

## **Does your data deliver for decision-making? new directions for resource sharing assessment**

Librarians count things. We count the number of volumes, we count the number of people who come through the door, we count circulation, items shelved, use of electronic resources, research consultations, the number of interlibrary loan requests received, and on and on. These numbers, without context or purpose, are useless. At the American Library Association (ALA) Annual Conference, June 2013, the RUSA STARS section held a program entitled “Does your data deliver for decision making? new directions for resource sharing assessment” where panel members discussed different assessment methods for data-informed decision making as well as the tools and data sources appropriate to the problem being addressed. [1] The session was extremely well attended with an informal door count of 211. [2] Unfortunately, the limited time allotted to each speaker only allowed a very general and high-level overview of the various approaches with no opportunity to compare their respective merits and/or limitations. In this paper the panelists expand on their ALA presentations to provide a more thorough discussion of assessment tools and techniques that can be applied to library services with specific focus on interlibrary loan (ILL) and document delivery.

### **Historic Data (Use Data)**

Using historic data to plan for new or changing services provides both a baseline for comparison as well as data that can inform the design. As Nate Silver [3] said in a recent interview about statistics, “It’s not about clairvoyance. This is not mysticism. It’s about using science to know... the order between what we know and what we don’t know.” (Greene, 2013) Historic data has the advantage of recording actual use, what really happened, not what nostalgia or cynicism wants us to believe. The number of people in the building is the number of people in the building; the number of books checked out is the number of books checked out. What historic data can’t provide is nuanced information unless it was collected at that time. Gate counts can tell you how many people entered or left the library but they cannot tell you where those people went once they passed through the doors, nor what they did once inside the building. That said, because historic data provides a true picture of actual transactions, it can be invaluable in planning for projects such as implementing a new service or making a significant change in an existing service.

Basing decisions on historic data makes a number of assumptions. First, that user behavior after the change will be fairly consistent with user behavior before the change. While that assumption would be pure lunacy if the change involved a dramatically new technology, it is safe to assume that most undergraduates will continue to procrastinate on course work, have tight deadlines, and will place a higher value on instantly available resources (electronic) over physical content that takes time and effort to retrieve. It’s also safe to assume that, if graduate students are the highest users of the print collection, that they will continue to be heavy users of print and that faculty accustomed to handing bibliographies to assistants for fulfillment will not suddenly begin to place their own requests, no matter how user-friendly the online form becomes. In other words, services and technologies can change quickly; human nature changes slowly.

Another assumption is that the data points of today are an exact, or near exact, match to the historic data points. If the systems or methods of data collection have changed over time then the usefulness of the historic data is compromised. That doesn’t mean it’s no longer useful but it does mean that comparisons are less exact. Fortunately for the design of academic library services the data doesn’t need to go back decades, three to five years is sufficient. That period of time is long enough to follow an entire undergraduate class and establish patterns for graduate students and faculty. In addition, in many libraries the technology and the electronic content change so rapidly that comparisons to time periods more than five years ago are more interesting than instructive.

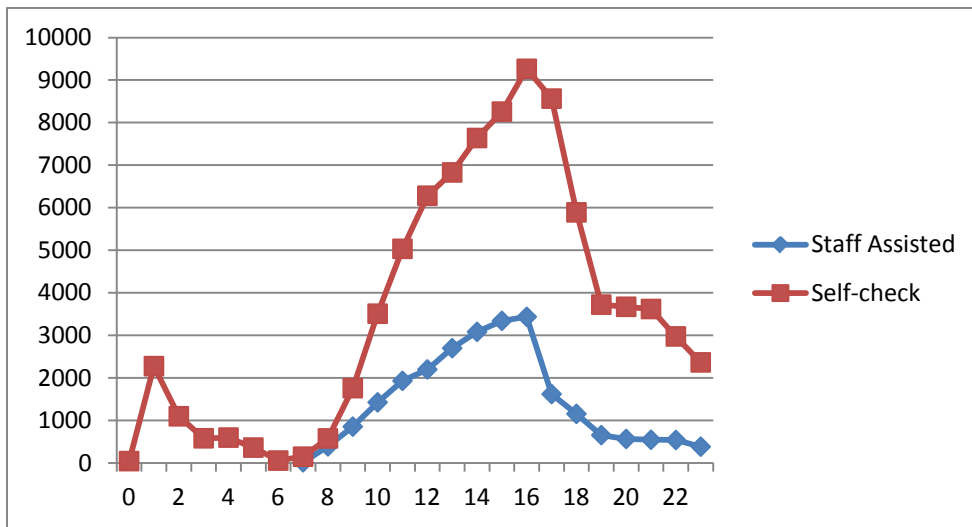
This section shows how historic data was used to design new services and adjust existing services. At the University of Notre Dame, the goals of the Resource Access and Delivery Team (RAD) were designed to be long-term, with strategies and specific projects changing as needed. Those goals were:

- Improve the user experience
- Provide a consistent high level of service across all hours of operation
- Engage in continual process improvement
- Make appropriate use of technology

