

#TC18

#TableauGetsSocial

Rock your social media data with Tableau

Alexander Loth

@xlth

aloth@tableau.com

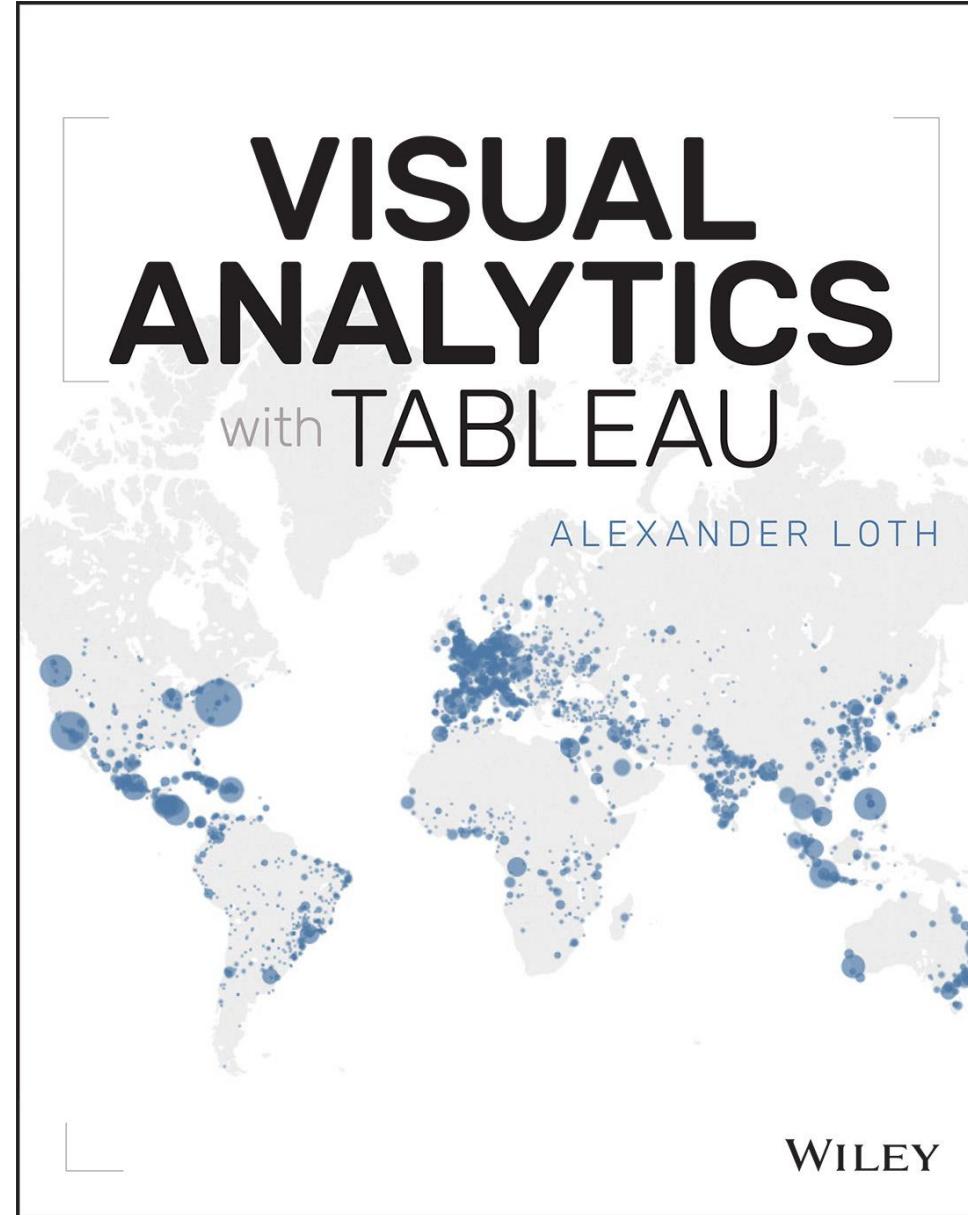


<http://bit.ly/tab-social>





<http://tableau-buch.de>



