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Nuanced and Timely: Capturing Collections Feedback at Point of Use

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Abstract

While libraries are using increasingly sophisticated metrics to determine electronic resource’s usefulness, impact, and cost effectiveness, much of these data reflect past usage. More nuanced information is still needed to guide collection managers’ decisions about which content to purchase, borrow, or deselect. To fill this gap, librarians at Oregon State University Libraries and Press and The Ohio State University Libraries are testing the utility of a pop-up survey to gather patron feedback at their point of use. By building an open-source application that inserts a survey between a citation and the full text, librarians are better positioned to capture users’ real-time reasons for selecting a given resource. Usage data can then be linked to qualitative information through questions such as whether a resource is being used for research or teaching; whether a user considers the journal core to their project; or even, if the resource is being used in class or with a student. Inspired by MINES for Libraries® this application was created to understand e-resource use beyond clicks. The authors discuss how the application works, whether users responded to the pop-up survey as expected, and other preliminary findings.

Introduction

Academic libraries employ sophisticated metrics to determine electronic resources’ usefulness, impact and cost effectiveness. Since much of these data reflect past usage, such as downloads, it only partially meets the range and types of questions library collection assessment programs are being asked. More nuanced information about e-resources is still needed to guide collection managers’ decisions to purchase, borrow, or deselect content and to demonstrate the impact and value contributions to an institution and its student and faculty success. MINES for Libraries® (MINES) serves as an example of how libraries might begin to meet these needs. Their methodology, employing intercept surveys, has connected e-resource use to funded research. (Kyrillidou, 2010). Inspired by this, Oregon State University Libraries and Press (OSULP) used a similar method, an intercept survey, as part of its collection assessment efforts to explore its usefulness in collection decisions and in demonstrating the impact and value of library collections. The authors report on the creation and initial deployment of an open-source survey framework developed with these goals in mind. Currently in beta, the tool injects a pop-up survey at patrons’ point of use such as an e-journal citation. The authors share preliminary findings from test surveys where patrons were queried about how and why they planned to use a resource and the value they placed on the targeted source. Initial findings suggest that this tool can contribute to the nuanced and timely information library collection assessment programs seek.

Background and Problem

OSULP Collection Development (CD) Unit’s collection assessment program includes an annual subscription review and program or degree reviews that occur due to curricular changes. The CD Unit reviews serial and database subscriptions primarily based on cost per use with a goal of identifying items that no longer make sense to keep due to their low use and high cost. In such cases, it is typically determined that it is more cost effective to fill the requests through interlibrary loan. In the past few years, cost per use data has been rounded out by metrics suggested by Wilson and Li (2012) from the California Digital Library. CD librarians also consider concepts of Utility which includes: usage plus citations; Quality: Impact Factor; SNIP 2; and Cost Effectiveness: cost per use; cost per SNIP. Source Normalized Impact per Paper (SNIP) “measures the average citation
impact of the publications of a journal" and provides an alternate citation-based measure to the Journal of Citation Reports’s Impact Factor, which measures the frequency with which the “average article” in a journal has been cited in a particular year or period (CWTS, 2013; JournalM3trics, 2012). CD librarians consider multiple data points and make data-driven renewal decisions.

For program and degree reviews, CD compares library holdings of monographs, journals, databases, and other content to peer holdings. An assessment is made based on whether holdings are less than, match, or exceed OSU’s comparators. Holdings are also assessed on their impact factor or other metrics, such as core title lists which designate materials important for curricular or research needs in a given discipline. Unlike the annual review, which focuses on subscribed content, all content is assessed, regardless of its fee structure when program proposals and/or reviews come up. After the data were compiled, CD and the librarian who liaises with the department requesting the review make summary statements about how well the collection supports the program or degree; designate the collection as adequate, marginally adequate, or inadequate to support the proposal; and supply recommendations for materials needed to bolster the collection. Using evaluation findings, CD can then make a case for financial support from the department requesting the review to fill collection gaps.

As helpful and informative as all of the above mentioned metrics are, they are poor indicators of how or even why library collections are being used. Data clearly linking student and faculty efforts to library collections is missing. Connecting patron success to library collections would meet collection assessment efforts and OSULP’s new Strategic Plan which states: “We advance OSU’s land grant mission by contributing to learner success, scholarly excellence, and community engagement” (2013). OSULP is not alone in wanting to answer these questions. Researchers at the University of Huddersfield recently found “a statistically significant relationship between student attainment and...e-resources use and book borrowing statistics” (review). While the Huddersfield study has not yet proven a causal relationship between student success and library use, this article’s authors hoped the point of use survey would make in-roads into establishing this link. The tool is promising because it intercepts respondents’ workflows so their responses are timely and because they can be asked qualitative questions about impact such as “What will access to this library resource help you to do?” Responses like “Complete a class assignment,” “Complete a dissertation,” or “Provide readings for my students” connect library collections to OSU’s curriculum, research, and student needs and speak to the broader impact that stakeholders ask libraries to articulate. Employing a survey tool to gather in-depth responses will assist libraries to convey a bigger story about library impact beyond usage numbers.

