It's Time for a Remodel! Collecting Usage Data to Design a Library for a New Generation of Students

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LIBRARIES BY DESIGN

Column Introduction A number of recent renovation and construction projects in academic business libraries across North America signal a new surge in the importance of academic business libraries as a place for students and faculty alike to collaborate, study and learn. Spurred in part by student demand and competition from peer institutions, many libraries are transforming themselves in the process, offering a wider range of services and becoming a hub of activity. In this article, Kim Bloedel discusses how user studies and data collection informed the renovation of the Pomerantz Business Library at the University of Iowa's Tippie College of Business ... and the results speak for themselves! Not only is the space much brighter and more inviting, but foot traffic and room reservations have greatly increased as well. - *Laura Walesby, Column Editor*

In spring of 2018, the University of Iowa's Tippie College of Business opened a newly designed third floor of the Pomerantz Business Library. Now called the "Biz Hub," the new design is very different from the old traditional design, which was completed in 1992. Gone are the dark woods, the large information desk, dark teal carpet, and the long hall of journal stacks. In their place are shiny stone counters, a smaller information desk, bright floors, and group study rooms with glass walls (Image 1). In addition to library services, the Biz Hub offers tutoring services, business writing assistance, and a café. Located in the center of the John Pappajohn Business Building, the Biz Hub provides study space and services to over 3,000 business students and business faculty members as well as the entire campus.

In fall of 2015, University of Iowa Business Library staff members along with the Tippie College of Business Deans met with architects to brainstorm a new design for the Pomerantz Business Library. Prepared with detailed statistics of our physical space, we were able to provide evidence for seating preferences, technology needs, and space use. This article will outline how we used the data to create a dynamic study space to meet the needs of a new generation of business students at the University of Iowa.

Image 1: Pre- and post-renovation photos of the library's information desk

Pomerantz Business Library information desk, pre-renovation, 2012

Biz Hub library services desk, photo taken in February 2018 before official opening

Data Collection

Prior to the renovation, business library staff members used two online tools to capture data on library patrons' use of the physical space. The business library subscribes to Springshare's room booking software and uses Springshare's statistics module to monitor use of group study rooms. In the summer of 2015, we began using SUMA to collect detailed patron usage statistics for the library's physical space. Developed by North Carolina State University Libraries, SUMA enables the capture of data through an application on a mobile phone or a tablet. In addition to a streamlined online data collection portal, SUMA also offers detailed visualization and analysis tools. Before we set up SUMA for data collection, we mapped out what we wanted to know about our patrons. We wanted to know the types of seating that students preferred, their activities, and their location in the library (Figure 1). An advantage of the SUMA application is that it allows for a variety of data types with multiple characteristics. For example, the system can track one person sitting in a study carrel in quiet study on the fourth floor or one person at a large table on the third floor participating in group study. A disadvantage of SUMA is that only one person can be counted at a time. As a result, using SUMA for data collection at busy times of the semester can be time consuming.

Figure 1: Data characteristics collected

Data Characteristics		
Seating (group study room not included)	Activity	Location
Upholstered Chairs/soft seating	Quiet study	3 rd Floor
Study Carrels	Group study	4 th Floor
Bar height table	Computer use	Outside of the Library
Large table (seats 6)	Other/browsing	
Table (seats 4)		
Table (seats 2)		

Planning for a New Space

When it came time to plan for a new space, the data that we had gathered on our physical space proved useful to the architects and influenced the design. The data helped to answer specific questions of the design team pertaining to traffic counts, use patterns, seating preferences, and activities conducted within the space. In order to enhance services, library staff members continue to use the data to determine when to offer services such as tutoring and programs.

Traffic Count and Patterns

In 2015, the Pomerantz Business Library was the third most-visited campus library (out of seven) at the University of Iowa, with over 216,944 visits (Figure 2). At that time, one of the challenges facing library staff was directing people to the library. Often, new patrons had a hard time finding the library, which was in the center of the building behind two sets of doors. Once through the doors and into the foyer, visitors could enter the library through the security gates.

Located outside the library was a common area with a variety of seating, including tables, booths, and soft seating. Here, librarians often met with students. As a result of these interactions, the common area was included during SUMA data collection. For the remodel, the architects removed the library doors and expanded the space to include the common area. Now the entrances meet central staircases on the west and south sides of the building. This creates a seamless entrance to the Biz Hub--one without barriers.