<http://www.visual-analytics.org/>

Agenda

Step 1: Understand How to Succeed with Social Media

Step 2: Define Your Social Objectives and KPIs

Step 3: Assemble Your KPIs

Step 4: Connect Your Social Media with Tableau

Step 5: Apply Some Tips to Level Up

Step 6: Explore Social Media Listening

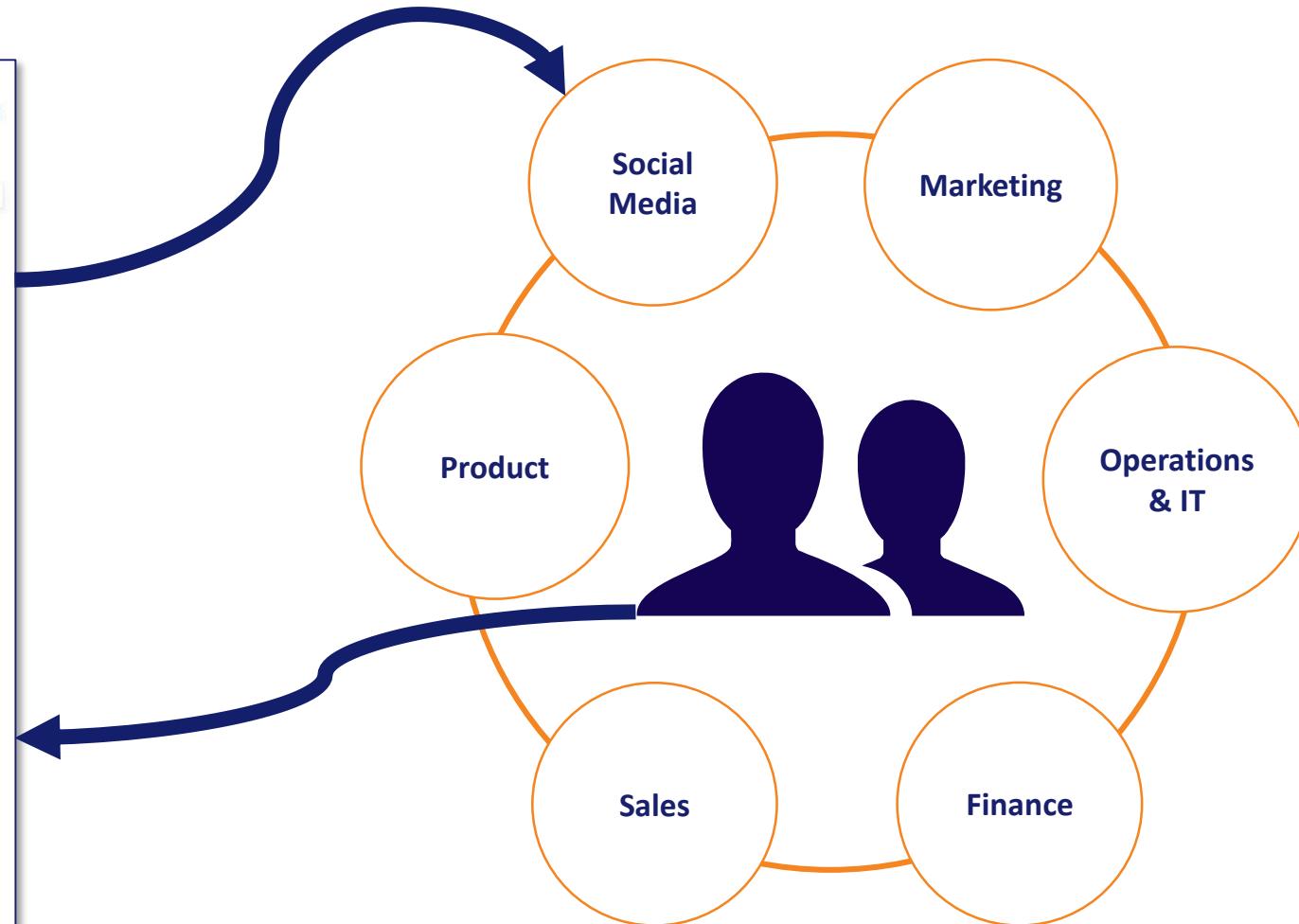
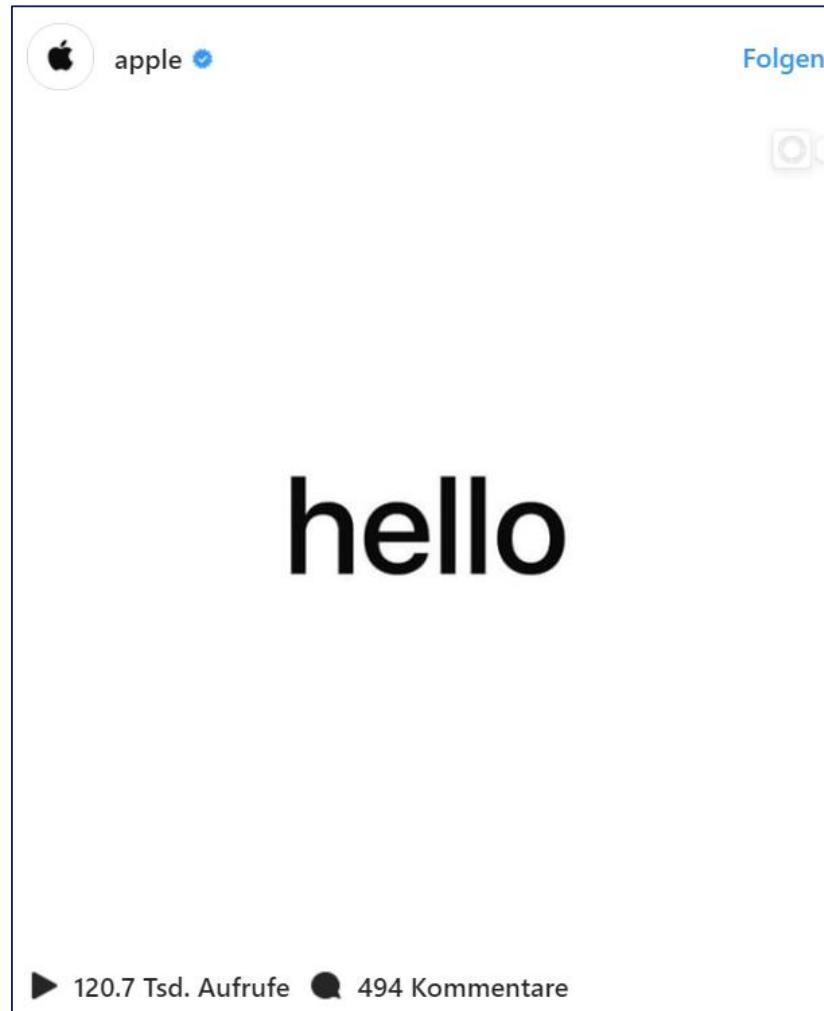
Step 7: Leverage your Analytics Tool Chain