**Application**

OSULP had experience with point-of-use surveys from its success with MINES and was able to develop a cost-recovery model based on data gathered from MINES. To conduct MINES, the library needed to develop the technical infrastructure that would generate an intercept survey. As OSULP’s programmer (now at The Ohio State University Libraries) developed the infrastructure for MINES, it became apparent that a survey framework could be created to meet other library purposes like collection assessment. (Reese, 2013)

To begin, the programmer built the framework to use the library proxy server, EZProxy as suggested by MINES. (Reese, 2013; MINES, 2013). However just using the EZproxy survey did not offer the desired flexibility. So an additional proxy was deployed—a public proxy server on Apache. In this workflow, the public Apache proxy encompasses the private EZproxy and acts as a decision engine directing users to a survey or their requested resource based on context. (Reese [2013] outlines additional workflow details, supplies code snippets, and more in his article.) For the initial surveys, the authors supplied the
End Users 295

programmer with if-then statements to set the parameters for when users would encounter a survey or be sent directly to their desired resource.

During fall 2012, the programmer created the code; the following spring, the authors ran a first test of it. The authors chose OSULP’s Elsevier unique title list for the first run, and, after revisions to the software, the survey, and the survey design in fall 2013, the authors retested it on newly acquired JSTOR collections. For each survey iteration, users encountered it if they selected a targeted title either from the library e-journal list; a database; or 1Search, OSULP’s discovery tool. Once the user selected a targeted resource, an IRB form and the survey popped up.

**First Round**

Elsevier journals were chosen for the initial survey test because of their high value both in terms of cost and user demand. The authors wanted to capture from users why these journals are so key to their teaching, research, and studies. In this iteration, additional goals included testing the survey tool and the survey questions to learn if each performed as expected. The survey was posted for one month and ran at all hours every day. It asked nine questions and targeted just over 70 titles. Journals were pinged until five unique instances for a given title were captured. We received 170 unique responses determined by unique IP address, and 186 unique articles were accessed.

This round proved useful for several reasons. When answering, “how has electronic access to library resources such as this impacted your research, teaching, or work?” respondents clearly linked the value of these journals to their work. Their comments showed that the content is used to complete work important to them. For example, “electronic access to library resources helps a lot. I need to complete a term paper” and “they have been critical in the construction of my graduate thesis. When access to certain documents is denied it has a material impact on the quality of the writing and causes significant frustration.” Not only do these types of comments demonstrate the journal’s value to the individual, they also directly show how OSULP collections impact research and teaching.

The authors wanted to learn what type of monetary value patrons would give to resources they selected as an indicator of the value they placed on the targeted source. In the first round, the survey asked, “If you were to give a monetary value for access to this resource what would it be?” and respondents used a toggle to select a dollar amount ranging from $0–70. Since the majority left the toggle at the default, $0, the authors changed the response option in a second survey iteration. The next highest dollar amount was $5, selected by 18 respondents. The authors
are reticent to draw conclusions about these responses until further testing of the question.

The first round uncovered another more significant issue with the survey design. Because the survey was on at all times, several respondents encountered the survey multiple times, leading to frustration and duplication. To remedy this, the design was changed in the second round.

Second Round

For this round, the authors focused on reducing respondent duplication and modifying questions to clarify meaning and improve readability. Response options were also changed to eliminate some of the ambiguous responses seen in the first round of results.

Reducing duplication was handled through changes to the rules determining how often and when various sets of IP addresses would encounter the survey. The authors decided to display the survey once every 60 minutes to the computers in the Valley Library Information Commons, which are primarily used by students. For all other IP addresses, used by students and faculty, the survey was set to pop up once every 24 hours. This meant anyone using the targeted library e-resources from on or off campus would see the survey just once in a given 24 hours. The programmer then modified the code to accommodate these rules. The survey’s duration was kept at one month. The authors also tweaked the phrasing of three questions and added or changed response options to six questions.

The targeted journals were changed to three new JSTOR collections, purchased due to a generous gift from OSU’s Ecampus department. Like other institutions, Ecampus has seen significant growth; they now offer over 30 degrees, and students receive the same diploma as on-campus students. Also, on-campus students can take Ecampus courses alongside their on-campus courses. Ecampus’s generous support of OSULP’s electronic collections benefits their students and faculty, so it is understandable they would want to learn about the impact this support has. When Ecampus made this gift, they asked the library to share information about its impact, and this pop-up survey was a natural fit to explore it.

The library learned of and received the gift during July and August 2013. During August and September, the Collection Development Unit identified, decided on, and purchased JSTOR Arts and Sciences III, V, and VI. These collections were seen as appropriate matches for the gift and were needed resources benefitting many of the disciplines that have Ecampus courses. Also in September, the authors revised the survey questions, and, by October, it was up and running. Results were compiled and analyzed in the week prior to the Charleston Conference. While the survey framework can be posted fairly quickly—one of its benefits—more time for data analysis is needed for a more thorough review of the data.

