From Ticks to Tableau: Hacking Reference Data So it Screams

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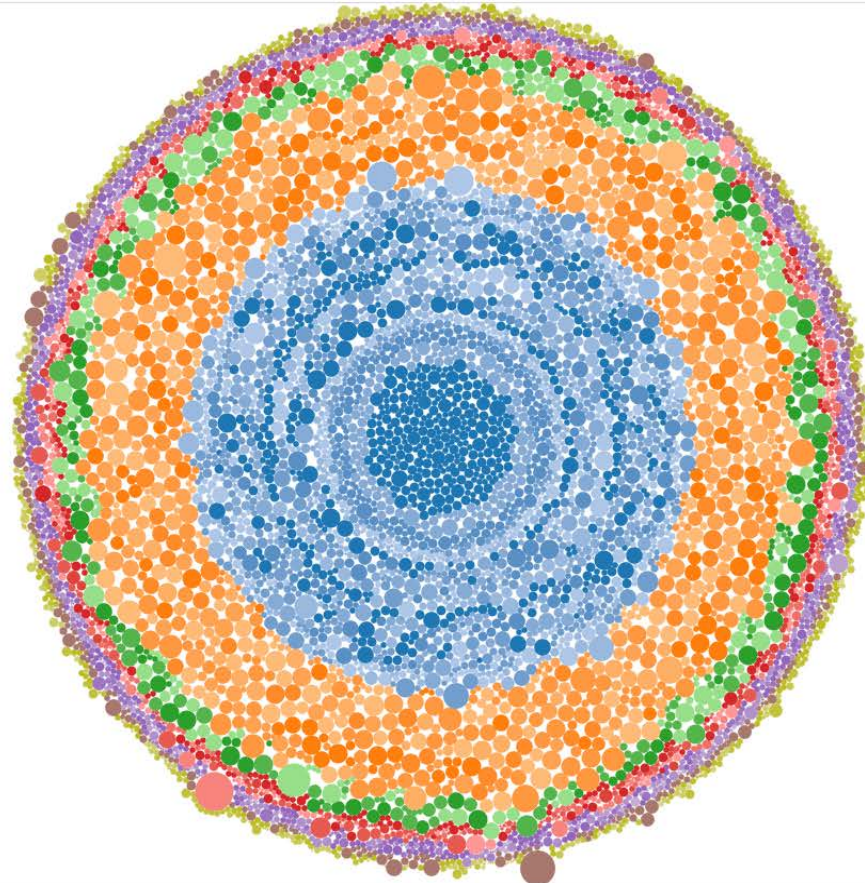
CARLDIG-S, Mount San Antonio College

Dec 5, 2014

The Elegant Mandala of Reference

Total 8,000

8,000 Questions

8,000 Questions & Answers from the last two years of Kennedy Library Reference.

Blue: Basic Research Question **Green**: GIS/Data **Purple**: Directional

Orange: In Depth Consultation **Red**: Tech Support **Olive**: Physical Tools

The Inelegant Scene of Annotation

Froze

Black screen

Reboot

Froze

Reboot

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2014 11:11:17	Tech Support (printing, linkin	How to print.	
2014 12:19:20	Tech Support (printing, linkin	Q: Patron was having issues logging in, computer would go to black screen and lock him out. A: Tried to manually restart computer, same issue. Called computer support number and they were able to shut it down and log him out. Comp issues then multiplied by 5 as the other computers around that computer proceeded to freeze and lag. Told everyone to jut move to another floor to use computers for now.	
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"Warning Will Robinson! Danger! Danger! Will Robinson!"