Demo

Step 1: Understand How to Succeed with Social Media



The Customer-Centric Data Strategy



Develop a Strong Social Media Presence

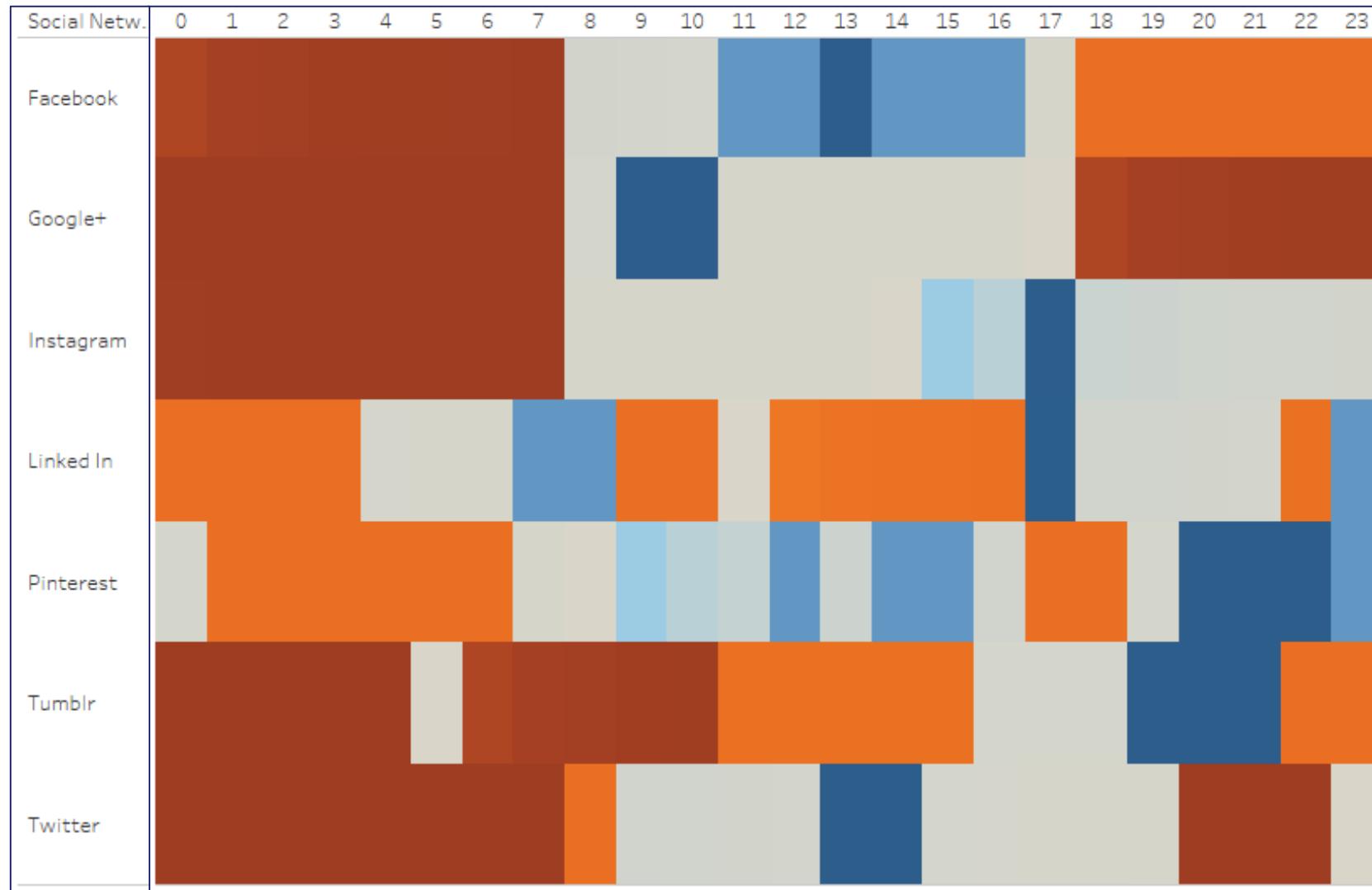


#TC18 #TableauGetsSocial @xlth

Post Regularly and in the Right Formats



Post Regularly and in the Right Formats



Step 2: Define Your Social Objectives and KPIs



Relevant Metrics

Sales		\$100,000
Cost of goods sold		<u>75,000</u>
Gross profit		<u>25,000</u>
Operating expenses		
Selling expenses		
Advertising expense	2,000	
Commissions expense	<u>5,000</u>	7,000
Administrative expenses		
Office supplies expense	3,500	
Office equipment expense	<u>2,500</u>	<u>6,000</u>
Total operating expenses		<u>13,000</u>
Operating income		<u>12,000</u>



