

Background

Librarians at Fanshawe College were faced with a major dilemma. A significant eResource budget cut, combined with a sinking Canadian dollar, made it impossible to keep all the databases in the collection. The ensuing decision making process left us repeatedly fighting our instincts. The process was long and challenging, in part because each Librarian had her own emotional investment in particular databases. As Walters explains in his 2016 article, we also had to be cognizant of the ability to explain our decisions to non-Librarians: “Regardless of the library’s staffing or selection model, collection development librarians must be able to explain their decisions to librarians, faculty, and administrators with primary interests in areas other than collection development.”

We believed there must be a way to objectively assess which databases should be retained or added to the collection. We were also curious to see if our instincts aligned with an objective, rational review of the data. We have had success using a priority matrix format for projects. This format successfully eliminated the promotion of ‘pet’ projects, so we decided to see if it would work the same way for databases.

Discussion

We have used the Priority Matrix since November 01 2016 as renewals have come in. This utilization has identified required minor tweaks, three of which are of note.

While we included ‘Cost per Expected User’ in our initial list of criteria, we neglected to include ‘Actual Cost Per Use’. ‘Actual Cost per Use’ is, of course, of equal importance so it was added to the list of criteria and assigned a weight of 8.

As we continued to work with the database we also quite quickly realized that we were going to need two Priority Matrices – one for renewal and retention of databases, and one for new subscriptions. This differentiation is necessary since a criteria such as ‘Actual Cost per Use’ is not available and should not be applied to a potential new resource.

Additionally, some rewording of criteria descriptions was necessary to make their scope wider and more encompassing or applicable when evaluating non-traditional eResources like SimplyMap and Envision.

Going forward, we will have an annual eResource Collection meeting during which all existing subscriptions, as well as desired additions, will be evaluated using the Priority Matrix so a decision can be made. These decisions will then be passed on to the eResource Technician who will acquire, renew or cancel resources accordingly.

The application of the matrix will be monitored for the next year to enhance and refine it whenever possible. As well, we hope to be able to apply this same approach to other resource types such as streaming media collections.

Works Cited
Walters, William H. "Evaluating Online Resources For College And University Libraries: Assessing Value And Cost Based On Academic Needs." *Serials Review* 42.1 (2016): 10-17.

Process

We began the process with an environmental scan including a survey of listservs and completion of a literature review. Ideally, we hoped to find a plug and play solution already in existence. We looked for a quick solution, certain that one was available, but after our search yielded no results, we resolved to create our own priority matrix.

MS Excel seemed like a natural solution as it is capable of basic mathematical formulas, is possible to customize, and is cost effective. The next step was to compile a list of the appropriate criteria. Our selection of weighted criteria is:

- ❖ Content (x10)
- ❖ Required Resource (x10)
- ❖ Cost Sharing (x10)
- ❖ Cost (x8)
- ❖ # of Applicable Programs (x8)
- ❖ Cost per Expected User (x8)
- ❖ Currency of Content (x8)
- ❖ Licensing & Authentication (x6)
- ❖ Ease of Use (x6)
- ❖ Overlap of Content
- ❖ Depth of Coverage
- ❖ Opportunity Cost
- ❖ Vendor Support
- ❖ Perpetual Access
- ❖ Brand Recognition
- ❖ % of Budget Assigned to Applicable School(s)

We also added an unweighted criteria that is used when needed. ‘Frequency of course offering’ is reserved for use when a resource is “on the bubble”. At that point, it is necessary to review how often the course is offered as that will impact usage stats, particularly with very specific and specialized eResources.

After compiling the list, the next step was to assign a weight to each criteria to ensure that the relative importance of each criteria was considered. For example, if a database package is near perfect in terms of content, should brand recognition dissuade us from making a purchase or renewing a subscription? By weighting each criteria, situations such as this can be avoided. The process of weighting resulted in each criteria being assigned a weight of 1, 2, 4, 6, 8, or 10. The rationale behind the weight assigned to each criteria can be found in Image 4.

Settling on the criteria weighting was the last step before building the matrix in Excel. One Librarian created five worksheets that contain criteria and their descriptions, the criteria weighting and rationale, as well as a place to input our scores for each resource, an automatically calculated results page, and needed data about each database. Our eResources Technician populated the worksheet with data, including usage statistics on each product.

The next phase of the project was to present the product to our Senior Manager and Librarian colleague to solicit and incorporate their feedback. We then went live with the Priority Matrix on November 01 2016.

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Outcomes

The Priority Matrix, developed in Excel, contains five worksheets: Evaluation; Results; Criteria Description; Criteria Weighting Rationale, Charts; and Database Data.

Evaluation: Scores for each criteria for each eResource are entered in this worksheet.

Name	Content	Required Resource	Cost Sharing	Cost
ABI/INFORM Global	4	3	0	4
Academic Search Complete	4	3	0	2
ACM Digital Library	3	3	2	4
Alt HealthWatch	1	1	0	4
AOAC Official Methods ...	2	2	0	4
Applied Science & Technology	3	3	0	3
Art Full Text	3	2	0	4
ARTstor	3	3	0	4
ASM Handbooks Online	2	2	0	4
Business Source Complete	4	3	4	3
Cdn. Health Facilities Law Guide	3	2	0	4
Cdn. Points of View	3	3	0	4
Cdn. Reference Centre	2	2	0	4
CARDonline	3	3	4	4
CRCA Complete +	3	3	0	4
CINAHL Plus Full Text	4	4	0	3

Image 1

Results: Scores recorded on the Evaluation worksheet are auto-calculated in this worksheet and assigned a score of 1-4. The score then determines the decision that we make:

- 1: high priority purchase/renewal; robustly meets all requirements
- 2: generally meets all requirements; purchase/renew if funds available
- 3: meets minimal requirements; purchase/renew with caution
- 4: meets minimal requirements; purchase/renew with caution

Name	Priority	Renew / Cancel
ABI/INFORM Global	1	Renew
Academic Search Complete	2	Renew
ACM Digital Library	3	Cancel
Alt HealthWatch	4	Cancel

Image 2

Criteria Description: This worksheet defines each of the criteria, as well as their weight, and description of what to look for when assigning a score.