Another challenge of the old space was inside the library. Due to the walls and lighting, many people were not aware that the library had two staircases. One staircase led up to the library's quiet study area in the book stacks and the other led down to the computer lab. In order to make the staircases to these spaces more visible, the architects removed walls and used design to center the staircases in the spaces (Image 2, Image 3).

Figure 2: Number of Visitors to the Pomerantz Business Library in 2015

Image 2: Pre- and post-renovation photos of interior staircase to the quiet study area

Image 3: Pre- and post-renovation photos of interior staircase to the computer lab

Staircase to the computer lab is located behind the window wall in the Pomerantz Business Library, pre-renovation, 2009

Staircase to the computer lab in the Biz Hub, 2019

Seating Preferences

The SUMA data was very helpful when choosing seating for the new space. While one of the goals for the project was to create a more collaborative environment, the SUMA data showed that many students still preferred study carrels and smaller tables (Figure 3). After reviewing the data, the architects designed the space to feature collaborative study seating closer to the entrances and quiet study seating toward the back of the space. In effect, as a person moves through the space, the noise level lowers. The design team also created four alcoves for two-seat tables to allow for a more private study or conversation. For the individuals who like a non-quiet study space but are reluctant to sit at a large table, the architects placed bar-height single seating around the perimeter of the south side of the space. In these areas, people can choose a window view or a wall view. Tables that seat four or five people were placed toward the front of the Biz Hub, near the café. The café area is a great spot for project collaboration, meetings, and socializing.

Figure 3: Seating preferences of students

Group Study Rooms

The old library design featured six small group study rooms with seating for four people. To accommodate the demand for more group study spaces in the old space, the library staff members removed reference book and journal stacks to add six group study cubicles. Although the cubicles lacked computers, Springshare data suggested that the larger cubicle space was more popular with students. The new space includes nine large group study rooms ranging in size from five to 12 seats. Each group study room is equipped with a computer and a large monitor. One study room is equipped with One Button Studio technology, which enables students to film themselves as they practice their presenting and interviewing skills.

Computers

Like our staircases, the computers in our old library space were hidden. Visitors could not easily see computers when they entered the library. Some were located on a large table toward the back of the library, while others were placed in select study carrels. Since computer use ranked high in the SUMA data (Figure 4), the new design features the computer area in the center of the Biz Hub. The computers are now located where the information desk was located prior to renovation (Image 4). Set on a large table, the computers are comfortably spaced and some feature dual monitors. The computer area also includes two alcoves--one for a printer and one for a high-speed scanner. Based on feedback from library staff members, the architects added lockable cabinets near the printer and scanner. The cabinets offer storage for paper and other office supplies.

Figure 4: Student Activities

Image 4: The Biz Hub computer area (right) is now located where the information desk (left) was located prior to renovation.

Services

Early in the planning for the Biz Hub, we were interested in creating a multi-service space. We also envisioned spaces for the business writing center and tutoring services. Before the renovation, we were

approached by tutoring services about offering their services in the library. We were able to conduct a pilot program before moving into the Biz Hub. We wanted to offer tutoring sessions three times per week. To help determine when to offer the services, library staff used SUMA's analytics module. Using heat maps of traffic data, we selected the times, days and areas of the library that would be less busy. The less busy times were selected so that tutors would not feel as though they were disrupting study sessions. The locations were chosen to accommodate large groups of students being tutored. Tutoring services continue to be popular in the Biz Hub. Based on the tutoring attendance data, we chose two large study rooms near the Biz Hub's café for tutoring services. The tables in the café allow the tutors to set up additional seating during a semester's high attendance times. We continue to rely on traffic data when bringing new services into the library. Recently a department wanted to set up a booth in the Biz Hub to market their program. After reviewing the data, we chose the days and times with the most traffic to market the program.

Conclusion

Pomerantz Business Library staff members continue to use SUMA to collect space usage data in the Biz Hub. SUMA and Springshare Stats have enabled us to gain a better understanding of how and when the space is used. Since our opening in Spring 2018, there have been 340,535 visitors to the Biz Hub. Group study rooms are also very popular. Since opening there have been 16,207 group study room bookings--or nearly 4 years of collaborative study. The Biz Hub (<https://blog.lib.uiowa.edu/biz/2018/05/09/the-busy-biz-hub/>) is indeed a hub of activity.