Ellen DeGeneres 
@TheEllenShow

 Follow

If only Bradley's arm was longer. Best photo ever. #oscars

5:06 AM - Mar 3, 2014

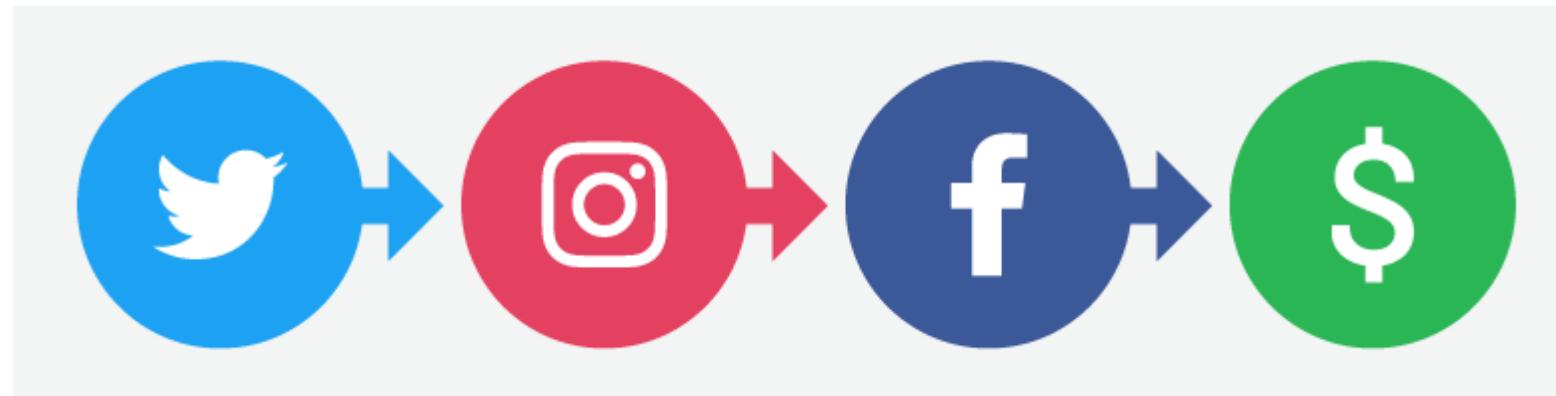
 223,851  3,443,083  2,418,123

Social Objectives

Define specific KPIs for social media platforms

KPI objectives need to be measurable

