

Presentation URL:

<http://tinyurl.com/jbchapf>

# Putting it All Together:

using data for web design decisions

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# Hello!

## We are Scott, Michael, & Will

We work at Bethel and do reference.

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# Agenda

1. What data sources do you/could you have?
2. How are they useful?
3. How do they compliment each other when making design decisions?



Hydra image © 2007 by Andrew Jian. Used under a CC BY 2.0 license,

**DATA!!**

**Discovery Layer**

**Link Resolver**

**Databases**

**Social Media**

**Chat Service**

**Calendar**

**Citation Manager**

**OPAC**

**Blog**

**LibGuides**

**DATA!!**

**LibGuides Analytics**

**OPAC/Discovery usage**

**Followers & Likes**

**Chat transaction Logs**

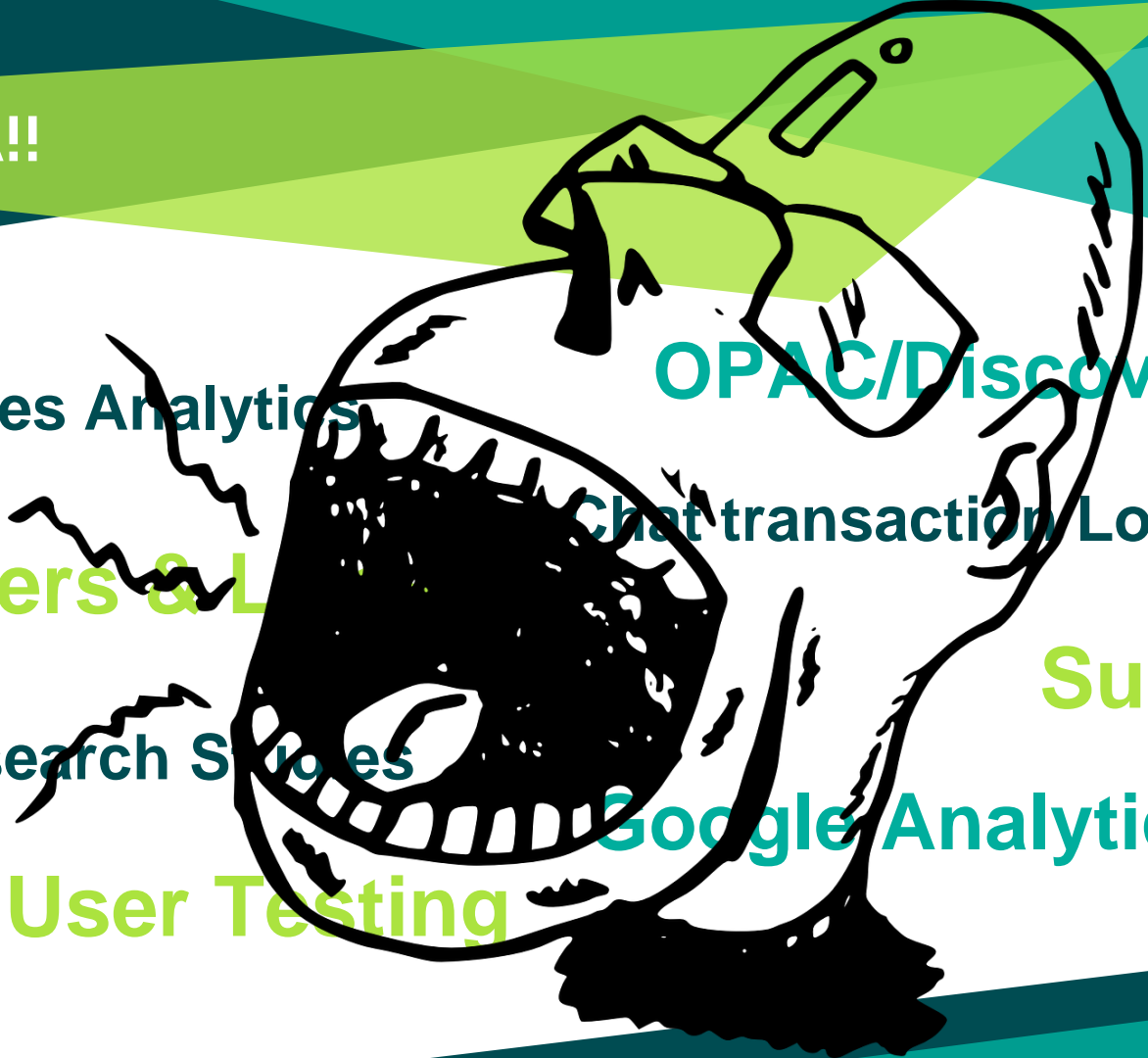
**Research Studies**

**Surveys**

**User Testing**

**Google Analytics**

**DATA!!**



LibGuides Analytics

OPAC/Discovery usage

Chat transaction Logs

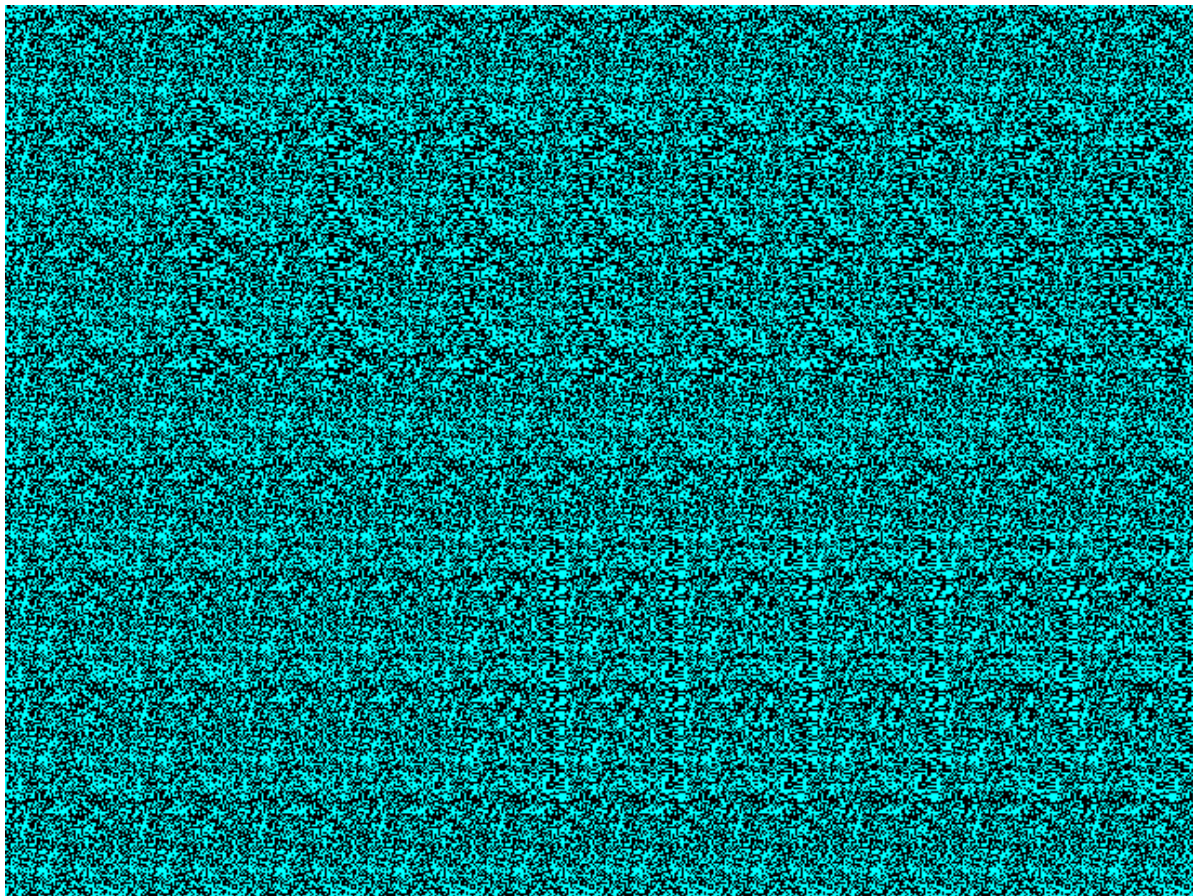
Followers & Likes

Surveys


Research Studies

Google Analytics

User Testing








What questions do you have that data can  
help you answer?

- or -

What goals do you have that data can help  
you measure?





What can you actually change?

# Other factors: Relationships

Library



Communications /  
Web Services



Central IT



Users



# Data tools

What's in your arsenal and what's it good for?

|   | <u>User Testing</u> | <u>Google Analytics</u> | <u>Click Tracker</u> | <u>Vendor Data</u> |
|---|---------------------|-------------------------|----------------------|--------------------|
| Cost  | ●                   | ●                       | ○                    | ◐                  |
| Customization   | ●                   | ●                       | ○                    | ○                  |
| Visualizations  | ○                   | ◐                       | ●                    | ◐                  |
