy of each title, which would largely defeat the purpose of the pilot. Whatever the exact causes, minimal publisher involvement was a key factor in the decision to terminate the program.

The resulting licensing terms also fell short of our initial proposals. Instead of a truly shared collection of titles as originally envisioned, we acquired a collection of deeply discounted titles for each member. We were unable to secure a multi-institutional trigger mechanism that did not use short-term loans and their accompanying fees. Multi-user versions of titles, either shared or purchasable by each institution via buying club, were not made available via DDA for the group. Finally, having to work with an e-book aggregator increased the level of DRM on the content to a greater extent than originally desired.

A significant counterpoint to working with an aggregator, however, was its ability to negotiate with multiple publishers on our behalf, even with the relative low rate of success in recruiting them. This definitely benefited our small discipline-oriented group. Should BD attempt a similar program at the full institutional level, implementing an experienced team to engage in sustained, coordinated negotiations with publishers may provide them with further impetus to participate, as it would be the full customer base engaged in the program, not just one discipline.

Finally, the existing high rate of duplication and potential for even more due to other e-book initiatives undertaken by individual members also played a role in the decision to end the pilot. This issue of conflicting acquisition practices became evident when one member engaged in an institution-wide trial of evidence-based acquisition directly with the publisher that supplied the majority of titles for our pilot, bringing their continued participation with the group in question.

Lessons learned

While this pilot did not evolve into a more widely adopted program by the participating BD schools, lessons learned over the course of its development and implementation can be offered up for consideration in future initiatives.

Using data for modeling and negotiations

Contemplating acquisition models that would be acceptable to both publishers and libraries, it became apparent early on that pricing would be based on some multiplier of a single copy price. As such, we examined our collective holdings in engineering and computer science collected from the OCLC WorldCat database over a five-year period for one of the larger publishers we had on our list to include in the pilot, and who subsequently participated. Holdings data indicated that roughly 92 per cent of the titles were owned by four or few institutions, with 52 per cent overall owned by a single institution. With these data in hand, we had a better picture of what a fair multiplier could be and felt more confident in working with our vendor partners in negotiating with publishers and rejecting those that required each institution to purchase a copy.

Examining the pilot's usage data to this point has found that title use has mirrored this holdings pattern. Approximately 94 per cent of the collection has seen use across four or fewer institutions, with 41 per cent seeing use at only one institution. While not every school has used every title, we still have preserved their ability to access them without having each school pay directly for their own copy.

If the BD partnership were to pursue a similar joint e-book acquisition program directly with an individual publisher, it would be well worth the time to investigate prior collection data for that publisher to provide substantive leverage in pricing negotiations. This approach, however, may or may not be as useful to other disciplines, depending on whether a higher percentage of titles from a given publisher would tend to be owned across multiple institutions (university presses, for example). Despite this, we would advocate examining holdings data for a discipline considering a collection effort similar to ours.

High-level coordination of collection practices

If the BD institutions are truly interested in collaborative efforts to jointly acquire e-books across more disciplines, a more concerted effort to coordinate e-book acquisition in general would need to be pursued. Our pilot's success in achieving savings of nearly 45 per cent per title per institution should indicate our collective ability to negotiate more favorable terms at a higher level of engagement. Even so, attaining such a level of coordination among these independent institutions could prove daunting.

To achieve successful cooperative e-book acquisitions, there are several potential areas where members may have to make changes or concessions. For example, other regional partnerships and consortia that members may be a part of

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would have to be taken into consideration. Individually, it may require members to strongly consider canceling long-held subscription collections or purchase-to-own collections, that in essence have become subscriptions, to align with the rest of the group. Approval plans would need to be adjusted to remove subjects/publishers and bibliographers would need to adjust their firm ordering practices to avoid duplication of material made available through a joint program. Conversely, these cancellations and adjustments would free up resources that could be applied to the joint effort. Finally, members would need to collaborate more when experimenting with new e-book acquisition models to avoid conflicts with existing practices.

Develop a collaboration infrastructure

Like other collaborative collection development endeavors among the BD libraries, this pilot was conceived and executed by a small group of librarians without the benefit of a central agency to take on its further development and support had it proven to be ultimately successful. Developing an underlying collaboration infrastructure among our schools would help shepherd the more promising projects into full production.

What would make up this infrastructure? A few elements come to mind here as starting points:

- Establish a shared set of operational principles agreed to by the members that potential projects should adhere to.
- A mechanism for better coordination of ongoing projects.
- A strong collection analysis team to determine and provide necessary data to assess the success of a project as well as support vendor negotiations.
- Provide support to technical services departments in responding to changes in workflow, adding records and removing duplicates.
- Jointly provide seed funding with guidelines on how they may be tapped to jump-start future projects.

Conclusion

Due to present copyright law and widely varying licensing terms, most e-books acquired by academic libraries today are having an adverse effect on resource sharing compared to their print counterparts. While providing wider access to affiliated users on their home campuses, they are hampering the long-held capability of libraries to supplement each other's holdings because e-book content may not be shared as readily as print. While technically feasible, present licensing terms prevent this from happening on a wide scale.

Clusters of libraries around the world are attempting to address this by collaborating on the acquisition of e-books to stretch limited resources in a mutually beneficial manner. The BD engineering e-book DDA pilot was just such an exploration in joint acquisition. While it was not continued after its year-long trial period, it did offer provide valuable insights that may inform future initiatives within BD.

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