Metrics should be in line with the business goals



Relevant Metrics

Benchmarks

Followers, mentions

Audience

Impressions, reach, demographics, location, timing

Engagements

Likes, shares, views, comments, follows

Conversions

Clicks, leads

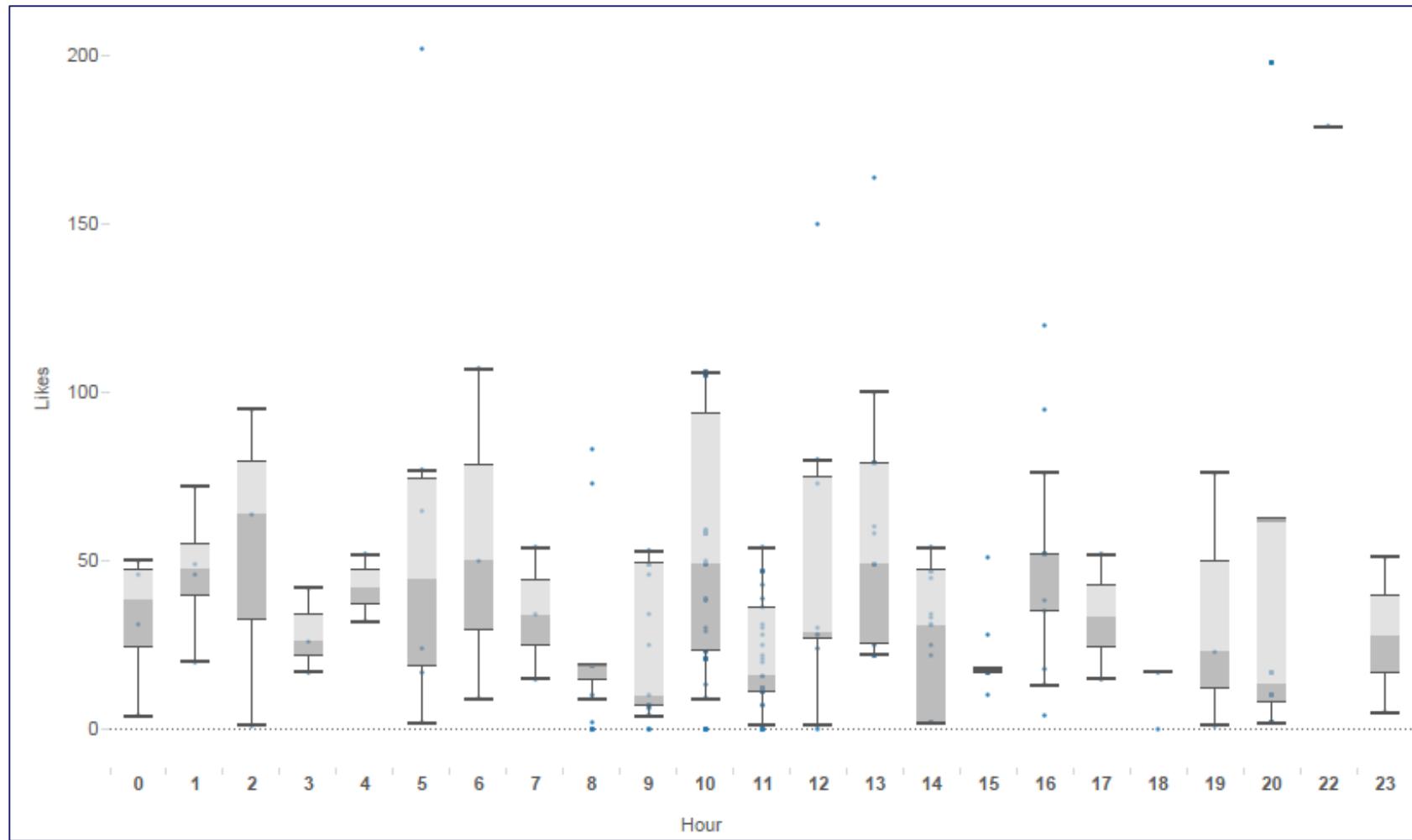
Opportunities