| Cross-domain support                                  | ●                   | ●                       | ◐                    | ○                  |
| Ease of use   | ●                   | ○                       | ○                    | ●                  |
| Setup difficulty<br>(e.g., script installation, etc.) | ●                   | ○                       | ◐                    | ●                  |

|   |                          |
|---|--------------------------|
| ● | Better                   |
| ◐ | Mixed                    |
| ○ | Worse -or- not supported |

# User Testing

|                                      | User Testing                     |
|--------------------------------------|----------------------------------|
| Free                                 | <input checked="" type="radio"/> |
| Visualizations                       | <input type="radio"/>            |
| Cross-domain                         | <input checked="" type="radio"/> |
| Easy to use                          | <input checked="" type="radio"/> |
| Requires installing scripts on pages | <input type="radio"/>            |

# Set Up

- ❖ Test multiple options
- ❖ Careful questions and scenarios
- ❖ Video if possible
- ❖ Small samples
- ❖ Use feedback, iterative approach
- ❖ Communicate feedback to stakeholders

# Why User Test?

Can ,not will, people do what you hope they will do?

*E.g. can users find where to search for a video?*

How will users think about your content?

*E.g. do they think journals mean articles?*



# Case Study: Homepage

Round 1

3 versions

Variables

Options on book search

Order/wording of the sections in

articles tab

# Bethel Libraries

My Library  
Accounts

Research

Services

About the  
Libraries

Libraries &  
Collections

News &  
Events

Get Help

[Home](#) » Bethel Libraries

Books

Articles

Journal Titles

Research Guides

Digital Collections

## Search across multiple databases

## Find database by subject

Best Bets:

## Find a database by name



# Case Study: Homepage

How did it go?

