Managing a Comprehensive Cost-per-Use Project in a Large Academic Library

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Managing a comprehensive cost per use project in a large academic library

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This article reports the findings of a study to evaluate title level cost per use (CPU) for most recurring resources at The University of Alabama Libraries. The study relied on cost and usage data from FY2016. The purpose of the project was to identify titles for cancellation and to establish CPU for most titles ordered individually and those within packages for use in future contract negotiations. The analysis began with a list of all recurring titles having a cost of $1000 or more. The review involved 1035 titles with an initial objective to highlight all titles with a CPU of $200 or more. Titles exceeding this CPU threshold received additional review with several identified for cancellation. This article presents the findings and provides an overview of the process used to collect CPU on a large scale. The article outlines some of the challenges faced by libraries when trying to align data that is stored in various silos and the limitations for various platforms and software used when collecting CPU data. The findings from this study formed the basis for a LibGuide developed and used to raise awareness of the need for cancellations. The data also assisted with future contract negotiations.

KEYWORDS: Electronic resources, cost per use (CPU), collections assessment, usage statistics, Usage Consolidation

INTRODUCTION

The University of Alabama Libraries consists of the Amelia Gayle Gorgas Library, the Angelo Bruno Business Library, the Rogers Library for Science & Engineering, the McLure Education Library, and the Hoole Special Collections Library. University Libraries provides resources that meet the teaching and research mission of The University of Alabama. Resource Acquisition & Discovery, a department established in 2015, is involved with selection, procurement, and access to library resources in all formats. The library faced a flat budget in
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FY2017 and this was first time in over a decade that discussions turned to serials cancellations. Prior to FY2017, the collection budget generally received enough recurring funds to cover inflation and additional one-time funds were common. The impact of a flat budget in one fiscal year may have been manageable through cuts to other areas of collection spending. Proactive planning required reviewing the rate of return for serials and databases with a focus on identifying those with a high cost per use (CPU). Serial and database renewal had become routine and now the library would rely more heavily on data driven decisions. This new philosophy was coming into existence at a time of rapid change for the library and, specifically, technical services.

The physical layout of technical service operations have been evolving for some time, impacted by new directions within the profession, changes within higher education, and evolving user expectations. The changes provide both challenges and opportunities for the library and its users. The transition to an online environment progressed more quickly beginning in 2007 with the hiring of a new Associate Dean for Collections, Millie Jackson, Ph.D. She had a new vision for technical services that emphasized the migration to online resources and toward more effective and efficient operations. She implemented changes to the approval plan profile, placed more emphasis on e-book collections, ramped up migration to online journals and explored the purchase of products to help manage the growing amount of electronic resources.

Changes in staffing and strategic direction resulted in the development of a new department, Resource Acquisition & Discovery, in 2015. Several projects got underway including development of a new fund structure to manage library resources, and a complete workflow analysis across all functional areas within the department. The workflow analysis
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resulted in several changes to operations, and full implementation of EBSCO’s Usage Consolidation (UC). Prior to final implementation of UC, the library collected usage statistics manually and stored the data in Excel spreadsheets for both internal use and for distribution to various reporting agencies.

Library administration developed a strategic plan to compliment the university plan, and efforts got underway to take a closer look at return on investment for library resources. The library had always focused on being good stewards of financial resources and thus to compliment the ongoing objective a project was envisioned to establish CPU for many of the continuing resources managed by the library. The library had not faced serials cancellations for over a decade so it was important to manage the process. A LibGuide listed titles selected for cancellation and library administration held follow-up discussions with librarians and campus faculty.

The project took approximately two months and involved staff and librarians as well as collaboration with publishers and vendors. The process would point to how much of the data was stored in silos with various parts of the final product stored in Voyager, UC, and various Excel spreadsheets used internally to individually track cost and use. Additionally there were learning curves and issues because of the need to pull cost and usage from various commercial platforms. The project was a learning process made more successful because of collaboration among librarians, staff, publishers, and vendors. Titles with a high CPU then received additional evaluation before development of a final cancellation list. The library presented the findings in a LibGuide that provided the selected titles and raised awareness of the need for journal and database cancellations.
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The CPU data also proved useful for contract negotiations with several publishers. Having easy access to detailed cost per use information meant that key librarians involved with negotiation were able to quickly provide justification for seeking reductions in total spend for annual renewals or caps on annual inflation. A concerted effort was made to negotiate caps on continuing services fees with large vendors. All titles with a cost of $1000 or more were reviewed individually to make decisions about cancellation or to note the need for more negotiation with the vendor. Equally important is that the project was an opportunity to explore the various issues involved when trying to develop CPU for recurring resources on a large scale.

The results of the cost/use study provided key data used to make decisions about title retention. Several titles with a high CPU were cancelled resulting in the opportunity to make better use of the funds in support of university and library initiatives. The changes helped slow growth on the recurring side of the budget. However, equally important to future decision-making was the number of best practices or impacts on the process that were identified during the project.

This paper will outline some key takeaways that may be useful to others managing comprehensive cost-use studies. These include challenges presented when data is stored in various silos within the library and in commercial products, inconsistencies with how cost and use information is collected, and how to manage non-COUNTER data. Developing clear objectives, establishing realistic expectations and staff training are critical to the success of a large scale cost per use study. This project resulted in immediate cost savings for the library, established the need for ongoing reviews, and allowed for purchase of new resources. The key
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findings and challenges are discussed in detail along with specific best practices that may assist others in planning for comprehensive cost per use studies.

LITERATURE REVIEW

The current environment in higher education is both challenging and exciting for libraries and librarians. Outside forces are having an impact on how academic libraries evolve to meet the changing needs and expectations of users and the larger campus community. Stakeholders including university administrators, faculty, students, and donors realize benefits from the library. Facing evolutions in services and collections, and rethinking the use of physical space are a few ways libraries are trying to evolve and meet the changing demands. There is a growing demand for demonstrating the value the library provides to the university. Given the overall size of collection budgets there may be a decision to measure the return on investment for library resources.