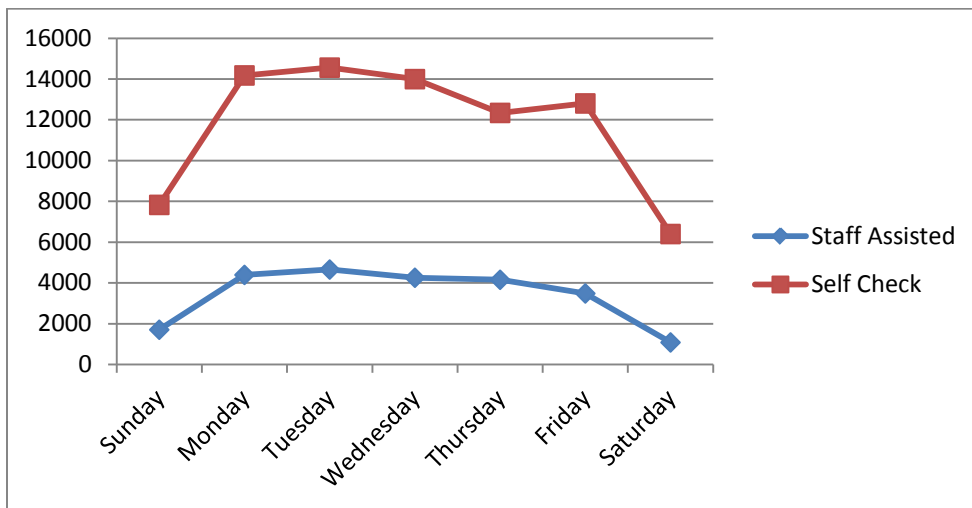
RAD covered what is often called access services—circulation, stacks, reserves, ILL, and document delivery. Before these units were combined to form RAD, the Hesburgh Library had multiple service desks with different hours of service. Interlibrary loan materials were picked up in the ILL office during standard business hours but at the reference desk after ILL hours and on weekends. Reserves were available at the reserves desk and recalled books

were available at the circulation desk. Service-specific desks meant that a library user who needed to use course reserves, pick up a recalled item and an ILL book had to go to three different service desks on a library floor that covers literally two acres.

RAD had been studying use patterns to understand the relationship between gate counts, which record use of the building, and transactions (e.g. database searches, circulation, interlibrary loan requests). The primary purpose was to inform decisions about staffing levels. The second was to confirm or refute the commonly held belief that the library was used as a study hall in the evenings and that professional staff wasn't needed then. In fact, the pattern of circulation, database searches, and ILL requests mirrored the gate count. The surprising fact was that circulation through self-service kiosks was much higher than staff-assisted circulation. What was even more significant was that self-check was more heavily used across all hours and days of operation; this was not a function of activity outside of desk hours. Circulation data pulled from Notre Dame's ILS showed that 76% of all materials that could be circulated via self-service were circulated through the self-check machines. That is, items in the open stacks were circulated overwhelmingly through self-service. Even during hours when the circulation desk was staffed, 74% of circulated items were self-checked. Users clearly showed a marked preference for self-service and were comfortable with the technology.



**Figure 1** Notre Dame circulation by hour, AY 2012



**Figure 2** Notre Dame circulation by day, AY 2012

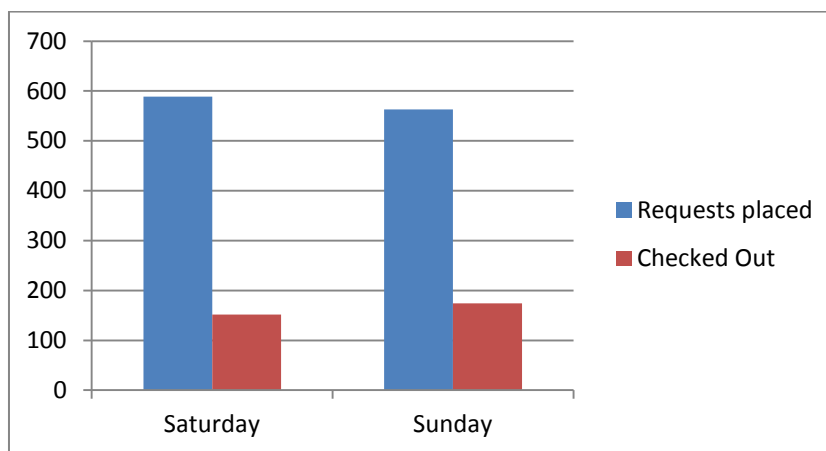
If circulation staff were spending less time on pure circulation activities this meant they had the capacity to take on new responsibilities. [4] RAD had already planned to have ILL books picked up at the circulation desk for the convenience of the user and to eliminate a point of confusion. Users tended to see notifications as from “the library” and to ignore text directing them to the appropriate service desk. Moving ILL books to the circulation desk made that issue irrelevant. With both holds and ILL items at the same desk it no longer mattered that users hadn’t read the email; they were still at the right desk. During the summer term, with far fewer students on campus, RAD moved the service component of course reserves to the circulation desk, as well—finally providing a single service point for all four of these closely related activities (circulation, recalls, ILL, and reserves).