Little difference in variables

Tabs required coaching to complete test

# Case Study--Homepage

Round 2

Tabs

vs

single-page w/buttons

vs

single-page w/links

My Library  
Accounts

Research

Services

About the  
Libraries

Libraries &  
Collections

News & Events

Get Help

## Summon | a new library search

books, articles, videos & more

### Find Something Specific

books & eBooks

scholarly articles

theses

music

video

journals

Bethel archives

### Research Databases

JSTOR, CINAHL, ATLA Religion, Academic Search  
Premium

### Quicklinks

[Reserve Study Room](#)

[RefWorks](#)

[Research Guides](#)

[Renew Books](#)

[Interlibrary Loan](#)

### Hours

| Location                                   | Today's Hours |
|--|---------------|
| <a href="#">Bethel University Library</a>  | 9am - 7pm     |
| <a href="#">Seminary St. Paul Library</a>  | 9am - 5pm     |
| <a href="#">Seminary San Diego Library</a> | 10am - 6pm    |

# Case Study--Homepage

## Results

- Big difference between tabs vs. single-page
- Little diff. between single-page options

## Take-aways

- A lot of design is still up to you
- User testing is not small-bore
- Give away control of “hypothesis”

# How Could User Testing Be Helpful

Case Study: FAQ and Chat

Problem: Low Use

Questions:

How does our current design affect usability?

Do people see this part of page?

What paths are people taking to get there?

Why are some FAQs more successful?

## LIBRARY SUPPORT

---

### Self Help



Search FAQs

### Live Help



Start a Chat

### Contact Us



Call, Text, or Email





## Search Libraries Worldwide

- Search (nearly) all library catalogs using WorldCat.
- Some libraries will not lend out their video material, but it is always worth a try.
- Faculty can use the [request video form](#), which lets you specify when you need to show it in class.

[Search Now](#)

---

## Frequently Asked Questions

[Does Bethel have a streaming video service?](#)

---

[How many DVDs can I check out at one time?](#)

---

## Contact Us

Start a chat. We're here to help.

Your Question

Start Chat



# User Testing

What scenarios/questions uncover realistic interactions?

Try to stump someone?

Ask user to imagine needing help?

“Look at this page; tell me what you see?”

“Please find FAQ’s and chat?”

## Case Study: FAQ/Chat

Iterative Sampling




Use feedback from small samples

Test the test

Saturation?

# Click trackers: Crazy Egg

|                          | Crazy Egg  |
|--------------------------|--|
| Cost                     |   |
| Customizations           |   |
| Cross-domain support     |   |
| Reports & Visualizations |   |
| Ease of use              |   |
| Setup difficulty         |  |

|   |                          |
|---|--------------------------|
|  | Better                   |
|  | Mixed                    |
|  | Worse -or- not supported |

# Click trackers: Crazy Egg

Good for:

Tracking interaction with specific pages (clicks & scrolling)

Visualizing data

Bethel Libraries

- Home
- Master
- Help
- Log Out
- News & Events
- About Us
- Contact Us
- Library Services



Library Hours

Services

Library Accounts

Summon | books, articles, videos & more

Find Something Specific

Books & eBooks

Articles

Video

Music

Summon

Theses

Research Guides

Citing



### Bethel Libraries

- Home
- Research
- Services
- Digital Library
- Open Access
- Physical Library
- Special Collections
- Site Map
- My Library Account



Library Hours | Study Tools | Library Accounts

### Summer | books, articles, videos & more

Search bar with search button

### Find Something Specific

- Books & eBooks
- Articles
- Videos
- Music
- Journals
- Theses
- Research Guides
- Chap

### Research Databases

EBSCO | Cengage | ProQuest | Sage | EBSCO eBooks

#### by name

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- R
- S
- T
- W
- All Databases




#### by subject

Search bar with search button



# Click trackers: Crazy Egg

|                          | Crazy Egg  |
|--------------------------|--|
| Cost                     |   |
| Customizations           |   |
| Cross-domain support     |   |
| Reports & Visualizations |   |
| Ease of use              |   |
| Setup difficulty         |  |

|   |                          |
|---|--------------------------|
|  | Better                   |
|  | Mixed                    |
|  | Worse -or- not supported |

# Click trackers: Crazy Egg

Currently using it for:

Tracking LibAnswers on library homepage

Do people scroll down far enough to see “Help”?

Are LibAnswers getting clicked on?