Library collections may provide tangible benefits to the university community. In a study designed to explore the importance of library resources to faculty, researchers asked faculty about information gathering through the library versus other information sources (King & Tenopir, 2013). As compared to other information options, “libraries were used most often as a source of articles (p.156). Faculty may be an important group for libraries to collaborate with because “journal articles are the most used information source of the last substantive piece of information used” (p.161) and “over 50% of article readings are from articles provided by libraries” (p.161).
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Looking at return on investment for library collections often turns attention to cost per use (CPU) or other quantitative measures for evaluating recurring resources. CPU studies often align with serials cancellation projects. CPU may also serve to establish benchmarks for cost and use prior to negotiations with publishers. The University of North Texas has experienced a number of successively more intense cancellation projects involving monographs and serials due to “increasingly large cuts to the budget” (Enoch & Harker, 2015, p.282). The criteria for the serials portion of the cancellation project expanded beyond CPU to explore other cost reducing measures including reducing duplication of print and electronic, eliminating duplicate access in other sources, dropping resources with limited access and finally exploring titles with both high CPU and low use (p.284).

Measuring and evaluating CPU as a basis for serial title cancellations requires that libraries develop detailed goals and objectives for how the project will be carried out and how the results will be used. Projects designed to analyze serials for cost per use can be time consuming. During a recent project at North Carolina State University almost four months was spent gathering data on all serials commitments (Davis & Raschke, 2017, p.15). The project reviewed usage data, CPU, citation analysis, exploration of duplicate holdings across aggregators, and big deal packages (p.14). Serials cancellation projects may be more successful if the library has time to measure title impact using objective and subjective criteria (Enoch & Harker, p.285) and to expand beyond CPU to include overlap coverage and the distribution of use across titles (p.286).

Usage is one factor in determining the value of library subscriptions. Libraries may wish to get liaisons involved to explore ways to swap titles, look for other ways to control costs or
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explore ways to market key resources (Smulewitz, Celano, & Andrade, 2013, p.216). However, libraries tend to use CPU as a basis for evaluating serials because CPU is the most common way to measure the overall value of a product based on the number of uses during a specified period (Huffine, 2015, p.55). With CPU data established, a library might choose to compare the results to other useful measures including “cost of acquiring a resource on-demand” (p.56).

CPU projects will present challenges for those involved in gathering both cost and usage data for serials titles. The University of St. Thomas completed a project to gather cost and usage data for purposes of collection analysis, and to provide background information for assisting with collection development decisions (Hulbert, Roach, & Julian, 2013). The project was complex because it involved working with various commercial products used to gather both cost and usage data. This study found that “multiple levels of usage such as sessions, searches, and full-text retrievals are reported in some cases and not in others, resulting in additional complexity” (p.159). Establishing the true costs for serials resources for the period matching the usage can be difficult because “payments for content fees and hosting fees may be made annually while fees for archives may be one-time” (p.159). Other anomalies with payments include titles paid using multiple fund codes or payments for a single resource funded over multiple fiscal years (p.159).

Cost per use is a well-established measure for determining the value of recurring resources. In a recent study on the value of big deal packages purchased through the Carolina Consortium, researchers used CPU to measure performance at the title and package level (Bucknall, Bernhardt, & Johnson, 2017). Other measures provided additional review following collection of CPU though cost per use was the “best single metric for analyzing big deal packages” (p.195). Libraries keen on measuring the return-on-investment for recurring resources
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will be served by completing a comprehensive CPU analysis and then taking the next step to “consider factors beyond cost and usage in making collection management decisions” (p.196).

METHODOLOGY

The purpose of this review was to gather cost per use (CPU) data for recurring subscriptions with a cost of $1000 or more. The project began with CPU calculations based on FY2016 expenditures. The University of Alabama fiscal year runs from October 1 through September 30. Usage data and cost information each coincided with FY2016.

In order to develop the most complete list of recurring titles the project began with a list of all titles paid in Voyager during FY2016. This step provided a complete list of titles with the associated FY2016 cost. The list was then reconciled to the total amount expended in all recurring funds for FY2016 thus confirming that the project would begin with a complete list. The project did not include a review of titles costing less than $1000.00. Efforts focused on developing CPU data for as many of the remaining titles as possible. Titles with a cost of $1000 or more became the basis of the study because they accounted for approximately 95% of all recurring expenditures in FY2016. Using this threshold would allow for a comprehensive study that could be completed in a reasonable amount of time.

The team then divided the large list into four smaller lists to aid in analysis. The next step was to acquire usage data from UC or manual collection given that EBSCO was not able to manage all resources and platforms. Usage data was COUNTER compliant as much as possible and manual collection included JR1, BR1, BR2, DB1 and DB2 data to align with UC.
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All titles for which usage was available were included in the study. In most cases, publishers supply the vendor with title level pricing. A limited number of journal packages do not break out individual titles costs resulting in overall CPU figures.

The four separate CPU reports used the same format and categories. The team settled on the following ranges, $5000+, $3000-$4,999, $2000-$2,999, and $1000-$1,999 so the spreadsheets would of more manageable in size. The original reports from Voyager included title, vendor, cost, and purchase order number.

RESULTS AND DISCUSSION

This study produced cost per use (CPU) data for 1035 titles. Some results are included below in Table 1. Primary review focused on titles with a CPU of $200 or more, and additional review followed for those titles marked for cancellation. CPU hit $200 or more for 139 titles while 89 titles had a CPU between $100 and $199. Titles in this range are a probable starting point for future cancellation projects. However, in the months following this project some titles with a CPU between $150 and $199 received additional review. Cancellation followed for some titles in this group because they were from one large publisher and not currently under Big Deal contract.

<INSERT Table 1: Number of E-Resources by expenditures and cost-per-use>

| Number of E-Resources by expenditures and cost-per-use |
|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|
|                                               | $1000 - $1999 | $2000 - $2999 | $3000 - $4999 | $5000 and above | Totals |
| CPU $100-$199                                | 29             | 15             | 17             | 28             | 89     |
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<table>
<thead>
<tr>
<th>CPU over $200</th>
<th>23</th>
<th>33</th>
<th>31</th>
<th>52</th>
<th>139</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=</td>
<td>333</td>
<td>182</td>
<td>174</td>
<td>346</td>
<td>1035</td>
</tr>
</tbody>
</table>

n values are total resources within each price range

The initial plan was to use the $200+ CPU threshold to identify titles for cancellation. There were a few challenges to implementing cancellations based on the findings. First, the majority of titles with a CPU exceeding the threshold were individual titles within Big Deal packages. While the CPU for the entire package might have been in line with expectations, there was concern about the return on investment achieved by a number of the individual titles. Cancellation is difficult for packages due to contractual agreements, though the data from this project and future CPU projects is important during review of Big Deal packages. The data will influence future negotiations as contracts come up for renewal.

When looking at the titles with high CPU, those with an individual cost of $5000 or more were the most problematic. In that price range, 52 titles had a CPU of $200 or higher with many of them being much higher. Many of these titles are in Big Deal packages where the overall CPU for the package is reasonable. Titles with a high CPU were prevalent at each price range. The library ultimately cancelled over 90 titles, both journals and databases, based on the findings.

