The Two Second (Data-Driven) Renewal: Automating Renewal Decisions Using Excel

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Abstract

Libraries never seem to have enough money or time. Unfortunately, finding the balance can be tricky. Because of the money shortage, we should review each subscription renewal. However, we often don't have time to individually review hundreds (or thousands) of renewals each year. This poster will outline how one library automated its approximately 2,500 subscription renewals to the point that a classified staff member can simply enter the price into a spreadsheet and get an immediate decision if s/he should renew a title or if the title needs to be escalated directly to a subject selector for review because of a significant increase in cost or high cost per use.

Background

Historically, whenever a renewal decision was needed the serials librarian would be asked to research and review the data to determine how to proceed. Not only was this workflow somewhat time-consuming—especially as the cost data and usage data were stored in separate systems—it was completely reliant on the presence of the Serials Librarian. When the Serials Librarian was scheduled to be on extended leave for several months, it became apparent that a new process was needed.

Click to view demonstration

1	Order Record	Title	Previous E-Price	Quoted Price	% Diff	Renew/Review Cost	2016 Usage	Cost/Use	Renew/Review Usage
604	o12286308	Reasonably priced journal	\$1,117.00	enter price here	#VALUE!	#VALUE!	44	#VALUE!	#VALUE!
605	o1132823x	Ridiculously priced journal	\$16,730.00	enter price here	#VALUE!	#VALUE!	118	#VALUE!	#VALUE!
606	o12145257	Random journal A	\$6,828.00	enter price here	#VALUE!	#VALUE!	427	#VALUE!	#VALUE!
607	o12450637	Random journal B	\$1,254.00	enter price here	#VALUE!	#VALUE!	74	#VALUE!	#VALUE!

Procedures and Recommendations

Establishing Renewal Criteria

The elements chosen as criteria should be quantifiable. Only a small number of elements should be used to avoid the spreadsheet from becoming too complicated.

The two elements chosen as renewal criteria by the University of Arkansas Libraries were cost per use and significant cost increase. These elements could be calculated by Excel using last year's cost, the current cost, and usage. Anything over \$30 per use would be flagged as high cost per use and sent to the selector for review. Different percentage increases were defined as a "significant increase" based on the cost of the resource.

Compiling the Data

There are several ways the data can be compiled into the spreadsheet, including exporting the data from an ILS/LSP, adding the relevant columns/fields to usage or budget reports, or using Access to combine data from multiple sources by mapping on ISSN. Be sure to Include a unique identifier, like a system record number. If the data was combined from multiple sources, it also may be a good idea to include whatever element was used to map or link the data, like ISSN.

Applying Formulas and Conditional Formatting

If you intend to have Excel perform any mathematical calculations, apply those formulas first. The University of Arkansas used formulas to calculate percentage of increase or percentage difference, $= (D2 - C2) / C2$, and cost per use, $= D2 / G2$, for the included spreadsheet.

Logical values should be added next. The University of Arkansas used an IF formula that would designate the appropriate action to take based on the values associated with the percentage difference and cost per use. The formula $= IF(E4 > 0.06, "Send to Selector for Review", "Automatically Renew")$ means that if the percentage difference is 6% or less the decision to Automatically Renew would apply. Anything over 6% would state Send to Selector for Review. The formula $= IF(H2 > 30, "Send to Selector for Review", "Automatically Renew")$ was used to differentiate anything with a cost per use greater than \$30. The numerical thresholds in the formulas can be adjusted for various categories. For example, a library may decide to use a lower cost per use threshold for databases than for journals.

While not required, it may be a good idea to use conditional formatting to better distinguish between returned statuses and reduce mistakes. Conditional formatting can be added under the **HOME** tab by selecting **Conditional Formatting -> Highlight Cells Rules -> Text That Contains**.

Conclusion

By utilizing the renewal spreadsheet in conjunction with a predesigned email template, the serials department at the University of Arkansas Libraries has saved a substantial amount of time—especially at the professional staff level. Additionally, as a data-driven decision was made for each subscription, the library has saved a significant amount of money that has been reallocated to other resources.