## Research Databases

JSTOR, CINAHL, ATLA Religion, EBSCO MegaFile...

by name

A B C D E F G H I J K L  
M N O P R S T W All Databases

by subject

Best Bets:

### LIBRARY SUPPORT

Self Help



Search FAQs

Live Help



Start a Chat

Contact Us



Call, Text, or Email

by subject

Ben Bell

LIBRARY SUPPORT

Self Help



Search FAQs

Live Help



Start a Chat

Contact Us



Call, Text, or Email

22 clicks (out of 34,691)

Read the Blog

# Click trackers: Crazy Egg

Potential future use:

- ❖ Tracking LibAnswers embedded in pages

# Google Analytics

|                          | Google Analytics |
|--------------------------|------------------|
| Cost                     | ●                |
| Customization            | ●                |
| Cross-domain support     | ●                |
| Reports & Visualizations | ◐                |
| Ease of use              | ○                |
| Setup difficulty         | ○                |

|   |                          |
|---|--------------------------|
| ● | Better                   |
| ◐ | Mixed                    |
| ○ | Worse -or- not supported |

# Google Analytics: why use it?

## Helps Establish:

1. What does normal site usage look like?

# Google Analytics

Example data points:

- ❖ pageviews
- ❖ landing pages
- ❖ exit pages
- ❖ mobile vs. pc traffic
- ❖ new vs. returning users
- ❖ location of users
- ❖ referral pages



# Google Analytics: why use it?

## Helps Establish:

1. What does normal site usage look like?
2. How does traffic flow through your site?  
*i.e., do people actually get places the way you anticipated?*
3. Are specific goals being reached?  
*i.e. are users reaching \_\_\_ page in 3 or fewer clicks?*

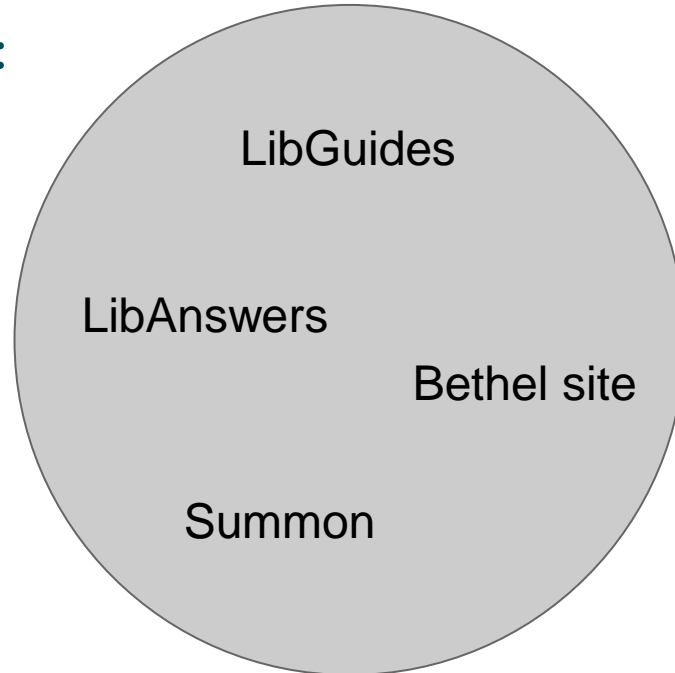
# Google Analytics

|                          | Google Analytics |
|--------------------------|------------------|
| Cost                     | ●                |
| Customization            | ●                |
| Cross-domain support     | ●                |
| Reports & Visualizations | ◐                |
| Ease of use              | ○                |
| Setup difficulty         | ○                |

|   |                          |
|---|--------------------------|
| ● | Better                   |
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| ○ | Worse -or- not supported |

# Google Analytics - Cross-domain tracking

Our “blob”:



# Google Analytics

|                          | Google Analytics |
|--------------------------|------------------|
| Cost                     | ●                |
| Customization            | ●                |
| Cross-domain support     | ●                |
| Reports & Visualizations | ◐                |
| Ease of use              | ○                |
| Setup difficulty         | ○                |

|   |                          |
|---|--------------------------|
| ● | Better                   |
| ◐ | Mixed                    |
| ○ | Worse -or- not supported |

# Google Analytics

Currently using it for:

- ❖ Deciding where some new content will live
- ❖ St. Paul vs. San Diego behavior
- ❖ Assessing LibAnswers usage?



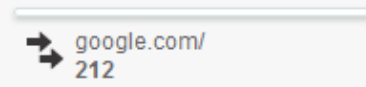
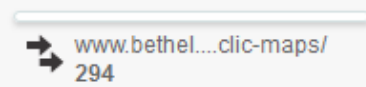
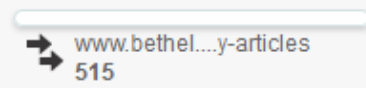
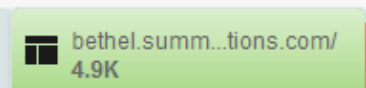
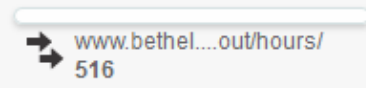
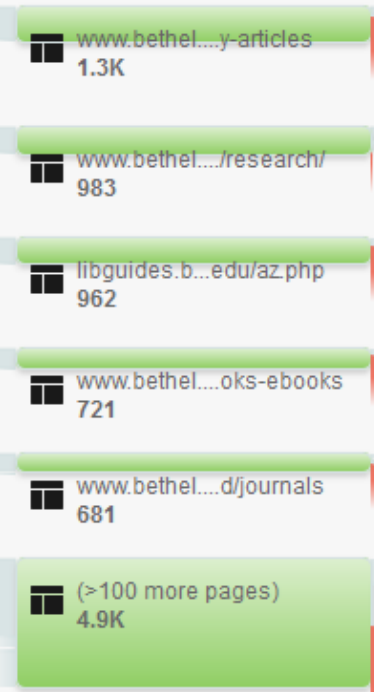
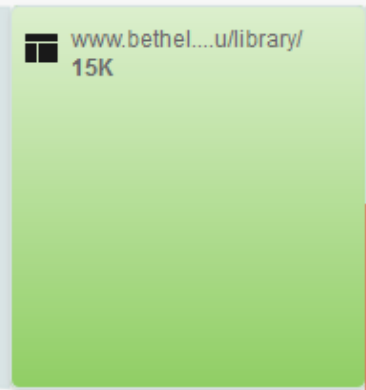
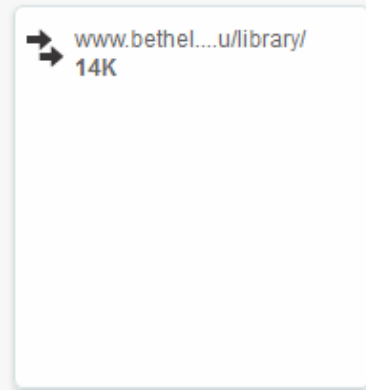
Landing Page