At the same time Notre Dame was expanding document delivery (providing materials from within the Hesburgh Libraries’ collections) to graduate students. While faculty would continue to have the option of having books mailed to academic departments, graduate students would need to pick their materials up in a library. Data from Aleph, Notre Dame’s ILS, showed that the most intense use of the print collection was by graduate students; the anticipated volume could overwhelm the relatively small shelf space in circulation. User preference for self-check had already been firmly established so making holds self-service seemed a natural extension to the service. This immediately meant holds were available not only during circulation desk hours but anytime the building was open. Because the Hesburgh library is situated next to a large parking lot this would benefit faculty, graduate students, and staff, allowing them to pick up materials on the way to work in the morning or on the way to their cars in the evening.

While making holds available on open shelves is common practice in public libraries it is unusual for an academic library. Because a book would be on hold for the specific person who requested it, only that person would be able to check it out. However, with books on open shelves, other students might remove books that were involved in ‘recall wars.’[5] While that might seem improbable, the concern was real. The library also needed to address the issue of user privacy without adding time and expense to the process. These concerns were addressed by shelving the books ‘spine in’ so that the title was not visible. [6]

There was no doubt that the new document delivery program would be popular among graduate students. What was unknown was the level of service required to meet their needs. Because the initial implementation involved users submitting requests in ILLiad, Notre Dame’s ILL system, and staff completing them in the Aleph ILS, the work required knowledge of two completely different systems. In addition, ILL staff and students did not work evenings or weekends. Would weekday service hours frustrate rather than serve users?

ILL data provided a picture of how graduate students both requested and picked up items. As shown in table three, graduate students actively requested materials on Saturdays and Sundays but did not pick up materials on those days. Over the entire 2011-2012 academic year, only 152 items were picked up Saturdays or, an average of 17 books a month, and the number of pick-ups were quite similar on Sundays. In fact there was only a loose correlation between when graduate students requested material and when they checked it out. This makes sense because, while requests can be placed online from almost any location at the user’s convenience, picking up materials requires physically coming to the library. Given the low rate of weekend pick-ups, there was no demonstrated need to fully staff the service on Saturdays or Sundays.



**Figure 3** Weekend use of ILL by Notre Dame graduate students, AY 2012

The ILLiad/Aleph hybrid service did work; however, it was staff-intensive and inefficient. It simply was not a good use of staff resources, particularly when the ILS included a ‘request’ feature that would provide a far more efficient workflow and allow the library to extend service hours into the evening. The hybrid service was dictated both by local policy and by the Aleph ILS shared by Notre Dame and other members of the Michiana Area Library Consortium (MALC). [7] Because of the specific system configuration Notre Dame could offer the request function either to everyone in MALC or to no one. As long as service was restricted to Notre Dame faculty, staff, and graduate students the service would have to be supported through the hybrid approach. Making the decision to offer the service to everyone, even with increased demand, would still be more efficient, faster, and cheaper.

Another issue with historic data, or any data, is the need to understand what is included in the dataset. As stated earlier, graduate students make the heaviest use of the print collection. Because faculty and staff have their books sent to campus departments and those departments are closed weekends and evenings, the issue of after-hours service was not relevant to those user groups. Table one demonstrates the difference between looking at all circulation and limiting circulation to only the material that was “requestable”. Not all materials could be requested; books on course reserves, audio-visual formats, microfilm, and a variety of realia such as microphones and laptops could not be requested. Those formats would continue to be available only at service desks during desk hours. What really mattered were materials that could be paged.

Table two demonstrates the difference between relying on all circulation and restricting the data to only the parts of the collection that would be affected by opening up the service. Where undergraduate use hardly changed, the importance of tailoring the service around the needs of our graduate students is underscored.

	All formats	Percentage	Requestable only	Percentage
<b>Faculty</b>	21,549	13%	11,255	10%
<b>Graduates</b>	61,237	36%	50,248	45%
<b>Undergraduates</b>	52,337	31%	35,613	32%
<b>Staff</b>	10,859	6%	7,497	7%
<b>All others</b>	22,334	13%	8,156	7%
<b>Total</b>	168,316	100%	112,769	100%

**Table 1** Notre Dame circulation by user status  
Comparison between all circulated items and “requestable” items, AY 2012

RAD’s final use of historic data in this context was as the baseline to show what, if anything, changed as a result of implementing the Aleph ‘request’ feature. As with other changes to ILL/document delivery, this expanded service was implemented as a soft launch, meaning that the request feature was turned on in Aleph but it was not actively promoted; users discovered and began using the service as they found it. [8] A big advantage of a soft launch is that it allows time to adjust the workflow and staffing levels before subjecting the system to full load.