The Interrogation Chamber
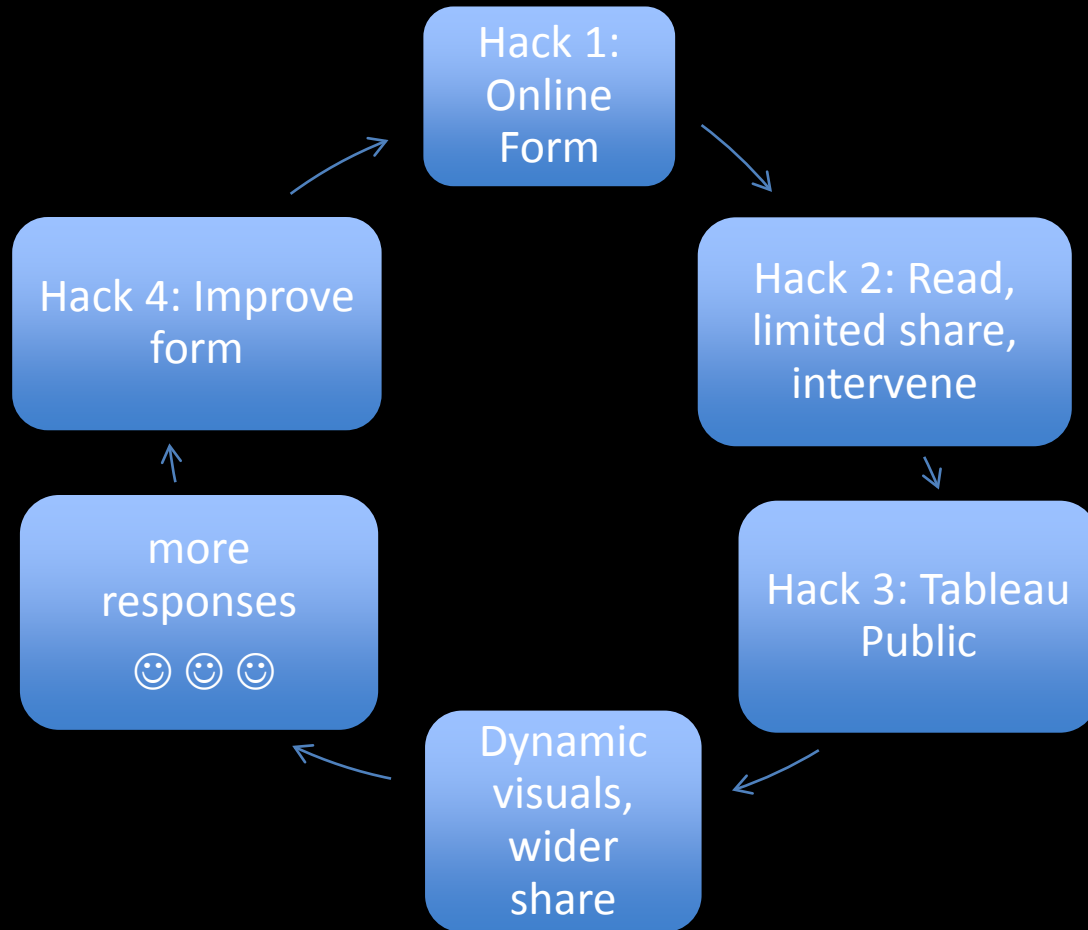
Hack #1: Online Form

Originally devised in 2011 for quality control of LibRAT (student assistant) reference

- Great tool – most particularly because it included questions AND solutions provided
- Also included : who, basic question type,

  channel (chat, phone, desk, email)

Hack #1, the saga continues

- Late 2012 expands to capture reference from College Librarians – a way to put more data in one locus
- Improved scope but not precision
- Hard to parse data after, for instance, **phone** call received at **desk** by **LibRAT**
- Not widely shared
- **Dismal!!** "interval" recording of time
- Lengthy – need to get non-LibRATs to buy in

Hack # 2: Blunt Force Trauma

- Since first form in 2011, Annotating Research Help Desk and Chat transactions each week
- Shared with LibRATs, who also read and annotate
- Helps identify issues in

        a) reference *provision*

        b) technical or website issues that can be

        conveyed to appropriate party

Hack #2, Weaknesses

- Not widely shared
- Can't expect librarians to read and annotate
- Week by week analysis good for timely interventions, but lacks perspective
- Enter Hack #3 . . .