Starting pages  
26K sessions, 17K drop-offs

1st Interaction  
9.5K sessions, 4.7K drop-offs

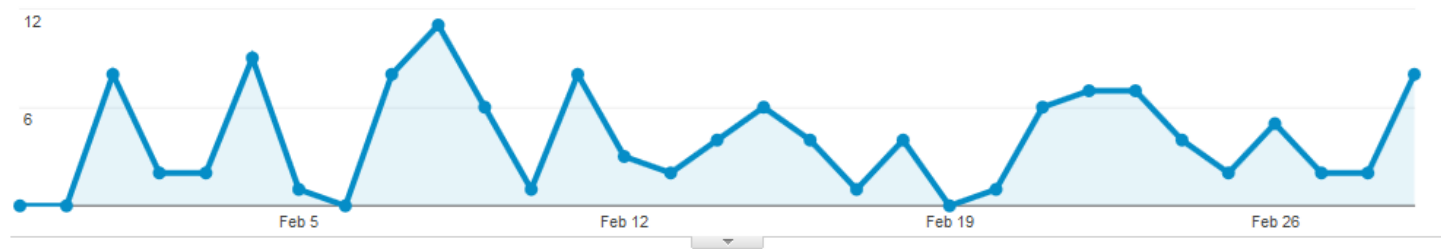
2nd Interaction  
4.7K sessions








Pageviews VS. Select a metric

Day Week Month  

● Pageviews











Primary Dimension: Page Other

Plot Rows Secondary dimension Sort Type: Default  advanced     

| Page ?  | Pageviews ?                              | Unique Pageviews ?                       | Avg. Time on Page ?                                 | Entrances ?                             | Bounce Rate ?                                  | % Exit ?  | Page Value ?                                |
|---|--|--|---|---|--|---|---|
|   | <b>124</b><br>% of Total: 0.27% (45,677) | <b>103</b><br>% of Total: 0.33% (30,881) | <b>00:00:29</b><br>Avg for View: 00:01:52 (-74.08%) | <b>44</b><br>% of Total: 0.25% (17,669) | <b>72.73%</b><br>Avg for View: 50.83% (43.07%) | <b>33.06%</b><br>Avg for View: 38.68% (-14.52%) | <b>\$0.00</b><br>% of Total: 0.00% (\$0.00) |
| 1. <a href="http://bethel.libanswers.com/">bethel.libanswers.com/</a>   | <b>81</b> (65.32%)                       | <b>67</b> (65.05%)                       | 00:00:38  | <b>35</b> (79.55%)                      | <b>74.29%</b>                                  | <b>37.04%</b>                                   | \$0.00 (0.00%)                              |
| 2. <a href="http://bethel.libanswers.com/search/?topics=interlibrary%20loan">bethel.libanswers.com/search/?topics=interlibrary loan</a>         | <b>11</b> (8.87%)                        | <b>8</b> (7.77%)                         | 00:00:09  | <b>3</b> (6.82%)                        | <b>33.33%</b>                                  | <b>18.18%</b>                                   | \$0.00 (0.00%)                              |
| 3. <a href="http://bethel.libanswers.com/search/?topics=check%20out%20and%20renew">bethel.libanswers.com/search/?topics=check out and renew</a> | <b>6</b> (4.84%)                         | <b>5</b> (4.85%)                         | 00:00:11  | <b>0</b> (0.00%)                        | <b>0.00%</b>                                   | <b>16.67%</b>                                   | \$0.00 (0.00%)                              |
| 4. <a href="http://bethel.libanswers.com/search/?topics=library%20information">bethel.libanswers.com/search/?topics=library information</a>     | <b>4</b> (3.23%)                         | <b>3</b> (2.91%)                         | 00:00:21  | <b>0</b> (0.00%)                        | <b>0.00%</b>                                   | <b>25.00%</b>                                   | \$0.00 (0.00%)                              |
| 5. <a href="http://bethel.libanswers.com/search/">bethel.libanswers.com/search/</a>   | <b>3</b> (2.42%)                         | <b>2</b> (1.94%)                         | 00:00:10  | <b>0</b> (0.00%)                        | <b>0.00%</b>                                   | <b>0.00%</b>                                    | \$0.00 (0.00%)                              |
| 6. <a href="http://bethel.libanswers.com/search/?topics=journals">bethel.libanswers.com/search/?topics=journals</a>                             | <b>3</b> (2.42%)                         | <b>2</b> (1.94%)                         | 00:00:05  | <b>0</b> (0.00%)                        | <b>0.00%</b>                                   | <b>0.00%</b>                                    | \$0.00 (0.00%)                              |