Of equal importance, the findings served the library in contract negotiations for several months following completion of the study. This was the first cancellation project at the library in many years though plans are in place to use a similar study for FY2017 with a goal of identifying additional titles. Using a lower CPU threshold for future projects is one potential change based on the effective results from the current study.

Laying the Groundwork for a CPU Analysis
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The project to collect CPU data began in the fall of 2016 with a request from library administration for CPU data for recurring resources. The aim was to establish CPU thresholds and to identify journals and databases for possible cancellation. Plans also included using the data to compare performance across publishers, to provide year over year analysis and to allow for peer comparison.

The Resource Acquisition & Discovery department began the planning phase in the fall of 2016. Key members of the department formed a team to review the parameters of the project, plan for data collection, and establish a workflow and timeline. The team included the department head, the Electronic Resources Librarian, and key staff with assignments in electronic resources, serials, acquisitions and fiscal control.

The planning process began with discussions about the functionality of the various tools used within the library to manage online resources. Voyager is the main source of cost and title information and is the key resource for managing expenditures. Voyager reporting is essential because of its prominent role in fiscal management of library resources. Reports included title, vendor, cost and other key information. Next attention turned to acquiring usage data.

Prior to the summer of 2016, the library relied on manual collection and tracking of usage data. Data aligned with the fiscal year, October 1-September 30, with an adherence to acquiring COUNTER compliant data when possible. When COUNTER data was not available, collection of non-COUNTER data followed established parameters. Usage data is available on the library intranet and reported to various agencies. The challenge for this new team was that the library had recently completed implementation of EBSCO Usage Consolidation (UC) to assist with
collection of FY2016 usage data. However, staff would have to continue some manual collection of usage data while learning to incorporate the reports from UC.

In addition to Voyager, additional information needed for tracking payments for electronic resources resides in a key spreadsheet internally named the “Uber” sheet. This spreadsheet provides essential points necessary for tracking subscriptions including title, vendor, publisher, renewal dates, purchase order, fund codes, and cost. The Uber sheet was ideal for tracking resources that required licensing or other renewal agreements including e-journal collections, databases, e-book packages and memberships. However, just as with other sources of information for this project there were limitations to the Uber sheet.

The tracking sheet, used by the Electronic Resources Librarian, was essential in helping to manage renewal and licensing for major resources including journal packages, databases, e-book and streaming video collections. It is not a tracking tool for individual titles often managed by EBSCO. Therefore, while the report did contain some of the necessary information the focus had been on tracking resources at the package rather than title level.

Title List Revisited

The title lists generated in Voyager provided important data points which would simplify sorting of the information based on future need. Title, vendor, price, and purchase order number were provide in the report. Important to note here is that past practice had not included maintaining publisher information in the Voyager payment record. Vendors invoice and manage many of the ongoing commitments including print and online journals, databases, and e-book collections. Regardless, reports derived from Voyager used the existing data points that did not
include publisher because they still provided the most complete list of all paid recurring resources.

The next step was to add publisher information for each title. The team reviewed options for identification of publisher information including using Serials Solutions and the library catalog. Serials Solutions had the information though finding a common identifier to connect titles in Voyager (payment record) with titles in Serials Solutions proved to be challenging. The team made a decision to search each title in the library catalog. There are often multiple access points to a title from the catalog though it was usually clear which link was pointing to the current access allowing for easy identification of publisher. Having publisher information added to the spreadsheets was crucial for establishing CPU trends.

Adding Usage Data

As the project moved forward, the team transitioned from collecting cost information using Voyager and the Uber sheet to focusing on gathering usage data. The library was in the final stages of implementing EBSCO Usage Consolidation. The library had served as a beta test site for UC and fully implemented the product in the summer of 2016.

Usage data had been acquired using manual collection prior to the summer of 2016. EBSCO began pulling usage data three times per year following discussions during the transition to UC. EBSCO loaded the final quarter of FY16 and then the team began to run usage reports in UC. The migration to UC required training and transition because the library had relied on manual collection. There were substantial changes to existing usage gathering procedures including the need to align existing statistics reporting with the COUNTER data points collected.
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by EBSCO. In essence, the library changed the number of usage categories reported so that any future manual collection would align with the fields collected by EBSCO.

For various reasons EBSCO could only pull statistics for about 75% of the resources tracked by the library and steps were taken to manually collect as much of the remaining data as possible. Within a couple of months, the team became comfortable using UC and learned to pull various reports for journals, databases, and e-books. At the same time manual collection continued for those resources that EBSCO was unable to track. Over 100 resources required manual collection of statistics.

Putting the Data to Good Use

The aforementioned findings brought together cost and usage data for most recurring resources purchased by the library. Titles were evaluated individually and as part of packages. A LibGuide served to notify library users of the upcoming cancellations. Public reporting channels provided opportunities to market the Libguide. Liaisons distributed the link and discussed the upcoming cancellations with faculty. Library administration met directly with faculty to provide more details about the need for serials cancellations and the objectives of the project. The library and its users benefitted from the fact that cancellations had not been commonplace as they are with many peer libraries.

The project was able to go after the most egregious titles. Faculty were reminded that the library was being good stewards and that the cuts would help meet new budget parameters and might permit purchase of new titles that would be more aligned to the current teaching and research needs. Results from the CPU project were valuable in helping build support for the
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cancellations and proved beneficial during a number of contract negotiations. Library administration presented the data as needed to alert faculty regarding the cost effectiveness for some resources for months following public notification.

**Challenges Faced**

A project of this magnitude presented several challenges including changes to current procedures, collection and analysis of data stored in various silos, learning and using new tools, and dealing with the lack of consistent data points to match titles across various products used to acquire cost and usage data.

Providing cost information for resources as paid in Voyager, or acquiring usage data from UC or manual collection separately is rather straightforward. However, combining cost and use at the title level presented several challenges starting with gathering the actual cost per title.

The process began with Voyager Reports in order to develop a complete list of paid recurring titles. Some of the challenges in starting this process with Voyager include managing duplicate payments in a fiscal year, one-time payments, rate increases and other anomalies that prevent directly linking the total payment for a single fiscal year to the equivalent usage. Title and cost information may be stored in Serials Solutions or be available from EBSCO. However, these are not necessarily complete sources of the cost information and aligning the information proved difficult because of the lack of a primary identifier. Problems with having the title and cost information in silos includes variances in title and inconsistencies in how cost is assigned per title.
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Serials Solutions was the link resolver for the library at the time of this study. Serials Solutions also contained purchasing data. However, the library had not been using the usage collection module. The decision to move forward with full implementation of UC preceded this project by a few months. Therefore, Serials Solutions might have been useful for identifying titles and cost though another commercial product, or manual collection would still be required for gathering usage data. The problem of trying to match titles between separate products would still have been a concern.