Active promotion of the service began with the fall term, September 2013, through graduate student orientation, new faculty orientation, research consultations, and bibliographic instruction. Preliminary data suggests that undergraduates will continue to rely on instantly available content and that graduate students are still the heaviest users of the print collection. The data suggests that more faculty members are using the service and that the biggest change is from non-Notre Dame users. These are members of the MALC consortium who can now request that Notre Dame books be paged on their behalf. While only speculation at this point, the most likely explanation is that they can search and request Notre Dame items while at their home institutions and make a quick visit to Notre Dame to pick up the books as opposed to having to schedule time to both search and retrieve items themselves from their home libraries. With the new service making use of the Hesburgh Libraries’ collections more convenient, their use of the collection increased.

One direct outcome of this project is that, since Notre Dame began offering the ‘request’ feature, other MALC libraries have decided to turn the feature on at their libraries as well. While there is no direct evidence, it is reasonable to assume their faculty may have asked why they were able to page books from Notre Dame but not from their own libraries. By the end of the fall term 2013 the MALC libraries will allow materials to be paged and delivered to the user’s library of choice. When the time comes to evaluate the impact of that change there will be historic data from ILLiad and Aleph to use as a baseline.

	AY 2012	Percentage	AY 2013	Percentage
<b>Faculty</b>	11,255	10%	17,097	13%
<b>Graduates</b>	50,248	45%	55,618	42%
<b>Undergraduates</b>	35,613	32%	33,379	25%
<b>Staff</b>	7,497	7%	8,272	6%
<b>All others</b>	8,156	7%	17,669	13%
<b>Total</b>	112,769	100%	132,035	100%

**Table 2** Circulation by user status  
Comparison between circulation of 'requestable' items before and after implementation

## Qualitative Data

Qualitative data does not measure, but characterizes or describes information. [9] Unlike quantitative data, which can be measured, manipulated, and counted; qualitative data can be unstructured. Qualitative data is the type of response associated with open-ended questions. In online surveys unstructured data is typically generated from free-form text boxes in which a respondent can enter anything using his or her own words. While the author of a survey may ask respondents to address specific issues using a free-form text box, allowing for general and expanded comments broadens the field for useful feedback.

Qualitative data can be solicited on its own but is often included as part of quantitative survey instruments. Quantitative questions may be as simple as 'yes' and 'no' questions or may provide a range of responses using a scale such as the Likert scale. [10] Likert's range of five statements is widely used and will be familiar to the reader. The scale usually asks the respondent to rate their response by degree of agreement or satisfaction. Example: Are you satisfied with the library's interlibrary loan services?

- Extremely Satisfied
- Satisfied
- Neither Satisfied or Dissatisfied
- Dissatisfied
- Extremely Dissatisfied

Likert scale questions are intended to provide a measure of the attitude of the user but only give partial insight. The question "How satisfied are you with the service you receive from our library?" with a Likert response scale can give some indication of whether or not users feel they received good service but not what made it good. In this case, repetition could be a good thing because consistently high rankings are easy to quantify and easy to explain but do not answer the questions "why?" If the user rates their experience as bad, you would need to know what made it bad in order to correct the problem. Is it possible for the library to adjust its services so that the experience is always good? If so, how? That data can best be gathered by qualitative methods. Asking users what makes an experience good helps clarify user expectations and makes that experience easier to replicate. Information on the Likert scale is widely available. Survey Monkey is an excellent place to get some basic beginner information.

Because users are usually not restricted to predetermined responses in a user experience survey, qualitative data can uncover completely unexpected problems and areas for improvement just by providing opportunity for respondents to say what they want. The key is to ask the right questions and perhaps even to ask them in a specific order. Sometimes, you may not know what that right question is. In that case, it is very important to include a free-text 'comments' section. Sometimes the 'comments' option in a survey is sufficient to encourage a respondent to give feedback more specific to his or her concerns.

While working with free-text responses can be difficult and time-consuming, enabling users to provide direct feedback in their own words is an immensely valuable tool. Follow-through on yes/no questions or those with a Likert scale can give you a bigger picture of what is being done well or what work needs improvement. For example, when starting a new service, libraries typically want to ask if users like the new service. Perhaps half of respondents choose 'yes' and the other half respond that they have not heard of the service. In that example it would be beneficial to know what venues of communication the people who responded 'no' to the question use to improve marketing for the future.

Using the example given earlier, in which Notre Dame switched from ILLiad to Aleph for graduate student document delivery requesting, survey questions might look something like this:

1. *'Have you heard of the new Aleph request service from ILL?' (Yes/No)*
2. *If 'no' then*

- a. *(Use opportunity to briefly describe)*
- b. *Ask users to respond in free text how they would like the library to inform them about new or changed services that might be of interest to them*
3. *If 'yes' then ask 'Have you used the new Aleph request service?' (Yes/No)*
  - a. *If 'yes' then ask them to rate their satisfaction (Likert scale)*
  - b. *Provide a free text box to ask about areas of improvement.*
  - c. *If 'no' then ask 'Why have you not used the new request service?' and then provide some multiple answers and a free text box such as:*
    - i. *No need as of yet.*
    - ii. *Do not know how.*
    - iii. *Other (free text)*
4. *Other comments concerning the ILL service (free text)*

The combination of yes/no, Likert, multiple answers, and free text give the students the opportunity to make specific choices as well as the freedom to provide more in-depth than they might otherwise have done. The combination of qualitative and quantitative can also be used to improve response rates. For example, when Notre Dame first offered document delivery to graduate students, the survey instrument asked a yes/no question "should the library continue to offer this service?" as well as a free text question "how can the service be improved?" Notre Dame knew the graduate students wanted the service continued. The question about continuing the service was included solely to encourage users to respond to the survey and to provide more detailed suggestions on how to improve service.