Content (x10)
4 Good: Consider scope, authority, etc. as reported in the study; all reputable publishers; responsible submission review process.
3 Acceptable: Reasonable scope, over 75% reputable publishers; responsible submission review process.
2 Problematic: Marginal scope, 1-74% reputable publishers; questionable submission review process.
1 Unacceptable: Limited scope; no reputable publishers; no apparent submission review process.

Required Resource (x10)
4 Essential / Must Have: Cost resource integral to supporting a program and so necessary that the library needs to fund it if at all possible.
3 Important / Should Have: A major resource for a program.
2 Useful / Could Have: A significant resource for a program.
1 Marginal: Directly relevant to supporting a field within a program.

Cost Sharing (x10)
4 Full: Whole cost is paid by other.
3 Primary/Other: Cost is split between other & library; other pays more than 50%.
2 Equal Split: Library and other split cost 50/50.
1 Primary Library: Cost is split between other & library; library pays more than 50%.
0 None: Whole cost is paid by library.

Cost (x8)
4 Excellent: What is the total cost of the resource in 2015? Exclude any outstanding amounts. Cost is less than \$5k.
3 Acceptable: Cost is between \$5k-9k.
2 Low: Cost is between \$9k-20k.
1 Unacceptable: Cost is more than \$20k.

Image 3

Criteria Weighting Rationale: This worksheet contains a list of each criteria, the weight assigned to each, and the rationale behind each weight assigned.

Criteria	Rationale
Priority	The Priority number calculated for a particular resource is calculated after the resource has been put through the matrix.
Content (x10)	Content of a particular resource is one of, if not the, most important factors in determining a resource's value. Our beliefs on this particular criteria were reinforced by Mangrum and Pezbor's 2012 study(1), and Walters' 2016 article(2). As such, this criteria was assigned the top possible value score of 10.
Required Resource (x10)	Resources required for programs to maintain accreditation are, naturally, more important than others and therefore this criteria was assigned a value score of 10.
Cost Sharing (x10)	Given the current economic climate, the amount of money a program or school is able to contribute to a resource heavily influences our ability to make a purchase, resulting in this criteria being assigned a value score of 10.
Cost (x8)	Cost is one of the most important considerations when reviewing potential purchases, however it is not one of the top considerations and so was assigned a value score of 8.
# of Applicable Programs (x8)	The number of programs that may find a particular resource useful speaks directly to value for money. Something may have a low initial cost, but may not be useful – thereby having low value for money. This is equally as important as the initial cost, so was also assigned a value score of 8.
Cost per Expected User (x8)	In comparison to the overall cost, the cost per expected user or program resource is equally important and speaks to cause for concern. Some resources are specialized, and it is not possible to compare their usage statistics to those of resources intended for a more general audience. This criteria should create a more equitable playing field. This criteria has been assigned a value of 8.
Currency of Content (x8)	Currency of content is almost as important as overall content. While a database may have lots of title holdings, it is important to consider how current the content is – for example, heavily embargoed resources are not particularly useful and reduce the value of the resource. A value of 8 has been assigned to this criteria.
Licensing & Authentication (x6)	Licensing, including permitted use, and authentication method are important as they influence the usability of a particular resource. This criteria has been assigned a value of 6.
Ease of Use (x6)	Patrons are more likely to make use of a database that is intuitive and user friendly. To that end, this is a relatively important criteria, but since learning how to use databases is part of a college education the value is lower than it would be in other types of libraries. As such, this criteria has been assigned a value of 6.
Depth of Content (x6)	It is important to consider how much the content of a resource overlaps with content in the existing collection, both print and electronic, to ensure we are not paying for the same resource twice unless it is justified. To reflect this, a value of 6 has been assigned.
Overlap of Coverage (x6)	Backfiles, and their relative importance, varies by database and discipline, which is why this criteria has been assigned a mid-range value of 6.
Opportunity Cost (x4)	What would the cost to the library be if we had to buy all of the relevant content individually, rather than as part of the database package? This is important to consider, but not as important as many other factors and therefore has been assigned a value of 4.
Vendor Support (x2)	It is important to note how many technological load incidents are associated with a particular database. However, how many of said incidents will be tolerated is largely dependent on other criteria, with a much higher value, and for this reason this criteria has been assigned a value of 2.
Perpetual Access (x2)	Lack of perpetual access is certainly not a deal breaker, however it is an additional value that should be considered. It is assigned a value of 2 reflects this.

Image 4

Charts: This worksheet uses the data generated in the Evaluation worksheet and displays it as images rather than numbers for optimal visual data representation.

Database Data: Our eResource Technician proactively inputs raw database data needed by the Librarians to make their retention and selection decisions following the criteria outlined in the Priority Matrix. This data includes cost, usage, cost sharing, etc.