# Vendor Data: Springshare

|                      | <u>Vendor Data</u>  |
|----------------------|---|
| Cost                 |  |
| Visualizations       |  |
| Cross-domain support |  |
| Easy of use          |  |
| Setup Difficulty     |  |

|   |                          |
|---|--------------------------|
|  | Better                   |
|  | Mixed                    |
|  | Worse -or- not supported |



# Vendor Data: Springshare

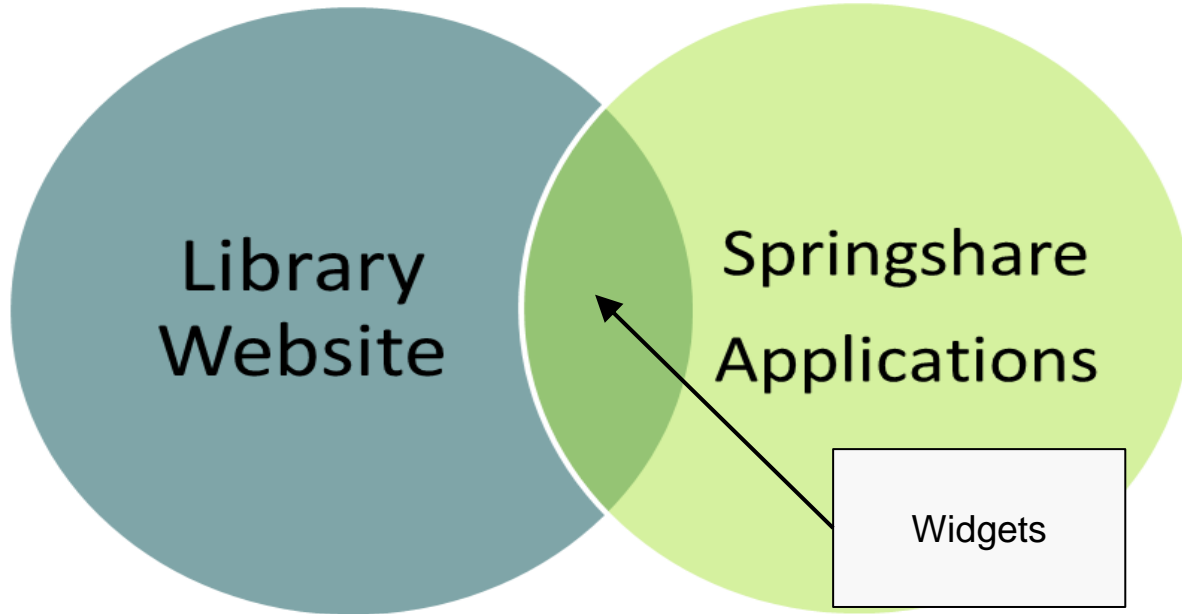
## Advantages:

- ❖ Little set-up required
- ❖ Canned reports are ready for analysis

## Disadvantages:

- ❖ Prescribed content
- ❖ Siloed

# Vendor Data: Springshare



Library  
Website

Springshare  
Applications

Widgets

| Question  | Owner                    | Created          |
|---|--------------------------|------------------|
| <a href="#">How can I find theses or dissertations to read online for free?</a><br>Topics: <a href="#">Theses and Dissertations</a>                   | Betsy Dadabo             | Feb 01 12, 16:45 |
| <a href="#">How do I request a book from a cooperating library (CLIC/CLICnet)?</a><br>Topics: <a href="#">Books</a> <a href="#">Interlibrary Loan</a> | Lyndi Finifrock Fabbrini | Feb 23 10, 12:11 |
| <a href="#">How can I renew an interlibrary loan item?</a><br>Topics: <a href="#">Interlibrary Loan</a>   | Lyndi Finifrock Fabbrini | Mar 31 15, 17:21 |
| <a href="#">How do I get an article that's NOT available through Bethel?</a><br>Topics: <a href="#">Articles</a> <a href="#">Interlibrary Loan</a>    | Betsy Dadabo             | Feb 23 10, 12:05 |
| <a href="#">How do I find a book in the library?</a><br>Topics: <a href="#">Books</a>   | Lyndi Finifrock Fabbrini | Feb 23 10, 12:16 |
| <a href="#">How can I get to the full text of an article?</a><br>Topics: <a href="#">Articles</a> <a href="#">Databases</a>                           | Scott Kaihoi             | Feb 23 10, 12:00 |
| <a href="#">How do I request a book from libraries worldwide (WorldCat)?</a><br>Topics: <a href="#">Books</a> <a href="#">Interlibrary Loan</a>       | Lyndi Finifrock Fabbrini | May 15 14, 14:48 |

Interlibrary loan can seem complicated. Get an overview of Interlibrary loan or see our frequently asked questions below.