Hack # 3 Tableau Public

Russ White, Cal Poly GIS and Data Wunderkind, chief co-architect of online form

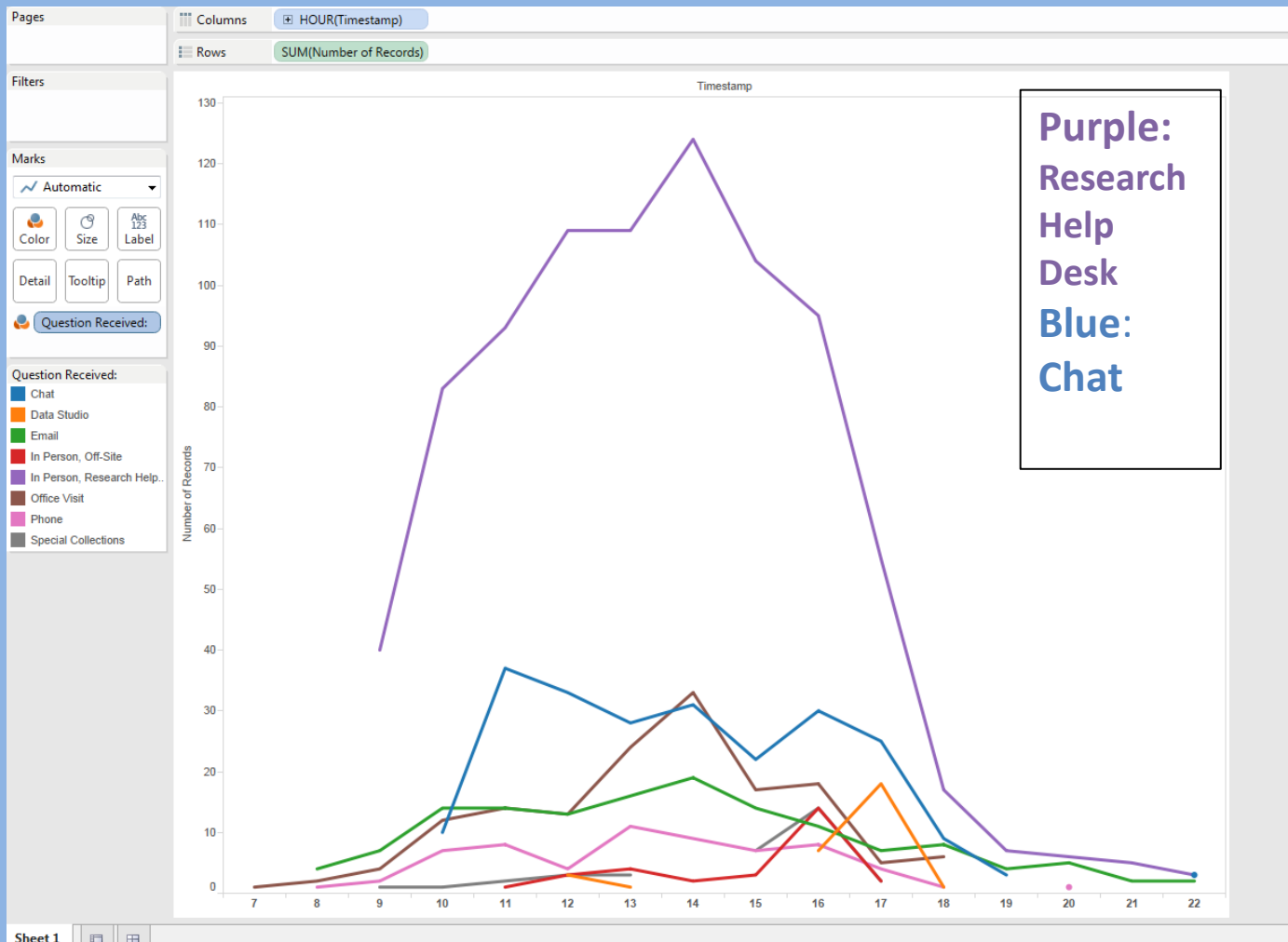Free online software for both pc & Mac

Hack #3

- For Winter 2013 reference meeting, exported Excel file of data into Tableau Public
- Providing visuals at meetings had four key benefits
    a) data was not hoarded – people **like** to be shared with
    b) visuals made for clear, easy takeaways

    moving both UP (administrators) and ACROSS (providers)
    c) the mere fact of showing data and demonstrating how it can be acted on showed value of taking the time to

    enter it
    d) efforts of groups and individuals recognized – making them **want** to participate!

