Chapter 5

The Impact of the Next-Generation Catalog

Abstract

In the past decade, libraries have shown some major evolutions in the types of services they provide and the platforms in which they deliver these services. From the learning café, to patron-driven acquisitions, to the NGC discovery solution, libraries are evolving to match the demands of changing user behaviors. But a key part of the process that is commonly overlooked is the use of data analysis to drive decisions. By utilizing usage analysis tools, we can build a picture of how certain changes and evolutions affect patrons and how services are used. By constantly analyzing reports on usage, librarians can better judge how to improve services to meet the demands of their patrons.

To have a clear understanding of the impact of the NGC on the library, we need to evaluate usage of many different aspects of the library's services. A library website that is designed around search and discovery may very well increase the visibility of the library to the community that it serves. With this in mind, we need to analyze the usage of the library website before and after the implementation of the NGC. Because the visibility of the library is affected, the physical building usage may change as well, and an analysis of the use of the physical building would also be valuable. Further, because the NGC is heightening the awareness of the library's physical collections making them more easily discoverable, the use of these collections needs to be analyzed as well to prove the effectiveness of the solution. Finally a comparison of the usage of the original OPAC versus the usage of the new NGC solution will help show the success of the solution in place.

Analyzing Circulation

The NGC solution is designed to make the library's physical collections more easily discoverable. A good metric to show the NGC's impact is to analyze the usage of the library's physical collections. We can do this by analyzing the circulation statistics (see figures 15 and 16).

By analyzing the sample set of libraries in this report who have implemented an NGC solution, we can conclude that while the NGC solution has not increased the circulation of physical materials in the library, it has contributed to the prevention of a plummeting circulation. With the focus of library spending changing from physical resources to electronic resources and with many libraries shrinking their physical collections, we would expect to see a decrease in circulation. However, this sample shows that the NGC has had a positive impact on the usage of physical resources.

Analyzing the Website

By analyzing its website, a library gains valuable knowledge about the activity happening on the site. This allows essential visibility into the activity happening on the library's website. These log files contain a tremendous amount of detail that can produce reports such as path analysis, search engine optimization, and referring web site reports. In addition to the website's log files, tools can be added to the website to analyze user activities in other ways. Heat map technology can show what areas on a webpage are used more than others, allowing the website owner to learn what links and features are used heavily and what goes unused.

Figure 17 is an example of a heat map created with Crazy Egg, a product that records the location of each user's cursor on the screen when the user clicks. This information is used to produce a heat map image that can be overlaid on the webpage to illustrate what parts of the website are the most frequently used. Red color shows spots that are most frequently used. Cooler colors, like greens and blues, show spots that are less frequently used. Crazy Egg and other similar tools use a bit of JavaScript added to a webpage that allows the software to work. This approach is similar to that of other usage analysis tools, such as the popular Google Analytics (figure 18).

Google Analytics is a free tool provided by Google. Google keeps the data about your users collected by the software. If Google decided to terminate or drastically change the product, you could potentially lose your usage data. However, other similar tools are available that do not require Google to store your usage data; these tools include the commercial version of Google Analytics, known as Urchin, or the open source alternative Piwik. By storing the data in your own IT environment, you control the data retention policies. However, the down side is the cost in resources to store and report on the data.

These tools can also be configured to track the usage of the library OPAC and NGC. Many website usage tools provide the ability to parse specific elements out of the URL that is recorded in the website's log files. This allows the analyzer to pull out search queries or other specific elements that are specified in the site's URLs. By combining the library's website, OPAC, NGC, and any other online resources the library manages into a single reporting system, this can be a very powerful solution for analyzing how patrons use the library's online environment.

Analyzing the Impact

Because so many factors play a role in the impact of next-generation services, it can be difficult to use analytics to isolate the effect of any one specific service. For example, around the same time that Wake Forest University deployed its NGC solution, it also established a Starbucks coffee lounge in the library. This new service will most likely impact many other services, such as the gate counts, library website usage, and circulation of materials—all the statistics that need to be reviewed to

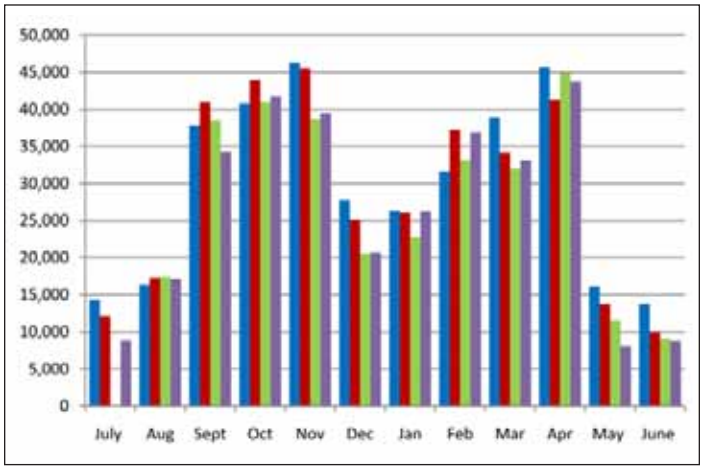

Figure 15
Circulation statistics for two years before and two years after implementation of the NGC solution at Oklahoma State University.

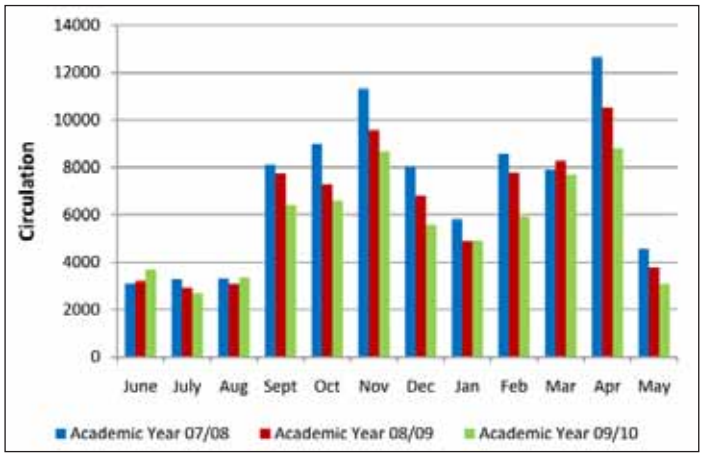

Figure 16
Circulation statistics for one year before and two years after implementation of the NGC solution at Villanova University.

Figure 17
A heat map image created by CrazyEgg that overlays the web page to illustrate user click locations.

Figure 18
A screenshot of Google Analytics.

calculate the impact of the NGC. So we have to take these other factors into consideration when analyzing the impact of such a solution; however, in order to provide empirical evidence, we must, as physicists say, "ignore wind resistance."

Another institution in North America that deployed an NGC solution, York College in the Greater Toronto area, has announced that its VuFind solution has increased usage more than five times over the original OPAC. The OPAC was peaking out at just under 10,000 page views per day, while the NGC was peaking at around 50,000. William Denton, web librarian at York University, reports that "according to Google Analytics, people average about 60 seconds looking at the search results pages in VuFind, and 90 seconds looking at item records. In the classic catalogue, they spend about 45 seconds per page average."[1] We don't know what other factors were in play at York during the time of the roll-out of its NGC solution—but this evidence shows that the NGC solution has made a tremendous impact.

Note

1. William Denton, "VuFind Usage Fives Times That of "Classic Catalogue," *Miskatonic University Press* (website), Dec. 17, 2010, www.miskatonic.org/2010/12/17/vufind-usage-fives-times-classic-catalogue.