User-generated links, related hashtags

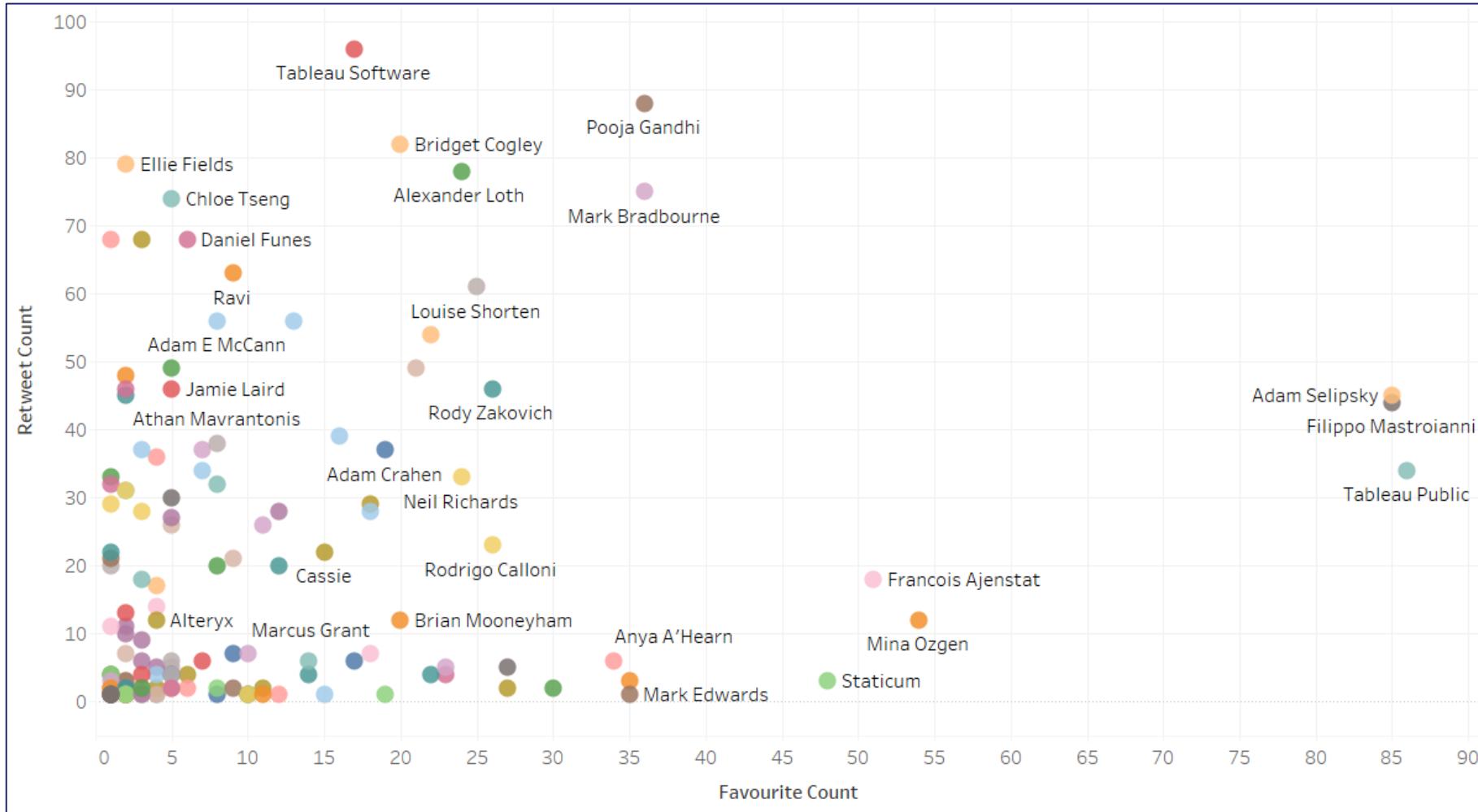
Sentiment

Brand monitoring, negative feedback

Audience



Engagements



Step 3: Assemble Your KPIs



Marketing Program Effectiveness

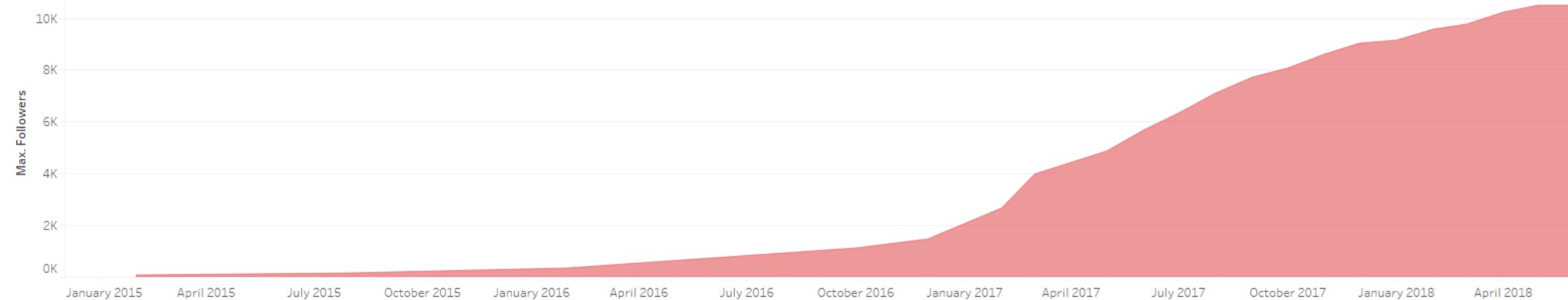
Social Reach (=total # of followers across all platforms)