Hack #3 example: Who is doing what?

Fall quarter data provided at winter meeting – different attendees see themselves and the whole.

Hack #3 example: What channels, when?

This graph "made" the case for shortening evening hours

Purple: Research Help Desk

Blue: Chat

# Hack # 3: the "community" effect

- After that first meeting:
- Others wanted into the act (Special Collections, and most recently Circulation)
- Input on form improvements
- Leading to Hack #4: continual improvement of form

Hack #4: Some Notable Tweaks

- Time (move to numerical values)
- Service point (distinction between physical service point and channel)
- Time override
- More granularity for technical problems

Hack #4: Numerical Time

1st year, recorded in intervals 1-5 minutes, 5-15 minutes, etc. Over a year that leads to ridiculous possible variations
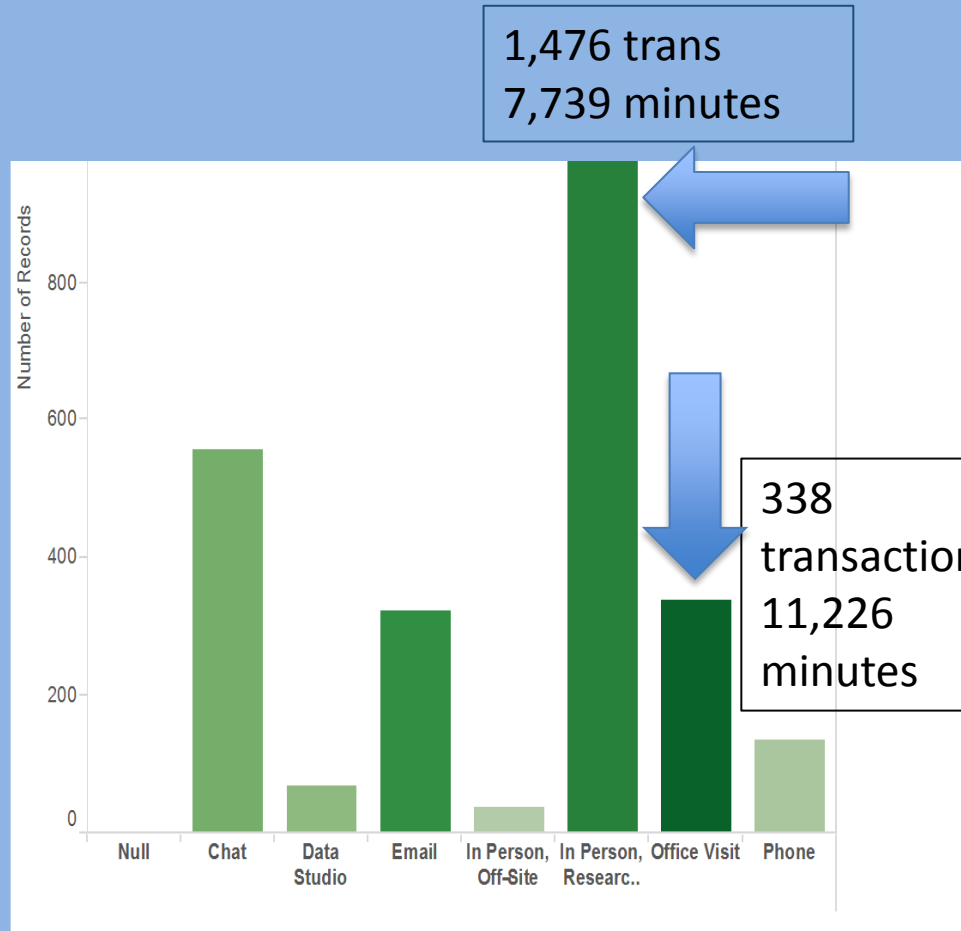
2nd year, went to numerals only: can be added – what a concept!