In response to the nine questions posed in this round, there were 77 responses. The authors were disappointed with this low response rate and will explore additional changes to improve it. The authors plan to run the survey successively over the course of the next year, so this second attempt represents one of several iterations. The project’s intent was to first test the survey software and, second, to conduct several survey design iterations to learn which design and which questions resulted in linking student success to collection development efforts. As the survey is distributed going forward, responses from this round will be added to future sets of responses. From that accumulation, the authors will be able to see over the course of a year what users say about library e-resources.

To meet Ecampus’s discrete goal of seeing the impact of their investment, two new questions were added: “Are you using this resource for a Distance education/Ecampus course? (Yes/No/Unsure)” and “Mark your primary campus (Cascades/Corvallis/Ecampus/HMSC).” Just 22% (17 respondents) were using the resource for an Ecampus course, two were unsure, and four left this field blank. As expected, the majority, 54, were not using the JSTOR journals for Ecampus. Presumably, these respondents were using JSTOR for an on-campus course. However, it is possible there were other usage locations not considered by the authors.

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<table>
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<th>On-campus course</th>
<th>Unsure (blank)</th>
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<td>My research</td>
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<td>1</td>
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</tr>
<tr>
<td>Grand Total</td>
<td>17</td>
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<td>4</td>
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Table 1. Purpose for Using JSTOR

Example, OSU is promoting the use of hybrid courses where the class meets in person for half of the sessions and online for the other half. Ecampus assists faculty with such courses, possibly creating uncertainty about how to respond to this question.
From the second new question, the authors learned that, of Ecampus usage, the majority were students using the resource for their assignments or homework. This is the type of impact that Ecampus would want to see—they invested in library resources that Ecampus students used for Ecampus coursework. The authors also looked at responses to the question asking if the resource was core or supplemental to the user’s purpose. This question was posed because it contributes to the picture of how impactful a resource is. All Ecampus respondents said that the article at hand was core to their purpose, whether for their assignment or homework or their research or teaching. Table 1 sums these data along with respondents’ status and if the resource was for an Ecampus course or not. One unanticipated finding is that more Ecampus than on-campus undergraduates indicated their use of JSTOR. More research is needed to learn why this is.

The authors were curious to read the open-ended comments from Ecampus users in response to the question “What will access to this library resource help you to do?” Table 2 displays a range of respondents’ thoughts representing learning, teaching, and student research. In addition to demonstrating value, these free-form comments offer OSULP and Ecampus language beyond the typical feel-good sentiments libraries frequently hear. Comments like these add a relatable human element to usage and other data. The authors can visualize faculty and students at work and suggest that this image, along with the data, convey to administrators the impact and value that library collections bring to our institutions.

In the second round, the monetary value question was reworded to: “If you had to pay for this article out of your own funds, how much would you be willing to pay for immediate access?” and the response option was changed to categories $0–1, $1–5, $6–10, $11–15, and more than $15. Again, most responses were left at $0, the default. The next highest values chosen were $5 (19), $1 (10), $15 (7), and $70 (4). It seems preliminary to draw conclusions about these findings given that the majority in both rounds appear to have left the response at the default. The authors are curious to learn if respondents are intentionally choosing zero or if they are skipping the question, and, if so, why? For those who did respond, further analysis is needed to understand the ramifications of their choices. Of those who did respond, most assigned a value of $5 per article—an undervaluing for most articles if purchased out-of-pocket from a publisher. Does this suggest the library should educate users about the actual cost of e-resources? Going forward, the authors will continue to test this question.

### Lessons Learned

The two survey rounds showed that the software works and that patrons share meaningful reasons for why and how e-resources affect their work. Despite these successes, the authors saw needed improvements and expect to make several changes to future survey distributions. Because of low response rates, the authors anticipate more survey design modifications. Possible changes include:

- Using fewer questions;
- Alternating questions (some could be displayed during a given time period and others during another time);
- Determining whether data captured from the proxy server would meet assessment needs;
- Analyzing whether usage data can be linked to survey responses; and,
- Work more closely with partners, like Ecampus, to prioritize questions.

The authors are interested to see if such changes will also minimize respondent duplication and
lead to a clearer understanding of responses to the monetary value question.

**Going Forward/Conclusions**

Going forward, there are additional developments to be made. Because survey construction is limited by the amount of time the programmer is able to give to a project and because survey software, namely Qualtrics, exists, the programmer began looking at whether it can be used. Employing the full power of Qualtrics would offer many more options for survey flow and question type. It would also take advantage of Qualtrics data analysis features, and the software is familiar to the authors. While Qualtrics currently offers a pop-up distribution option enabling surveys to be embedded into a web site, it does not launch a survey at the journal level. At the time of this writing, the programmer has begun to explore Qualtrics’ API to use it in conjunction with the survey framework. In the meantime, interested librarians can access the survey code’s initial release from GitHub at https://github.com/reeset/ics.

These exploratory surveys demonstrate the potential of a pop-up survey that retrieves users’ real-time sentiment at the article level. Additional testing will improve the framework and offer the opportunity to try other survey designs and questions. More analysis is planned to learn if responses not focused on in this article contribute to understanding how e-resources impact user success and future research, and analysis could also look at whether connecting patrons’ responses to usage data is meaningful. For now, this survey framework is a promising development for library collection assessment programs seeking nuanced and timely information from their users.

**References**