EBSCO Usage Consolidation proved to be useful for some aspects of the cost-per-use project. EBSCO has some of the cost information but not all of it. EBSCO manages a large percentage of recurring resources so payment information for those resources was available. EBSCO is not able to handle all resources so missing data included either titles or usage, or a combination. During the time of this study, it was not easy to acquire cost and use from EBSCO. Enhancements made after this study have already improved the efficiency and reliability for acquiring CPU from EBSCO. The remaining challenge is that EBSCO is not able to manage all resources or collect all usage data for the library. In fact, there are often discrepancies because EBSCO may be able to manage the resource but not gather the usage data or vice versa. Leaving the library back at the point of trying to determine what pieces of the puzzle are missing and, once again, trying to ensure use of a primary identifier that links title, cost, and use across various platforms.

The team had to manage the issue of having access to COUNTER and non-COUNTER data, learning to use UC, and changing procedures for data collection. Challenges included balancing procedures used regularly for manual collection with changes necessitated by full
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implementation of UC. The process emphasized the need for consistency in gathering and reporting usage data.

A Learning Process

Acquiring cost-per-use data on a large scale is time intensive. Success is dependent on clear objectives, detailed procedures, managing inconsistent data, and reliance on well-trained staff.

It is important to begin a project of this scale with clear objectives. The project set out to acquire CPU data with the purpose of identifying titles for possible cancellation. The process included measures to ensure the data is worthwhile for tracking individual and package titles by publisher. Additional goals included having as complete a list as possible to show CPU across all recurring resources for use in contract negotiations and for use by library administration for reporting and analysis. It is important to set out clear goals and to develop a plan for how to reach the goals. Staff training plans, assignment of specific duties based on skill set, and identifying criteria that will measure success will help to produce effective results.

Libraries should establish the best way to develop a title list for all recurring resources based on local practice. For this project, a Voyager Report met that requirement because the fund structure assigned to all recurring resources share a similar fund code pattern. Using the Voyager list and comparing the total expenditure for all titles to the total expenditures in all recurring funds meant the project began with a complete title list. Enhancements to commercial products and value added services from vendors including EBSCO have improved and since completion
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of this project the process for acquiring cost and use data for vendor managed resources is more efficient.

Regardless of whether or not a library uses UC or a similar product, the process will require manual collection or manipulation of the data. It is not likely that any commercial product will be able to collect usage for all resources. The library must determine if the resources not tracked by the commercial entity are significant enough to influence the results. There were resources not tracked by UC that needed to be reviewed for cost per use. While a library can simply request cost per use data from publishers this is not feasible for a project of this size and scope. There are simply too many publishers and there would still be the issue of determining how to develop a complete list and managing discrepancies with titles, purchase order numbers and other key criteria. Planning as much as possible for these challenges will help to ensure a more efficient and effective process.

It is important to have realistic expectations. Assessment measures for recurring resources including journal backfiles, current subscriptions, e-book packages, continuing service fees, and streaming media can be complicated and time-consuming. Many factors will have an impact on the completeness and accuracy of the final product.

Usage data will also be inconsistent and there will be variations in usage depending on how the vendor reports the data and its interpretation of COUNTER. It is important to establish how COUNTER and non-COUNTER data will be used and to have a clear plan for aligning manual collection with the results from a commercial product.
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Having a well-trained and dedicated staff is always important though critical for a project of this scale. Identify the key staff who will lead the project to success and those who will be flexible in learning new technologies. Leaders develop during times of change. During this project, staff changed procedures, learned to use new products and expanded their roles. The success of the project was due in large part to the ability of staff at all levels to acclimate to new expectations.

Working closely with library administration was key to the success of this project. Cost per use studies range from those that are small in scope and designed to focus attention on a limited number of titles or a single journal package, to a complete cost-per-use analysis, as was the case with this project. No matter the scale, library administration should be involved in the planning phase, receive regular updates, and play a lead role in plans for presentation and dissemination of the results.

Making Use of the Data

This paper has covered the process, limitations and challenges associated with a large scale cost per use study. Some of these issues were to be expected while others were new challenges realized because of the project’s scope. In the end the results were worth the effort as large savings were realized from title cancellation and renegotiation of existing contracts. The library used the information to establish a LibGuide that raised awareness of the need for consistent review of resources, and some cancellations followed in order to maintain good stewardship of university resources. Cost savings from this project covered annual inflation, and permitted the library to add new resources more suited to meeting the teaching and research
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mission of the university. The data on resources with a high cost per use, or just low use in general provided a reason to reach out to a large number of publishers and vendors. The subsequent dialogue drove the library to negotiate more vigorously on renewals, to explore opportunities to reduce continuing service fees, and to push for additional content during renewal or purchase of new packages. Finally, the lessons learned from this project will be used to improve efficiency and effectiveness during future cost-use studies.

Conclusion

This study evaluated 1035 recurring titles and produced CPU data that served the immediate need of developing a cancellation list, and armed library administration with information used during several contract negotiations. It is critical for academic libraries to show return on investment particularly given the wide range of resources purchased each year. CPU is one tool the library can use to evaluate the effectiveness of resources in meeting the needs of researchers and students. It is important to note that other evaluation factors weighed on cancellation decisions. However, the results of this study served as a basis for title cancellations in 2016. Cost per use was the key factor because it is a well-defined objective measure to analyze the value across most recurring resources.

Plans are already in place to do a complete CPU analysis using FY2017 data and more cancellations may result. One area of future study may be a focus on titles with an individual cost below $1000. The current study excluded these titles for at least two reasons. First, the number of titles meeting these criteria would greatly expand the project. Another reason is that while there are many titles, the total expenditures are a small percentage of the overall annual outlay.
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for recurring resources. Review of these titles would be time intensive and cancellation of the
titles would have little impact on the recurring budget.

Future reviews may include additional criteria both quantitative and qualitative, and more
time for review by liaisons and faculty. A review of low use titles may produce some relevant
results. This study did not review low use titles unless they triggered a high CPU. Round one of
the project established a baseline for CPU for most recurring resources and resulted in
development of a LibGuide used to raise awareness of the need for serials cancellations.
Cancellations helped the library to better align expenditures toward titles with more user
demand. The department is using the lessons learned from year one to help guide the process.
Enhancements from EBSCO, more experience working with UC, and the knowledge gained
during this project will contribute to even better results for FY2017.