1,476 trans
7,739 minutes

338 transactions, 11,226 minutes


Vertical = #of transactions
The Darker the green = the more the minutes

Log-in/tech issues

- Because of logon issues on in-library computers we set up this year's form to create more documentation

- This fall, because of greater parsing AND looking at language, saw that there was a further problem of freezing as well

- Shared with IT staff with peak problem times and language so they could troubleshoot more ably

Multiple Hack Intervention:
tech/pc issues this fall quarter
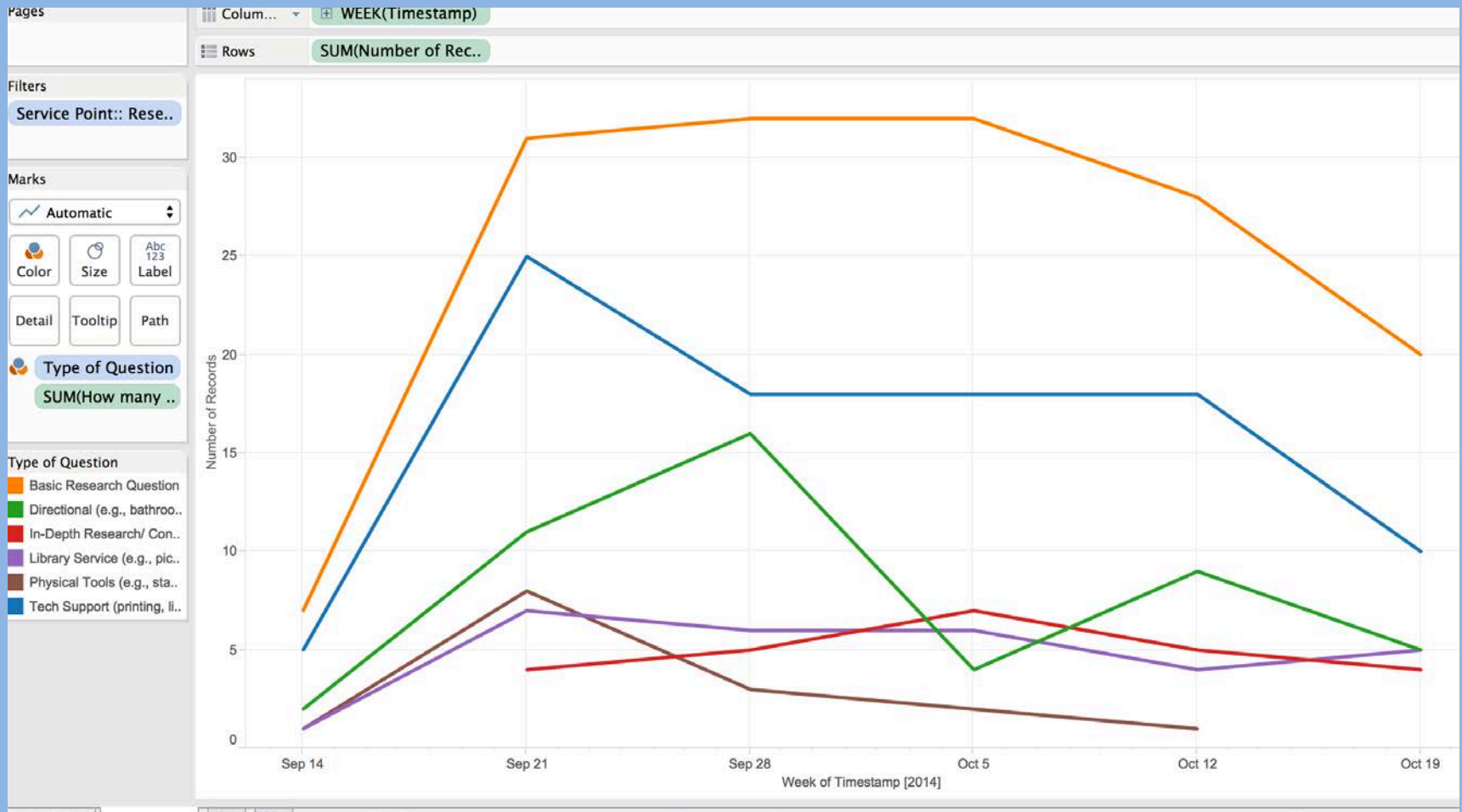
By week: Blue line is tech support questions