## **Analyzing Qualitative Data: The Basics**

Analyzing qualitative data does take longer than entering information into a spreadsheet and working a little bit of numbers magic. Each text field needs to be read thoroughly and multiple times. These free-text responses are referred to as "verbatim". While verbatims can be used to emphasize a specific area in the analysis they aren't statistically useful in their raw form. Coding this data to help streamline the responses into specific categories helps to better organize the data into intelligible and organized groupings. While time consuming, without that additional step of coding and organizing it is difficult to impossible to present the findings and associated recommendations in any meaningful fashion.

Because the range of responses and terms in free-text fields varies widely and in unpredictable ways, it is usually necessary to do a preliminary analysis to identify the common themes and appropriate terms for coding. This step is best done by one person to avoid duplication or omission of terms. The list of codes and categories should then be shared so that everyone is coding the data the same way. Defining these codes is also helpful so that everyone has an understanding of how and why these terms are used and in what way. In addition, each comment can be coded into multiple categories, as needed. For example the comment: "I really like the ILL service but I get confused on the web pages sometimes and how to complete a request with the library catalog" covers a lot of areas and would need multiple codes or categories. One category could simply be 'web pages' and define this category by indicating that any time the library web pages are mentioned this category is used. More granular distinctions can be made by using additional codes or subgroups. The choice as to whether to create sub-groupings is dependent on several considerations:

1. **Purpose of the subcodes:** Although it can be tempting to code at the most specific level possible it will add time and complexity to the project. If the project will not use that level of detail it isn't necessary to code to that level.
2. **Time and staff resources:** Adding additional codes and subgroups will slow down the coding process and increases the probability of errors because it requires that the coder make more, and more detailed, judgment calls.
3. **Number of respondents:** A large number of responses will take longer to code and a small number of responses makes it unnecessary. If you have a low response rate, there may be no need for going into such fine detail. Interesting or particularly illustrative verbatims can be quoted in the report or presentation.

For those who still like numbers, in the long run, the results actually turn into quantitative data that can be used in statements such as "Ten out of fifty respondents mentioned difficulty in navigating the web page" as well as using this information in charts and graphs. In this example the data could be further analyzed by taking a closer look at the verbatims to see if those ten respondents are saying the same thing about the web page. The Learning Store provides a short but well laid out document that walks you step-by-step through the process of analyzing qualitative data. [11]

## Using Google to Share the Data with Colleagues

Google Docs, which fully switches to Google Drive in November 2013, is a wonderful (and free) tool to use when working with a team on survey analysis for qualitative data. Not only can a group create its survey form in Google Drive, the spreadsheet with responses can be read, shared and edited simultaneously. Up to 50 people can edit at one time and the document itself can be shared with up to 200 people. Edits from the different contributors are in different colors so it's easy to tell where you are in the document when sharing with others. Google spreadsheets can be downloaded into formats such as .xls, .pdf, .txt and .csv, to name a few, so there are many options for manipulating data with software other than Google docs. [12]

Some potential issues with using Google are that if a survey participant does not hit the 'submit' button when completing the survey, the answers are not recorded. Also, there is a limit of 20MB of data in total for Google spreadsheets. If the survey is expected to gather a large number of responses or if it is a large survey with multiple parts, it is best to find a different product that is more conducive to that type of survey analysis. For a more in-depth analysis of large quantities of qualitative data, Wikipedia has a list of free and proprietary software that may better assist the bigger projects. These resources may provide more flexibility and offer other tools within the software such as content searching and linking tools for data analysis.

For interlibrary loan, choosing your survey sample and marketing the survey are not as challenging as you might think. The challenge actually comes with getting users to read what you send them! Your ILL system probably requires an email address as part of requesting or registering to use the service. To focus on just those users who are actively using the service you could send emails to users who have used your services in the last year. This would eliminate users who have graduated, retired, or changed jobs. However, if you feel that you are missing an opportunity to include past users who, for whatever reason, have discontinued service, it might be a prime opportunity to find out why, as well as remind them that your services are still available to them. Another technique for advertising the survey or telling users about new services is to include flyers with the materials that you are providing them. Other easy survey marketing options include advertising on your library web page and/or in campus or community newsletters. Of course, probably the best method to ensure that users are aware of the survey is to tell them verbally when you interact with them.