References


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This article reports the findings of a study to evaluate title level cost per use (CPU) for most recurring resources at The University of State Libraries. The study relied on cost and usage data from FY2016. The purpose of the project was to identify titles for cancellation and to establish CPU for most titles ordered individually and those within packages for use in future contract negotiations. The analysis began with a list of all recurring titles having a cost of $1000 or more. The review involved 1035 titles with an initial objective to highlight all titles with a CPU of $200 or more. Titles exceeding this CPU threshold received additional review with several identified for cancellation. This article presents the findings and provides an overview of the process used to collect CPU on a large scale. The article outlines some of the challenges faced by libraries when trying to align data that is stored in various silos and the limitations for various platforms and software used when collecting CPU data. The findings from this study formed the basis for a LibGuide developed and used to raise awareness of the need for cancellations. The data also assisted with future contract negotiations.

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1.0. INTRODUCTION

The University of Alabama Libraries consists of the Amelia Gayle Gorgas Library, the Angelo Bruno Business Library, the Rogers Library for Science & Engineering, the McLure Education Library, and the Hoole Special Collections Library. University Libraries provides resources that meet the teaching and research mission of The University of Alabama. Resource Acquisition & Discovery, a department established in 2015, is involved with selection, procurement, and access to library resources in all formats. The library faced a flat budget in FY2017, and this was first time in over a decade that discussions turned to serials cancellations. Prior to FY2017, the collection budget generally received enough recurring funds to cover inflation, and additional one-time funds were common. The impact of a flat budget in one fiscal year may have been manageable through cuts to other areas of collection spending. Proactive planning required reviewing the rate of return for serials and databases with a focus on identifying those with a high cost per use (CPU). Serial and database renewal had become routine, but the library was beginning to rely more heavily on data driven decisions. This new philosophy was coming into existence at a time of rapid change for the library and, specifically, technical services.

The physical layout of technical service operations had been evolving for some time, impacted by new directions within the profession, changes within higher education, and evolving user expectations. These changes provided both challenges and opportunities for the library and its users. In addition, the transition to an online environment progressed more quickly beginning in 2007 with the hiring of a new associate dean for collections, Millie Jackson, Ph.D. She had a
new vision for technical services that emphasized the migration to online resources and toward more effective and efficient operations. She implemented changes to the approval plan profile, placed more emphasis on e-book collections, ramped up migration to online journals, and explored the purchase of products to help manage the growing number of electronic resources.

Changes in staffing and strategic direction resulted in the development of a new department, Resource Acquisition & Discovery, in 2015. Several projects got underway including development of a new fund structure to manage library resources and a complete workflow analysis across all functional areas within the department. The workflow analysis resulted in several changes to operations, and full implementation of EBSCO’s Usage Consolidation (UC). Prior to final implementation of UC, the library collected usage statistics manually and stored the data in Excel spreadsheets for both internal use and for distribution to various reporting agencies.

Library administration developed a strategic plan to compliment the university plan, and efforts got underway to take a closer look at return on investment for library resources. The library had always focused on being good stewards of financial resources and thus to compliment the ongoing objective, a project was envisioned to establish CPU for many of the continuing resources managed by the library. The library had not faced serials cancellations for over a decade so it was important to manage the process. A LibGuide listed titles selected for cancellation, and library administration held follow-up discussions with librarians and campus faculty.

The project took approximately two months and involved staff and librarians as well as collaboration with publishers and vendors. The process would point to how much of the data was stored in silos with various parts of the final product stored in Voyager, UC, and various Excel
spreadsheets used internally to individually track cost and use. Additionally there were learning
curves and issues because of the need to pull cost and usage from various commercial platforms.
The project was a learning process made more successful because of collaboration among
librarians, staff, publishers, and vendors. Titles with a high CPU then received additional
evaluation before development of a final cancellation list. The library presented the findings in a
LibGuide that provided the selected titles and raised awareness of the need for journal and
database cancellations.

The CPU data also proved useful for contract negotiations with several publishers.
Having easy access to detailed cost per use information meant that key librarians involved with
negotiation were able to quickly provide justification for seeking reductions in total spend for
annual renewals or caps on annual inflation. A concerted effort was made to negotiate caps on
continuing services fees with large vendors. All titles with a cost of $1000 or more were
reviewed individually to make decisions about cancellation or to note the need for more
negotiation with the vendor. The project was an opportunity to explore the various issues
involved when trying to develop CPU for recurring resources on a large scale.

The results of the cost/use study provided key data used to make decisions about title
retention. Several titles with a high CPU were cancelled resulting in the opportunity to make
better use of the funds in support of university and library initiatives. The changes helped slow
growth on the recurring side of the budget. However, equally important to future decision-
making was the number of best practices or impacts on the process that were identified during
the project.

This paper will outline some key takeaways that may be useful to others managing
comprehensive cost-use studies. These include challenges presented when data are stored in
various silos within the library and in commercial products, inconsistencies with how cost and use information is collected, and how to manage non-COUNTER (Counting Online Usage of Networked Electronic Resources) data. Developing clear objectives, establishing realistic expectations, and staff training are critical to the success of a large-scale cost per use study. This project resulted in immediate cost savings for the library, established the need for ongoing reviews, and allowed for purchase of new resources. The key findings and challenges are discussed in detail along with specific best practices that may assist others in planning for comprehensive cost per use studies.

2.0. LITERATURE REVIEW

The current environment in higher education is both challenging and exciting for libraries and librarians. Outside forces are having an impact on how academic libraries evolve to meet the changing needs and expectations of users and the larger campus community. Stakeholders including university administrators, faculty, students, and donors realize benefits from the library. Facing evolutions in services and collections, and rethinking the use of physical space are a few ways libraries are trying to evolve and meet the changing demands. There is a growing demand for demonstrating the value the library provides to the university. Given the overall size of collection budgets there may be a decision to measure the return on investment for library resources.

Library collections may provide tangible benefits to the university community. In a study designed to explore the importance of library resources to faculty, researchers asked faculty about information gathering through the library versus other information sources (King & Tenopir, 2013). As compared to other information options, “libraries were used most often as a
source of articles (p.156). Faculty may be an important group for libraries to collaborate with because “journal articles are the most used information source of the last substantive piece of information used” (p.161) and “over 50% of article readings are from articles provided by libraries” (p.161).