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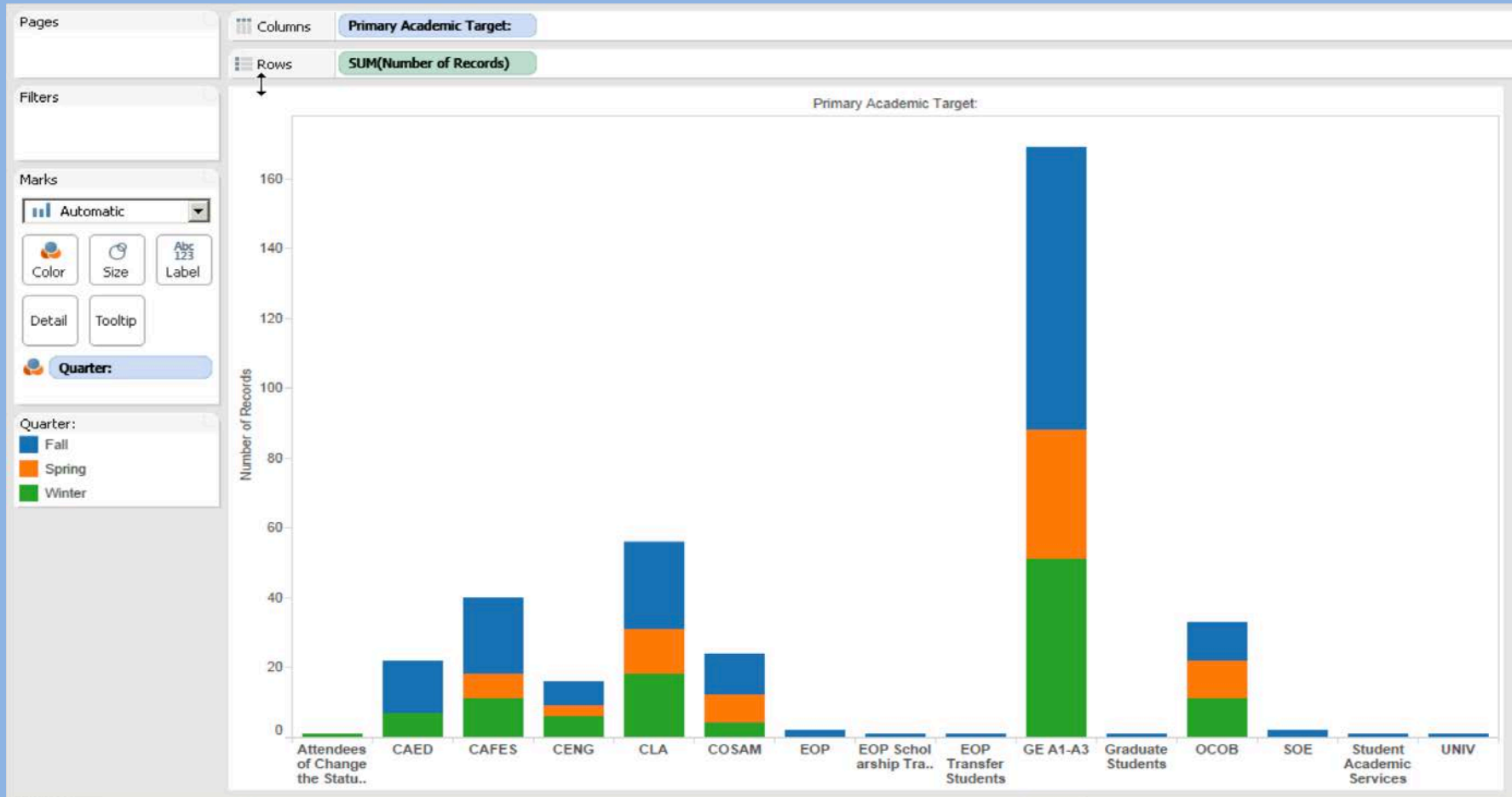
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A peek into Tableau workbooks themselves