Sending out surveys and analyzing qualitative data is not easy. It can be time-consuming and tedious. Figuring out the best way to communicate with users and get feedback is important in working toward continuous improvement. Sometimes, though, if you want to know something, all you have to do is ask and those invested in your service will certainly tell you!

## A Combinatorial Approach

In some cases it takes a combinatorial approach to answer the question at hand. [13] For example, routine statistical reporting can indicate an increase or decrease in the use of interlibrary loan. Especially if data is available from an integrated library system (ILS) and/or ILL management system, additional use data may be able to identify where the change is happening. Is the change happening across the board or is it in particular segments of your user base, for example, in certain academic departments or disciplines (humanities vs. health sciences) and/or in particular user statuses (faculty vs. students)? One caveat is that, while use data can narrow the focus of the next steps in analysis, it cannot tell you *why* a service is seeing more or less use, nor can it tell you what, if anything, you might need or want to do about it.

Emory's experience shows how a variety of approaches and data sources can be useful for assessment. When reviewing the Association of Research Libraries (ARL) Statistics for recent years [14], library leadership concluded that the university's ILL borrowing numbers and ranking were not where they "should be". Follow-up discussion revealed the perception that an institution of Emory's caliber, with active and engaged research faculty and graduate students, should have higher interlibrary borrowing numbers relative to other ARL libraries.

In response to leadership's perception that Emory's ILL borrowing was "out of line" with its peers, the main library began a process called a "deep dive", a concept popularized by Jack Welch. (Welch, 2001) [15] In this case the deep dive involved going beyond the common metrics and basic survey instruments to uncover why ILL borrowing levels were lower than leadership expected and, in fact, decreasing.

Emory first looked at standard ILL metrics such as fill rates and turnaround times. These performance measures offered little insight into why ILL use would be "below normal" and decreasing. In fact, fill rates at most of Emory's libraries were high and stable and turnaround time was steadily improving at the same time that ILL use was

decreasing. In addition, ARL's LibQual and Emory Libraries' own survey data showed high levels of both awareness and satisfaction among faculty and graduate students, historically the heaviest users of ILL services.

Still with no cogent explanation for the "outlying" ILL borrowing numbers, a closer look at ILLiad use data revealed that the largest drop in use was at the Woodruff Main Library (WML). Further segmentation of WML ILL users by school revealed that use was decreasing among researchers in the arts and sciences while use by researchers in the health sciences was, if anything, trending slightly higher than in the past. With the scope of the deep dive narrowed to WML's traditional arts and sciences user base (which consistently reported high levels of awareness and satisfaction with ILL), the focus shifted to identifying external factors and data sources that might help explain lower than expected use of ILL:

- Stable materials budget? Based on ARL data, Emory's materials budget had been relatively stable compared to its peer institutions. While stable collection budgets and acquisitions could reduce the need for ILL requesting, leadership was doubtful that WML's physical collections were meeting Emory researchers needs significantly better than other ARL libraries.
- Availability of online resources? Was the licensed content available to WML users meeting such a high proportion of user needs that they didn't feel the need to request more? Leadership thought this was unlikely and data that might support further investigation was deemed too unreliable to pursue.
- Decreased number of faculty? The 2008 financial crisis resulted in reductions in force and/or increased teaching time on the part of permanent faculty, especially in the college and graduate school. Could these changes be having a significant impact on ILL use by faculty? Existing institutional data was identified that promised to elucidate how much and where faculty numbers had changed. However, it turned out that the readily available data did not distinguish between full- and part-time faculty, making meaningful comparisons from year to year impossible. The library may pursue more reliable faculty data in the future (expressed in FTEs, or full-time-equivalents).
- Fewer graduate students? Since graduate students tend to be the heaviest users of ILL, a post-2008 decrease in the number graduate students, especially in key departments, could help explain a drop in ILL use. There was anecdotal evidence of smaller cohorts of incoming graduate students, especially in the humanities. However, the readily available institutional data for graduate students suffered from the same reliability issues as the faculty data. Thus, the lack of FTE-based data for both faculty and students made any suppositions about decreases in their numbers speculative at best.
- Decreased research? A reduction in grants or degrees awarded might also provide insight into decreased ILL levels but research in the humanities and social sciences is not as heavily grant-driven as other disciplines and data on the number of degrees granted in recent years was not conclusive.

## **The Voice of the Customer**

Having mined available library, institutional and ARL data only to find it either inconclusive or unreliable, Emory decided to use a Voice of the Customer (VoC) approach to understanding ILL customer requirements. [16] This approach had been used successfully elsewhere in the library so there was VoC expertise within the organization to draw upon. Based on previous VoC experience, they first attempted to gather ILL-related VoC data via focus groups. However, they were unable to schedule sufficient numbers of faculty and or/graduate students for focus groups in the desired timeframe. This experience demonstrates one of the drawbacks of focus groups, particularly in an academic environment: during the term faculty and graduate students are busy with classes and/or administrative duties and during breaks many are busy with research, often away from campus. It is possible to assemble focus groups in an academic environment. However, it often requires tangible incentives, such as food, gift cards or a chance to win something like an iPod. Libraries wishing to conduct focus groups will want to check institutional policies and/or local regulations to ensure that remuneration is allowed and to plan ahead so that the funds for incentives are built into the budget. Tax implications for the recipient should also be considered, since in some areas a gift card is considered to be a cash payment and therefore taxable.