Looking at return on investment for library collections often turns attention to cost per use (CPU) or other quantitative measures for evaluating recurring resources. CPU studies often align with serials cancellation projects. CPU may also serve to establish benchmarks for cost and use prior to negotiations with publishers. The University of North Texas has experienced a number of successively more intense cancellation projects involving monographs and serials due to “increasingly large cuts to the budget” (Enoch & Harker, 2015, p.282). The criteria for the serials portion of the cancellation project expanded beyond CPU to explore other cost reducing measures including reducing duplication of print and electronic, eliminating duplicate access in other sources, dropping resources with limited access, and finally exploring titles with both high CPU and low use (p.284).

Measuring and evaluating CPU as a basis for serial title cancellations requires that libraries develop detailed goals and objectives for how the project will be carried out and how the results will be used. Projects designed to analyze serials for cost per use can be time consuming. During a recent project at North Carolina State University almost four months was spent gathering data on all serials commitments (Davis & Raschke, 2017, p.15). The project reviewed usage data, CPU, citation analysis, exploration of duplicate holdings across aggregators, and big deal packages (p.14). Serials cancellation projects may be more successful if the library has time to measure title impact using objective and subjective criteria (Enoch &
Harker, p.285) and to expand beyond CPU to include overlap coverage and the distribution of use across titles (p.286).

Usage is one factor in determining the value of library subscriptions. Libraries may wish to get liaisons involved to explore ways to swap titles, look for other ways to control costs, or explore ways to market key resources (Smulewitz, Celano, & Andrade, 2013, p.216). However, libraries tend to use CPU as a basis for evaluating serials because CPU is the most common way to measure the overall value of a product based on the number of uses during a specified period (Huffine, 2015, p.55). With CPU data established, a library might choose to compare the results to other useful measures including “cost of acquiring a resource on-demand” (p.56).

CPU projects will present challenges for those involved in gathering both cost and usage data for serials titles. The University of St. Thomas completed a project to gather cost and usage data for purposes of collection analysis, and to provide background information for assisting with collection development decisions (Hulbert, Roach, & Julian, 2013). The project was complex because it involved working with various commercial products used to gather both cost and usage data. This study found that “multiple levels of usage such as sessions, searches, and full-text retrievals are reported in some cases and not in others, resulting in additional complexity” (p.159). Establishing the true costs for serials resources for the period matching the usage can be difficult because “payments for content fees and hosting fees may be made annually while fees for archives may be one-time” (p.159). Other anomalies with payments include titles paid using multiple fund codes or payments for a single resource funded over multiple fiscal years (p.159).

Cost per use is a well-established measure for determining the value of recurring resources. In a recent study on the value of big deal packages purchased through the Carolina Consortium, researchers used CPU to measure performance at the title and package level
(Bucknall, Bernhardt, & Johnson, 2017). Other measures provided additional review following collection of CPU though cost per use was the “best single metric for analyzing big deal packages” (p.195). Libraries keen on measuring the return-on-investment for recurring resources will be served by completing a comprehensive CPU analysis and then taking the next step to “consider factors beyond cost and usage in making collection management decisions” (p.196).

3.0. METHODOLOGY

The purpose of this review was to gather cost per use (CPU) data for recurring subscriptions with a cost of $1000 or more. The project began with CPU calculations based on FY2016 expenditures. The University of Alabama fiscal year runs from October 1 through September 30. Usage data and cost information each coincided with FY2016.

In order to develop the most complete list of recurring titles the project began with a list of all titles paid in Voyager during FY2016. This step provided a complete list of titles with the associated FY2016 cost. The list was then reconciled to the total amount expended in all recurring funds for FY2016 thus confirming that the project would begin with a complete list. The project did not include a review of titles costing less than $1000.00. Efforts focused on developing CPU data for as many of the remaining titles as possible. Titles with a cost of $1000 or more became the basis of the study because they accounted for approximately 95% of all recurring expenditures in FY2016. Using this threshold would allow for a comprehensive study that could be completed in a reasonable amount of time.

The team then divided the large list into four smaller lists to aid in analysis. The next step was to acquire usage data from UC or manual collection given that EBSCO was not able to
manage all resources and platforms. Usage data was COUNTER compliant as much as possible and manual collection included JR1, BR1, BR2, DB1 and DB2 data to align with UC.

All titles for which usage was available were included in the study. In most cases, publishers supply the vendor with title level pricing. A limited number of journal packages do not break out individual titles costs resulting in overall CPU figures.

The four separate CPU reports used the same format and categories. The team settled on the following ranges, $5000+, $3000-$4,999, $2000-$2,999, and $1000-$1,999 so the spreadsheets would be more manageable in size. The original reports from Voyager included title, vendor, cost, and purchase order number.

4.0. RESULTS AND DISCUSSION

This study produced cost per use (CPU) data for 1035 titles. Some results are included below in Table 1. Primary review focused on titles with a CPU of $200 or more, and additional review followed for those titles marked for cancellation. CPU hit $200 or more for 139 titles while 89 titles had a CPU between $100 and $199. Titles in this range are a probable starting point for future cancellation projects. However, in the months following this project some titles with a CPU between $150 and $199 received additional review. Cancellation followed for some titles in this group because they were from one large publisher and not currently under big deal contract.

<INSERT Table 1. Number of E-Resources by expenditures and cost-per-use.>
The initial plan was to use the $200+ CPU threshold to identify titles for cancellation. There were a few challenges to implementing cancellations based on the findings. First, the majority of titles with a CPU exceeding the threshold were individual titles within big deal packages. While the CPU for the entire package might have been in line with expectations, there was concern about the return on investment achieved by a number of the individual titles. Cancellation is difficult for packages due to contractual agreements, though the data from this project and future CPU projects is important during review of big deal packages. The data will influence future negotiations as contracts come up for renewal.

When looking at the titles with high CPU, those with an individual cost of $5000 or more were the most problematic. In that price range, 52 titles had a CPU of $200 or higher with many of them being much higher. Many of these titles are in big deal packages where the overall CPU for the package is reasonable. Titles with a high CPU were prevalent at each price range. The library ultimately cancelled over 90 titles, both journals and databases, based on the findings.

Of equal importance, the findings served the library in contract negotiations for several months following completion of the study. This was the first cancellation project at the library in many years though plans are in place to use a similar study for FY2017 with a goal of identifying additional titles. Using a lower CPU threshold for future projects is one potential change based on the effective results from the current study.

