2016

Getting More From LibQual+ Data: Using Open Source Tools for Data Analysis and Visualization

Julie Miller  
*Butler University*

Franny Gaede  
*Butler University*, fgaede@butler.edu

Andrew Welp  
*Butler University*, anwelp1@butler.edu

Laura Menard  
*Butler University*, lmenard@butler.edu

Follow this and additional works at: [https://digitalcommons.butler.edu/librarian_papers](https://digitalcommons.butler.edu/librarian_papers)

*Part of the Library and Information Science Commons*

**Recommended Citation**

Miller, Julie; Gaede, Franny; Welp, Andrew; and Menard, Laura, "Getting More From LibQual+ Data: Using Open Source Tools for Data Analysis and Visualization" (2016). *Scholarship and Professional Work*. 66.  
[https://digitalcommons.butler.edu/librarian_papers/66](https://digitalcommons.butler.edu/librarian_papers/66)

This Presentation is brought to you for free and open access by the University Libraries at Digital Commons @ Butler University. It has been accepted for inclusion in Scholarship and Professional Work by an authorized administrator of Digital Commons @ Butler University. For more information, please contact digitalscholarship@butler.edu.
1. CLEANING UP THE DATA

The first step in this process was cleaning up the raw data provided to us by LibQual+. The raw data were provided to library personnel in .xls format and were manually cleaned up in order to provide clarity for analysis as the raw data were necessarily coded alphabetically in order for collection of the data. These codes were manually replaced with their actual labels for human analysis.

Tools: Excel

2. ASKING RESEARCH QUESTIONS

A trial of SPSS and the University Edition of SAS were used to conduct inferential analysis of the data for no cost. A trial of SPSS and the University Edition of SAS were used.

Tools: Excel, SPSS, SAS

3. SELECTING & APPLYING STATISTICAL TOOLS

A trial of SPSS and the University Edition of SAS were used to conduct inferential analysis of the data for no cost.

As the LibQual+ data were collected to support the library’s planning and assessment processes, the results were broad-based, and more in-line with exploratory methodology. Therefore, hypothesis testing has not been performed as of this time.

4. PLAN & IMPLEMENT VISUALIZATION

We looked at several options, and after weighing the costs and benefits, selected two high-quality and cost-effective visualization applications:

- Tableau
- Keynote

Tableau is free, relatively easy to learn, and allows users to harness the platform for everything from basic to advanced visual analytics. Keynote was then used to turn our Tableau visualizations into an infographic.

Tools: Keynote, Tableau

5. INTEGRATION INTO STRATEGIC PLANNING

The faculty and staff of Butler University Libraries meet annually to review progress toward goals based on assessment reports and to identify new or continuing initiatives in support of the five strategic priorities and seven goals of the 2013-16 strategic plan.

In our planning retreat in August 2015, we reviewed both quantitative and qualitative LibQual+ results to inform the planning discussion. Five of the resulting 26 initiatives developed for the 2015-16 academic year were based on LibQual+ findings and response themes.

6. CLOSING THE LOOP & NEXT STEPS

Here are two strategic initiatives developed using LibQual+ data, the actions taken as of August 16, and results/next steps:

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Action(s) Taken</th>
<th>Result/Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>LibQual+ data dissemination to faculty and staff</td>
<td>Presentation of LibQual+ findings to faculty and staff</td>
<td>Implementation of new initiatives based on LibQual+ findings</td>
</tr>
<tr>
<td>LibQual+ data dissemination to students</td>
<td>Distribution of LibQual+ results to students</td>
<td>Increased awareness and understanding of library services</td>
</tr>
</tbody>
</table>

For an interactive version of this infographic & other materials, visit http://bit.ly/butler-lac