Use your account right now: [Login to interlibrary loan](#)

Don't have one yet? Find out [how to create an account](#).

### Overview of Interlibrary Loan (ILL)

Interlibrary loan simply means borrowing materials from other libraries outside of Bethel. Usually, this means you send a request for the item to the Bethel library you use, we find another library that has it, they send it to us, and we pass it along to you for check-out. You may even be eligible to have it [mailed to you](#). It may come from our local consortium, [CLIC](#), or from anywhere in the world.

If it's an article you're after, Bethel libraries have millions you can access online in one of our databases. Sometimes you'll find an article title in one database, but the document (a.k.a. full-text) is really available in another database. The database with just the article title will have a link to search Bethel Libraries for the article's full-text in another database. If that doesn't work, you'll have the option to request the article. And that request will be for, you guessed it, an interlibrary loan.

#### Information for libraries borrowing from Bethel

### Frequently Asked Questions

[How do I request a book from a cooperating library \(CLIC/CLICnet\)?](#)

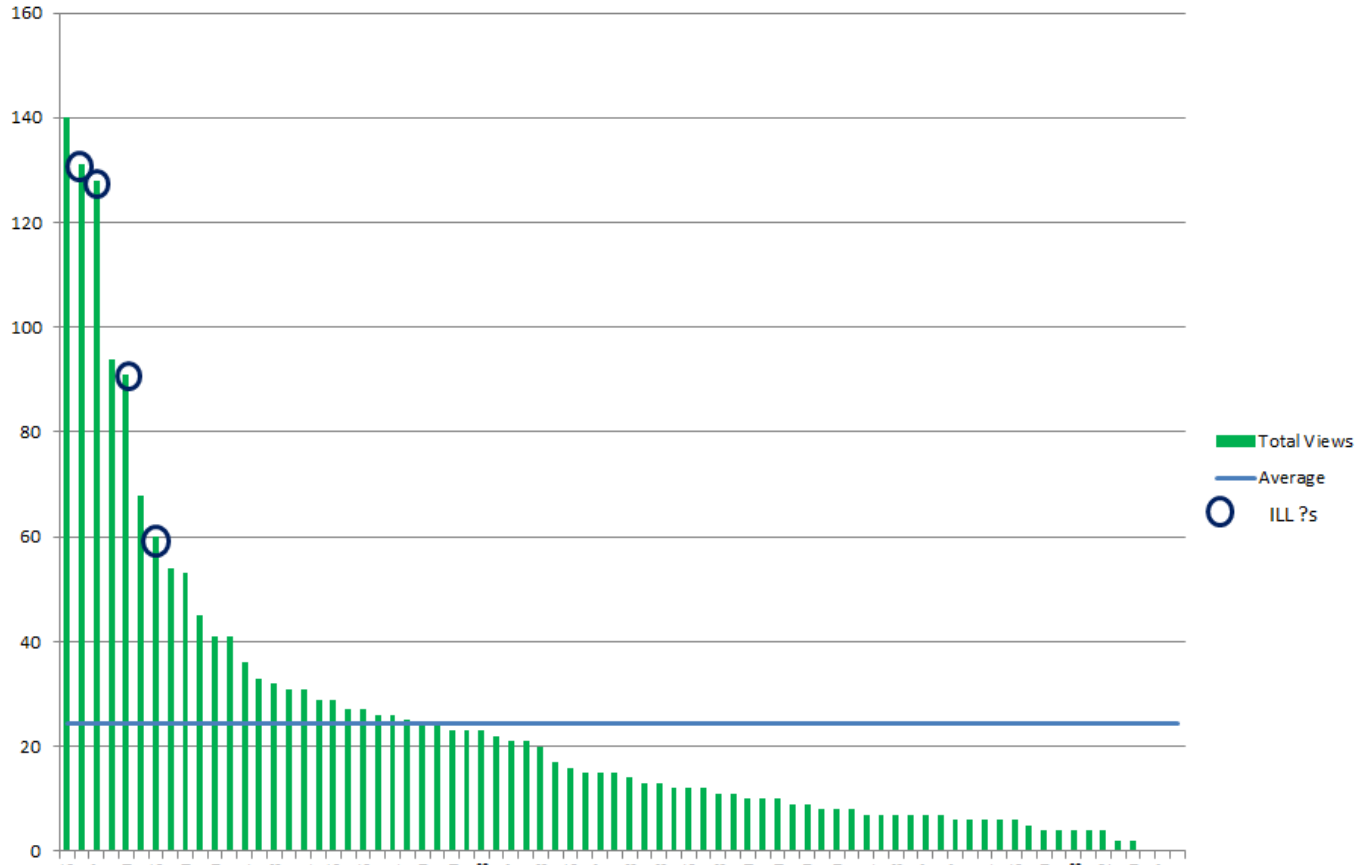
[How can I renew an interlibrary loan item?](#)

[How do I get an article that's NOT available through Bethel?](#)

[How do I request a book from libraries worldwide \(WorldCat\)?](#)

[What is CLIC/CLICnet?](#)