4.1. Laying the Groundwork for a CPU Analysis

The project to collect CPU data began in the fall of 2016 with a request from library administration for CPU data for recurring resources. The aim was to establish CPU thresholds and to identify journals and databases for possible cancellation. Plans also included using the
data to compare performance across publishers, to provide year over year analysis, and to allow for peer comparison.

The Resource Acquisition & Discovery department began the planning phase in the fall of 2016. Key members of the department formed a team to review the parameters of the project, plan for data collection, and establish a workflow and timeline. The team included the department head, the electronic resources librarian, and key staff with assignments in electronic resources, serials, acquisitions and fiscal control.

The planning process began with discussions about the functionality of the various tools used within the library to manage online resources. Voyager is the main source of cost and title information and is the key resource for managing expenditures. Voyager reporting is essential because of its prominent role in fiscal management of library resources. Reports included title, vendor, cost, and other key information. Next, attention turned to acquiring usage data.

Prior to the summer of 2016, the library relied on manual collection and tracking of usage data. Data aligned with the fiscal year, October 1-September 30, with an adherence to acquiring COUNTER compliant data when possible. When COUNTER data was not available, collection of non-COUNTER data followed established parameters. Usage data are available on the library intranet and reported to various agencies. The challenge for this new team was that the library had recently completed implementation of EBSCO Usage Consolidation (UC) to assist with collection of FY2016 usage data. However, staff would have to continue some manual collection of usage data while learning to incorporate the reports from UC.

In addition to Voyager, additional information needed for tracking payments for electronic resources resides in a key spreadsheet internally named the “Uber” sheet. This spreadsheet provides essential points necessary for tracking subscriptions including title, vendor,
publisher, renewal dates, purchase order, fund codes, and cost. The Uber sheet was ideal for tracking resources that required licensing or other renewal agreements including e-journal collections, databases, e-book packages, and memberships. However, just as with other sources of information for this project, there were limitations to the Uber sheet.

The tracking sheet, used by the electronic resources librarian, was essential in helping to manage renewal and licensing for major resources including journal packages, databases, and e-book and streaming video collections. It is not a tracking tool for individual titles often managed by EBSCO. Therefore, while the report did contain some of the necessary information, the focus had been on tracking resources at the package rather than title level.

4.2. Title List Revisited

The title lists generated in Voyager provided important data points that would simplify sorting of the information based on future need. Title, vendor, price, and purchase order numbers were provided in the report. Important to note here is that past practice had not included maintaining publisher information in the Voyager payment record. Vendors invoice and manage many of the ongoing commitments including print and online journals, databases, and e-book collections. Regardless, reports derived from Voyager used the existing data points that did not include publisher because these reports still provided the most complete list of all paid recurring resources.

The next step was to add publisher information for each title. The team reviewed options for identification of publisher information including using Serials Solutions and the library catalog. Serials Solutions had the information though finding a common identifier to connect titles in Voyager (payment record) with titles in Serials Solutions proved to be challenging. The
team made a decision to search each title in the library catalog. There are often multiple access points to a title from the catalog though it was usually clear which link was pointing to the current access allowing for easy identification of publisher. Having publisher information added to the spreadsheets was crucial for establishing CPU trends.

4.3. Adding Usage Data

As the project moved forward, the team transitioned from collecting cost information using Voyager and the Uber sheet to focusing on gathering usage data. The library was in the final stages of implementing EBSCO Usage Consolidation. The library had served as a beta test site for UC and fully implemented the product in the summer of 2016.

Usage data had been acquired using manual collection prior to the summer of 2016. EBSCO began pulling usage data three times per year following discussions during the transition to UC. EBSCO loaded the final quarter of FY16 and then the team began to run usage reports in UC. The migration to UC required training and transition because the library had relied on manual collection. There were substantial changes to existing usage gathering procedures including the need to align existing statistics reporting with the COUNTER data points collected by EBSCO. In essence, the library changed the number of usage categories reported so that any future manual collection would align with the fields collected by EBSCO.

For various reasons EBSCO could only pull statistics for about 75% of the resources tracked by the library, and steps were taken to manually collect as much of the remaining data as possible. Within a couple of months, the team became comfortable using UC and learned to pull various reports for journals, databases, and e-books. At the same time manual collection
continued for those resources that EBSCO was unable to track. Over 100 resources required manual collection of statistics.

4.4. Putting the Data to Good Use

The aforementioned findings brought together cost and usage data for most recurring resources purchased by the library. Titles were evaluated individually and as part of packages. A LibGuide served to notify library users of the upcoming cancellations. Public reporting channels provided opportunities to market the LibGuide. Liaisons distributed the link and discussed the upcoming cancellations with faculty. Library administration met directly with faculty to provide more details about the need for serials cancellations and the objectives of the project. The library and its users benefitted from the fact that cancellations had not been as commonplace as they are with many peer libraries.

The project was able to go after the most egregious titles. Faculty were reminded that the library was being good stewards and that the cuts would help meet new budget parameters and might permit purchase of new titles that would be more aligned to the current teaching and research needs. Results from the CPU project were valuable in helping build support for the cancellations and proved beneficial during a number of contract negotiations. Library administration presented the data as needed to alert faculty regarding the cost effectiveness for some resources for months following public notification.

4.5. Challenges Faced

A project of this magnitude presented several challenges including changes to current procedures, collection and analysis of data stored in various silos, learning and using new tools,
and dealing with the lack of consistent data points to match titles across various products used to acquire cost and usage data.

Providing cost information for resources as paid in Voyager, or acquiring usage data from UC or manual collection separately is rather straightforward. However, combining cost and use at the title level presented several challenges starting with gathering the actual cost per title.

The process began with Voyager Reports in order to develop a complete list of paid recurring titles. Some of the challenges in starting this process with Voyager include managing duplicate payments in a fiscal year, one-time payments, rate increases and other anomalies that prevent directly linking the total payment for a single fiscal year to the equivalent usage. Title and cost information may be stored in Serials Solutions or be available from EBSCO. However, these are not necessarily complete sources of the cost information and aligning the information proved difficult because of the lack of a primary identifier. Problems with having the title and cost information in silos includes variances in title and inconsistencies in how cost is assigned per title.

Serials Solutions was the link resolver for the library at the time of this study. Serials Solutions also contained purchasing data. However, the library had not been using the usage collection module. The decision to move forward with full implementation of UC preceded this project by a few months. Therefore, Serials Solutions might have been useful for identifying titles and cost though another commercial product, or manual collection would still be required for gathering usage data. The problem of trying to match titles between separate products would still have been a concern.