Subsequently, a change in senior library leadership at Emory resulted in a change in focus for the ILL deep dive. The focus shifted from attempting to "explain" Emory's ARL ILL borrowing numbers to exploring variations in user expectations and needs by discipline and to using individual VoC interviews instead of focus groups. Interviews have the advantage of not needing to coordinate the schedules of multiple people but lack the synergy of a focus group. The good news is that data from well-conducted focus groups and interviews is considered equally reliable. As with many research strategies, the advantages and disadvantages must be balanced with the time frame and resources available. Since Emory had already identified faculty and graduate students in the arts and sciences as the

immediate focus for further assessment, interviewees were drawn from this pool. Health Sciences researchers were not included in the initial round of interviews in large part because their ILL use is stable or increasing and also because their needs and expectations are already known to be substantially different from those of traditional WML users. These researchers will be the focus of future VoC research.

The VoC approach involves asking questions designed to encourage customers to think and talk *in their own terms* about what they're doing and what they need from your organization to do it better. In this case, the focus is on faculty & graduate students doing academic research and how the library can help them be more successful in this endeavor. In line with VoC principles, Emory developed the following general questions and follow-ups:

1. *What do you do when you discover that items you need for your research are not available at Emory?*
2. *Have you found that this strategy is effective?*
  - *Were you able to obtain items in the format you needed?*
  - *Were you able to get items in time?*
3. *What kinds of items have been the most challenging to get for your research?*
  - *Are there materials you were not able to get at all?*
4. *What do you wish for, in terms of being able to find and access materials needed for your research?*

Note how the opening and follow-up questions incorporate descriptive language about what researchers do when they run into obstacles in their research (like not being able to find needed items at Emory) and whether they are satisfied with the option(s) they try to overcome the obstacles. Rather than using library jargon and limiting the focus to a specific service (like ILL), open-ended questions and follow-ups encourage customers to discuss, *in their own terms*, their thoughts, requirements and expectations for both library- and non-library-based solutions to their research problems. As with open-ended survey questions, discussed earlier, the customer's exact words (verbatim) are critical to the process and, depending on the amount of data, require the same sort of coding and analysis to reveal common themes. Thus far, Emory has only conducted a few ILL-focused VoC interviews so the amount of data has not required extensive coding or analysis to identify themes.

As expected based on existing survey data, VoC interviewees did report using WML ILL services when they needed items not held at Emory and being generally satisfied with the service they were receiving. The following verbatims were typical for Q.2:

- *ILL is faster than recalls. Electronic delivery is super-fast & wonderful – request one day and have it the next. – Post Doc, Anthropology & Public Health*
- *They are pretty fast. It really depends on the book.... They can find stuff that's incredible and they can get it relatively fast, sometimes it takes awhile. I'm completely impressed by them. – Professor, Chinese History*

Verbatims for Q.3, regarding items difficult or impossible to get included:

- *Unpublished dissertations and theses [and] materials in vernacular languages since often they are romanized incorrectly.... Also materials in European or Australian libraries that do not lend overseas. – Grad Student, South Asian History*
- *Original sources, obviously, like archival sources, handwritten, 16th, 17th, 18<sup>th</sup> century, all sorts of different countries – it's just tough to get these things. – Professor, Chinese History*

Not surprisingly, verbatims for Q.4, regarding interviewees' wishes for finding and accessing materials, were wide-ranging and highlighted a variety of areas for improvement, including, but by no means limited to, interlibrary loan:

- *Longer ILL loan periods, a more intuitive [library] website & better linking from DiscoverE [Emory's search & discovery interface] to ILLiad. – Post Doc, Anthropology & Public Health*
- *Sometimes images in journal articles aren't good quality or are missing because they're in the back of the volume. It would be helpful to fix that problem so articles are right the first time. – Grad Student, Art History*
- *Most of the ebooks . . . anything that has any kind of DRM, are just awful . . . -- Professor, History*
- *The latest update to DiscoverE is annoying. I'm not sure about call number searching and status information is often unclear or not up-to-date. – Grad Student, Art History*
- *I don't like the keyword searching in DiscoverE.... You get large result sets even when searching for known items. – Post Doc, Anthropology & Public Health*

Emory's WML ILL staff is already taking steps to address customer expectations for longer loan periods, better linking between ILLiad and other library systems, and high-quality and complete images in scanned documents. They have also forwarded verbatims regarding other library systems and services to appropriate colleagues for follow-up. In addition, they will continue and expand their use of VoC interviews to various user subgroups, including health sciences. The VoC process definitely enriches the perspective that ILL and other library staff can

gain from traditional library assessment approaches. With a VoC-enhanced understanding of their customer's needs and expectations, staff can more effectively plan, implement and improve the library systems and services our customers require to succeed in their endeavors.