### Total Views of Each LibAnswers FAQ

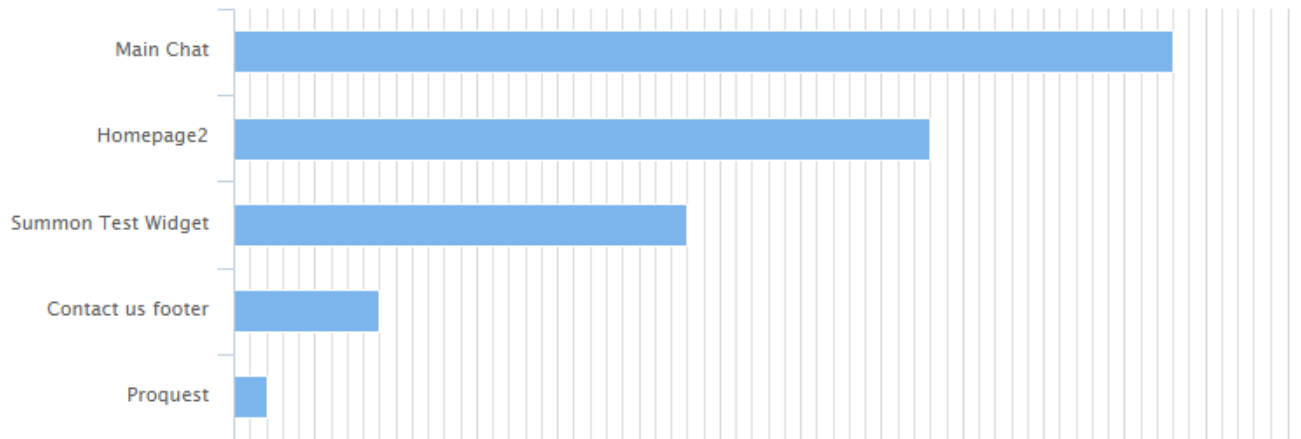


# Vendor Data: Springshare

## Widget Statistics (which widget chat started from)

| Widget             | Count | %   |
|--------------------|-------|-----|
| Main Chat          | 58    | 41% |
| Homepage2          | 43    | 31% |
| Summon Test Widget | 28    | 20% |
| Contact us footer  | 9     | 6%  |
| Proquest           | 2     | 1%  |

## Widget Statistics

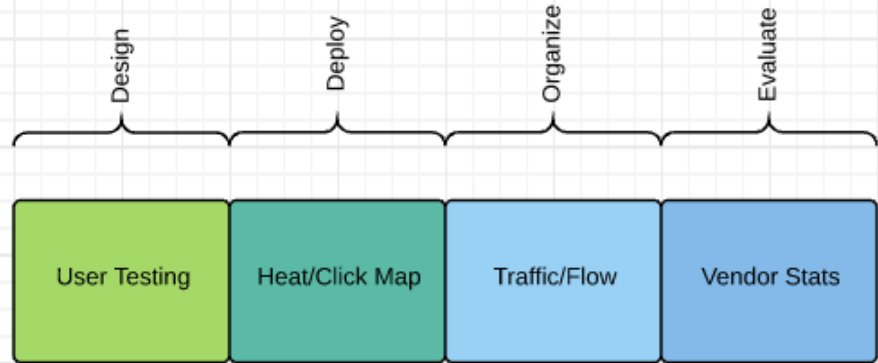


## Vendor Data (Springshare)

- ❖ How effectively are products/widgets incorporated into our web presence?
- ❖ Can the lessons from successful widgets be built upon elsewhere?

# Big Picture

User Testing  
Heat Maps & Click Maps  
Crazy Egg  
Traffic, trails, goals  
Google Analytics  
Product Usage  
Vendor Stats



# Case Study Wrap

If we know:

- ❖ Our users can understand, use, want to use
- ❖ Our users find the content
- ❖ How our users find the content
- ❖ Which content is used, from where

We have put the pieces together.



# Attribution

Unless otherwise noted, all images used in this presentation were dedicated to the public domain using a CC0 1.0 license.



# Resources

Free Silverback (2.0) User Testing Software - <https://silverbackapp.com/>

Crazy Egg - [www.crazyegg.com](http://www.crazyegg.com)

Google Analytics Support - <https://support.google.com/analytics/>

Google Developers - Google Analytics - <https://developers.google.com/analytics/devguides>

Springshare Lounge: <http://springsharelounge.com/>

# Bibliography

Barba, I., Cassidy, R., De Leon, E., & Williams, B. J. (2013). Web Analytics Reveal User Behavior: TTU Libraries' Experience with Google Analytics. *Journal Of Web Librarianship*, 7(4), 389-400. doi:10.1080/19322909.2013.828991

Fagan, J. C. (2014). The Suitability of Web Analytics Key Performance Indicators in the Academic Library Environment. *Journal Of Academic Librarianship*, 40(1), 25-34. doi:10.1016/j.acalib.2013.06.005

Farkas, M. G., Hinchliffe, L. J., & Houk, A. H. (2015). Bridges and barriers: Factors influencing a culture of assessment in academic libraries. *College & Research Libraries*, 76(2), 150-169. doi: 10.5860/crl.76.2.150

Farney, T. A. (2011). Click Analytics: Visualizing Website Use Data. *Information Technology & Libraries*, 30(3), 141-148.

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Farney, Tabatha, & McHale, Nina. (May/June 2013). Maximizing Google Analytics: Six High-Impact Practices. *Library Technology Reports* 49(4), 5-42.

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