EBSCO Usage Consolidation proved to be useful for some aspects of the cost-per-use project. EBSCO has some of the cost information but not all of it. EBSCO manages a large
percentage of recurring resources so payment information for those resources was available.

EBSCO is not able to handle all resources so missing data included either titles or usage, or a combination. During the time of this study, it was not easy to acquire cost and use from EBSCO. Enhancements made after this study have already improved the efficiency and reliability for acquiring CPU from EBSCO. The remaining challenge is that EBSCO is not able to manage all resources or collect all usage data for the library. In fact, there are often discrepancies because EBSCO may be able to manage the resource but not gather the usage data or vice versa. This leaves the library back at the point of trying to determine what pieces of the puzzle are missing and, once again, trying to ensure use of a primary identifier that links title, cost, and use across various platforms.

The team had to manage the issue of having access to COUNTER and non-COUNTER data, learning to use UC, and changing procedures for data collection. Challenges included balancing procedures used regularly for manual collection with changes necessitated by full implementation of UC. The process emphasized the need for consistency in gathering and reporting usage data.

4.6. A Learning Process

Acquiring cost-per-use data on a large scale is time intensive. Success is dependent on clear objectives, detailed procedures, managing inconsistent data, and reliance on well-trained staff.

It is important to begin a project of this scale with clear objectives. The project set out to acquire CPU data with the purpose of identifying titles for possible cancellation. The process included measures to ensure the data are worthwhile for tracking individual and package titles by
publisher. Additional goals included having as complete a list as possible to show CPU across all
recurring resources for use in contract negotiations and for use by library administration for
reporting and analysis. It is important to set out clear goals and to develop a plan for how to
reach the goals. Staff training plans, assignment of specific duties based on skill set, and
identifying criteria that will measure success will help to produce effective results.

Libraries should establish the best way to develop a title list for all recurring resources
based on local practice. For this project, a Voyager Report met that requirement because the fund
structure assigned to all recurring resources share a similar fund code pattern. Using the Voyager
list and comparing the total expenditure for all titles to the total expenditures in all recurring
funds meant the project began with a complete title list. Enhancements to commercial products
and value added services from vendors including EBSCO have improved and since completion
of this project the process for acquiring cost and use data for vendor-managed resources is more
efficient.

Regardless of whether or not a library uses UC or a similar product, the process will
require manual collection or manipulation of the data. It is not likely that any commercial
product will be able to collect usage for all resources. The library must determine if the resources
not tracked by the commercial entity are significant enough to influence the results. There were
resources not tracked by UC that needed to be reviewed for cost per use. While a library can
simply request cost per use data from publishers, this is not feasible for a project of this size and
scope. There are simply too many publishers, and there would still be the issue of determining
how to develop a complete list and managing discrepancies with titles, purchase order numbers,
and other key criteria. Planning as much as possible for these challenges will help to ensure a
more efficient and effective process.
It is important to have realistic expectations. Assessment measures for recurring resources including journal backfiles, current subscriptions, e-book packages, continuing service fees, and streaming media can be complicated and time-consuming. Many factors will have an impact on the completeness and accuracy of the final product.

Usage data will also be inconsistent and there will be variations in usage depending on how the vendor reports the data and its interpretation of COUNTER. It is important to establish how COUNTER and non-COUNTER data will be used and to have a clear plan for aligning manual collection with the results from a commercial product.

Having a well-trained and dedicated staff is always important for a project of this scale. Managers should identify the key staff who will lead the project to success and those who will be flexible in learning new technologies. Leaders develop during times of change. During this project, staff changed procedures, learned to use new products, and expanded their roles. The success of the project was due in large part to the ability of staff at all levels to acclimate to new expectations.

Working closely with library administration was key to the success of this project. Cost per use studies range from those that are small in scope and designed to focus attention on a limited number of titles or a single journal package, to a complete cost-per-use analysis, as was the case with this project. No matter the scale, library administration should be involved in the planning phase, receive regular updates, and play a lead role in plans for presentation and dissemination of the results.

4.7. Making Use of the Data
This paper has covered the process, limitations and challenges associated with a large scale cost per use study. Some of these issues were to be expected while others were new challenges realized because of the project’s scope. In the end the results were worth the effort as large savings were realized from title cancellation and renegotiation of existing contracts. The library used the information to establish a LibGuide that raised awareness of the need for consistent review of resources, and some cancellations followed in order to maintain good stewardship of university resources. Cost savings from this project covered annual inflation, and permitted the library to add new resources `more suited to meeting the teaching and research mission of the university. The data on resources with a high cost per use, or just low use in general, provided a reason to reach out to a large number of publishers and vendors. The subsequent dialog drove the library to negotiate more vigorously on renewals, to explore opportunities to reduce continuing service fees, and to push for additional content during renewal or purchase of new packages. Finally, the lessons learned from this project will be used to improve efficiency and effectiveness during future cost-use studies.

5.0. Conclusion

This study evaluated 1035 recurring titles and produced CPU data that served the immediate need of developing a cancellation list and armed library administration with information used during several contract negotiations. It is critical for academic libraries to show return on investment particularly given the wide range of resources purchased each year. CPU is one tool the library can use to evaluate the effectiveness of resources in meeting the needs of researchers and students. It is important to note that other evaluation factors weighed on cancellation decisions. However, the results of this study served as a basis for title cancellations
in 2016. Cost per use was the key factor because it is a well-defined objective measure to
analyze the value across most recurring resources.

Plans are already in place to do a complete CPU analysis using FY2017 data and more
cancellations may result. One area of future study may be a focus on titles with an individual cost
below $1000. The current study excluded these titles for at least two reasons. First, the number
of titles meeting these criteria would greatly expand the project. Another reason is that while
there are many titles, the total expenditures are a small percentage of the overall annual outlay
for recurring resources. Review of these titles would be time intensive and cancellation of the
titles would have little impact on the recurring budget.

Future reviews may include additional criteria both quantitative and qualitative, and more
time for review by liaisons and faculty. A review of low use titles may produce some relevant
results. This study did not review low use titles unless they triggered a high CPU. Round one of
the project established a baseline for CPU for most recurring resources and resulted in
development of a LibGuide used to raise awareness of the need for serials cancellations.
Cancellations helped the library to better align expenditures toward titles with more user
demand. The department is using the lessons learned from year one to help guide the process.
Enhancements from EBSCO, more experience working with UC, and the knowledge gained
during this project will contribute to even better results for FY2017.

6.0. References


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n values are total resources within each price range