## Conclusion

Interlibrary loan practitioners must become conversant in data collection and analysis in order to run effective, efficient offices. "Does your data deliver" is an introduction to data-informed decision-making and should be considered a starting point. Making good decisions and designing useful services rely on the quality, consistency, and currency of the data but also on planning. Before beginning data collection it's important to ask good questions, identify real problems and then determine what approach(es) is/are likely to help the most, always remembering that data collection and analysis have costs. Even "free" sources require staff time; the effort should be in proportion to the expected benefit and within the resources of the project. Do not limit yourself to only data that is already available or easily collected from within the library. The larger institution will have data, such as the number of graduate students by department, which could be critical to your analysis.

There are two dangers that were not discussed in this overview. The first is a reminder that this article is about data-*informed* decisions, not data-*driven*. Services and policies should never be determined only by the numbers; they must be shaped by a customer-focused philosophy of service. The second danger of data is that it is too easy to impose your own expectations on it. Do not begin data analysis with an answer or a solution already in mind. Assumptions and predetermined solutions result in wasted time and effort and, worst of all, fail to solve the real problem at hand. Be prepared to listen and act on the story the data is telling you, even when it is not what you expected to hear. In other words, *listen* to your customers.

## Notes

1. Program details for "Does your Data Deliver" are available online at <http://ala13.ala.org/node/10235>.
2. The number of attendees at "Does your Data Deliver?" was announced at the STARS Executive Committee meeting on Monday, July 1, 2013 at the ALA annual conference.
3. Nate Silver is a statistician whose blog, [www.fivethirtyeight.com](http://www.fivethirtyeight.com), has had an extremely high degree of accuracy in predicting elections by applying techniques he developed for sports to politics.
4. In addition to increased productivity, taking on additional duties allowed RAD to successfully petition to have the positions upgraded.
5. "Recall wars" result when two or more people engage in ongoing recalls for a single resource.
6. Late in summer 2013, after the ALA program, Notre Dame implemented remote circulation among all members of the shared local system. Because books from other libraries cannot be checked out through a kiosk, books 'on hold' are once again staff-served.
7. MALC, the Michiana Academic Library Consortium, consists of the Hesburgh Libraries at University of Notre Dame and the libraries of Holy Cross College, Saint Mary's College, and Bethel College. Michiana is a combination of Michigan and Indiana, two states that share a long border.
8. Current users of ILL and document delivery were notified via email ahead of the change. Also, 950 faculty members, graduate students, and staff members who had used either ILL or document delivery during the current academic year were emailed two weeks prior to the change.
9. A definition of qualitative data can be found online in the Business Dictionary, [www.businessdictionary.com/definition/qualitative-data.html](http://www.businessdictionary.com/definition/qualitative-data.html).
10. For more information on the Likert scale, see Survey Monkey's "The Likert Scale Explained," [www.surveymonkey.com/mp/likert-scale/](http://www.surveymonkey.com/mp/likert-scale/). This site provides practical information on how to construct and apply the scale in addition to a basic definition.
11. The Learning Store's guide "Analyzing Qualitative Data" provides an introduction to the topic as well as a step-by-step guide, <http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf>.
12. For more information on Google export conversions and charts, see "Overview of Google Sheets" at: [https://support.google.com/drive/answer/140784?ref\\_topic=20322&rd=1](https://support.google.com/drive/answer/140784?ref_topic=20322&rd=1).

13. Brief definitions of “combinatorial” can be found online in *The Free Dictionary*, [www.thefreedictionary.com/](http://www.thefreedictionary.com/). Apropos to the context of Emory’s deep dive, this kind of approach has also been referred to as “an advanced way of finding a needle in a haystack”, [www.udel.edu/chem/C465/senior/fall00/DrugDiscovery/WhatisCombinatorialChemistry.htm](http://www.udel.edu/chem/C465/senior/fall00/DrugDiscovery/WhatisCombinatorialChemistry.htm).
14. ARL statistics can be found at [http://publications.arl.org/ARL\\_Statistics](http://publications.arl.org/ARL_Statistics).
15. The exact quote is “One of my favorite perks was picking out an issue and doing what I called a “deep dive.” It’s spotting a challenge where you think you can make a difference—one that looks like it would be fun—then throwing the weight of your position behind it.”
16. A brief description of the VoC process is available at [www.mit.edu/~hauser/Papers/Gaskin\\_Griffin\\_Hauser\\_et\\_al%20VOC%20Encyclopedia%202011.pdf](http://www.mit.edu/~hauser/Papers/Gaskin_Griffin_Hauser_et_al%20VOC%20Encyclopedia%202011.pdf). For a complete and practical “how to” book on the VoC process, see *Voices into choices: acting on the voice of the customer* by Gary Burchill and Christina Hepner Brodie for the Center for Quality Management, Madison, WI, Joiner Associates, 1997.

## References

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