

## Alternatives to Demand-Driven Acquisition: An Exploration of Opportunity Costs

by Carol Joyner Cramer (Head of Collection Management, Wake Forest University) <cramercj@wfu.edu>

If Demand-Driven Acquisition (DDA) dies as an option, or simply no longer meets our needs, what would we do instead?

The Z. Smith Reynolds Library at Wake Forest University provides an all-you-can-eat smorgasbord for our DDA profile with EBL. We currently offer about 170,000 titles. We do not exclude books based on publication date, publisher or subject. We assert that topic areas not covered by our curriculum (e.g. agriculture) will see extremely low use anyway. Therefore, we do not want to waste time pulling those topics out of our pool. On the other hand, if the occasional agriculture book gets used, then hooray, we have served a user without resorting to ILL. However, we do systematically exclude popular and juvenile works (as those categories are defined by YBP) and books with a Short-Term-Loan (STL) cost of more than \$200/day. We also de-duplicate against other e-book providers in our collection. However, we de-duplicate against print only in cases where the STL cost exceeds \$76/day.

We can provide such a wide-ranging buffet because we have a healthy book budget and a relatively small user base, especially in comparison to our budget. In fiscal year 2015, we spent about \$129 per student on monographs in all formats (including DDA). Also, we have fortunately had budget increases that match journal inflation for several years in a row. The Z. Smith Reynolds Library serves about 6,200 students, and the total student FTE at Wake Forest is about 7,600. Since the DDA model is fundamentally a pay-per-use model, a lower number of potential users most likely equates to a lower total consumption of books. However, the dramatic DDA price increases and publisher embargoes seen since 2014 have led us to ponder – is there a better way? Should we spend our money differently?

I did a thought experiment to explore other ways we could spend our DDA money. I made two fundamental assumptions: (1) our overall buying power will remain unchanged, and (2) the money we are currently not spending on DDA will continue to be spent exactly as it is today – i.e. this is not an opportunity to cut the budget. Notably in our case, our statewide consortium NC LIVE subscribes to ebrary's Academic Complete and Public Library Complete on our behalf. Therefore, I did not explore making more investments in the subscription model. For now, I focused solely on cost-per-use and ignored other factors, e.g. user experience factors, that might make a more expensive choice more desirable.

Instead of looking strictly at actual cost-per-use, this thought experiment speculates about what might happen with hypothetical future purchases, based on actual data on user behavior with our existing collection.

I calculated a hypothetical cost-per-use for four different scenarios. My conclusions were:

1. DDA (control – actual data): 170,000 books; \$10.58/use (COUNTER BR1) or \$28.27/STL
2. Buy More Print: 4,434 additional books; \$52.71/use
3. Package Purchase: 4,052 books; \$97.31/use
4. Evidence-Based Acquisition (EBA): Close to print

## Buy More Print

To determine an approximate cost-per-use for our existing print collection, I focused on the books purchased in fiscal year 2011. These books have had almost five full years to reach a user. The average use is 1.15 times per book, and the five-year cost-per-use came to \$39.40.

To project forward the cost-per-use of buying more print, I assume that the extra books bought would have lower use because we buy the most-needed books already (e.g., we already purchase almost every book directly requested by a user). We also might assume that the additional books would have a higher per-unit cost because selectors would choose more expensive books if they had more money to spend. In fiscal year 2015, the average print book purchased by my library cost \$47.49. I predicted that the average cost of buying additional print books would be \$52.71 and the five-year use would drop down to 1.00 per title. (This is perhaps a trifle optimistic.) These projections, if correct, would yield a cost-per-use of \$52.71 for about 4,434 print books.

## E-book Packages

To continue the thought experiment, I took actual price quotes for e-book packages received from two major players in the academic market and compared them to local use of DDA books offered by the same providers. The two price quotes I received had radically different per-book costs. I determined that for one smaller (and cheaper) provider, we could buy the whole package for a given year. We would then have money left over to cherry-pick some relevant subject packages offered by the larger publisher. However, based on our DDA statistics, I would expect at most that only about 30% of the titles would get used within five years. I concluded that we could buy 4,202 titles using this method, but our cost-per-use after five years would be a whopping \$97.31 across the two collections.

## Evidence-Based Acquisition

The basic premise underlying EBA has been outlined in these pages before<sup>1</sup>. Once the experimental access period ends, the library buys the chosen books at list price. If the e-book price mirrors print pricing, the total number of books acquired would be substantially similar to the number acquired in print. However, books acquired under the EBA model should have a lower cost-per-use compared to print, as long as the library's choice of publisher partners fits well with user demand. I did not calculate a projected cost-per-use for EBA, since there are so many unknown variables. Given our small user base, I have serious concerns about whether enough books from a single publisher would get used to make the EBA model a good choice. Should we ever enter negotiations to purchase an EBA plan, I hope the publishers would grant the smaller schools a lower required purchase amount to account for these concerns.

I also considered the penetration rate of various publishers (what percentage of their titles was used) vs. the absolute number of titles used. If we choose to buy a publisher package, I would target a publisher with the highest possible penetration, since we would pay for every title regardless of use. With an EBA model, however, we can accept a lower penetration as long as the total number of titles used was higher.

### Table 1

Publisher	Titles in WFU DDA pool	Usage	Use rate/Penetration
Major commercial publisher	36,952	3,729	10%
Large academic publisher	1,836	619	34%

Imagine that I wanted to commit \$20,000 to either a single EBA plan or a package purchase. Table 1 is extrapolated from actual DDA statistics at my institution. If I wanted to pursue an EBA plan, I should consider working with the major commercial publisher. Their title list is so large that I would almost certainly have \$20,000 worth of worthwhile purchases with use by the end of the access period. On the other hand, if I want to pursue the package model, I would be better off pursuing a deal with the academic publisher that has seen deeper use.

Once, near the end of the fiscal year, I sent our selectors a list of DDA books that had seen use, but had not yet been triggered for purchase. I did not mandate that the selectors take any particular action, but many of them who had money left in their monograph funds chose to firm-order the e-book. Others chose to firm-order the print. Can EBA work like this? As long as many patrons still express a strong preference for print, we could use temporary e-access to indicate which specific titles are needed and then purchase print. We could even make a dual-format purchase in cases of highest demand.

So in summary, even with the recent price increases, DDA remains by far the most cost-efficient model for an institution like ours. If the DDA model ceased to exist (or if further price increases undid this cost efficiency), then my institution should probably consider re-directing our DDA fund toward a combination of print and EBA instead of pursuing package purchases. Institutions with a different budget profile and especially with a larger user base would probably reach very different conclusions. I can use the information I gathered to determine at what cost-per-use threshold I should consider dropping my DDA plan in favor of an alternative. Likewise, I can now identify my second choice in case the DDA option ceases to exist.

---

<sup>1</sup> Levine-Clark, Michael. "Evidence-Based Selection at the University of Denver," *Against the Grain* 27, no. 5 (November 2015): 18-20.