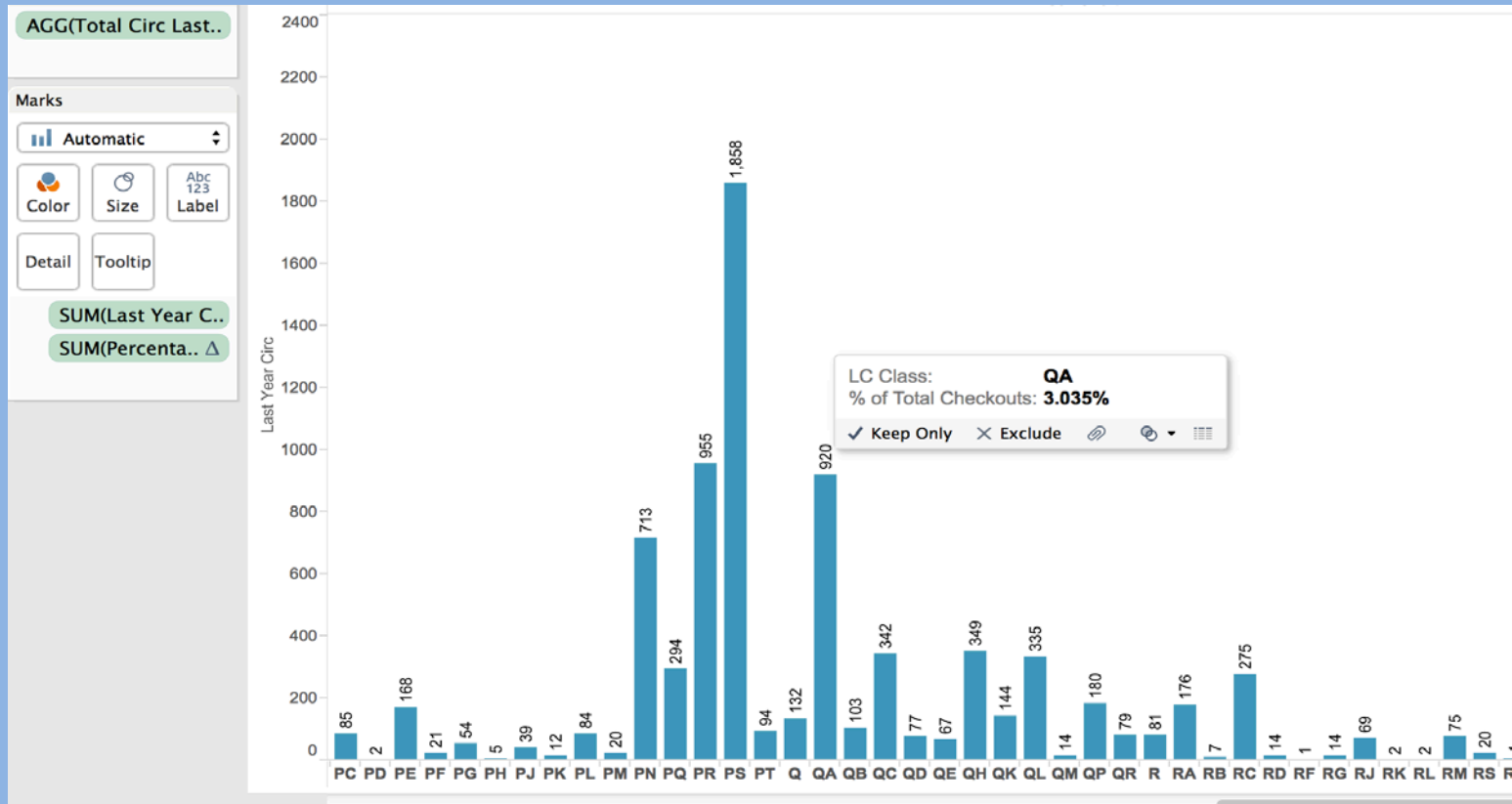. [Tableau/Wizard Russ White](#)

[http://public.tableausoftware.com/views/GeneralReference2013-14/8000QuestionsAnswersa?:showVizHome=no#1](#)

Other Uses: Instruction Data

Vertical: # of sessions/ color: quarters

Other Uses: Collections

Last year's monograph checkouts by call #

Conclusion

- Data form and Tableau Public great tandem for:

- Getting providers involved

- Letting individuals and units show their value

- Making operational points to administrators

- Collecting data for institutional reporting

- Most importantly: improving services & making timely interventions

Thank You.

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