15,656

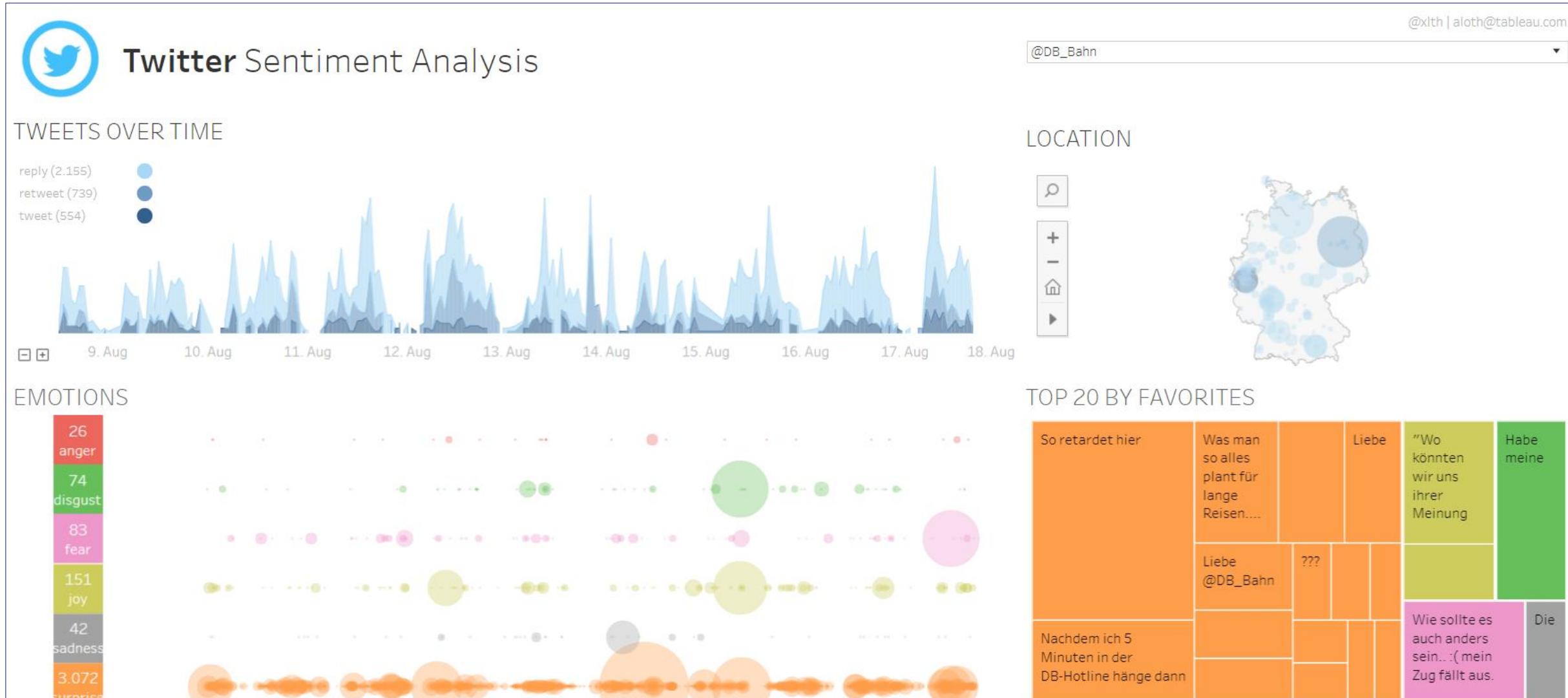
Followers across all platforms



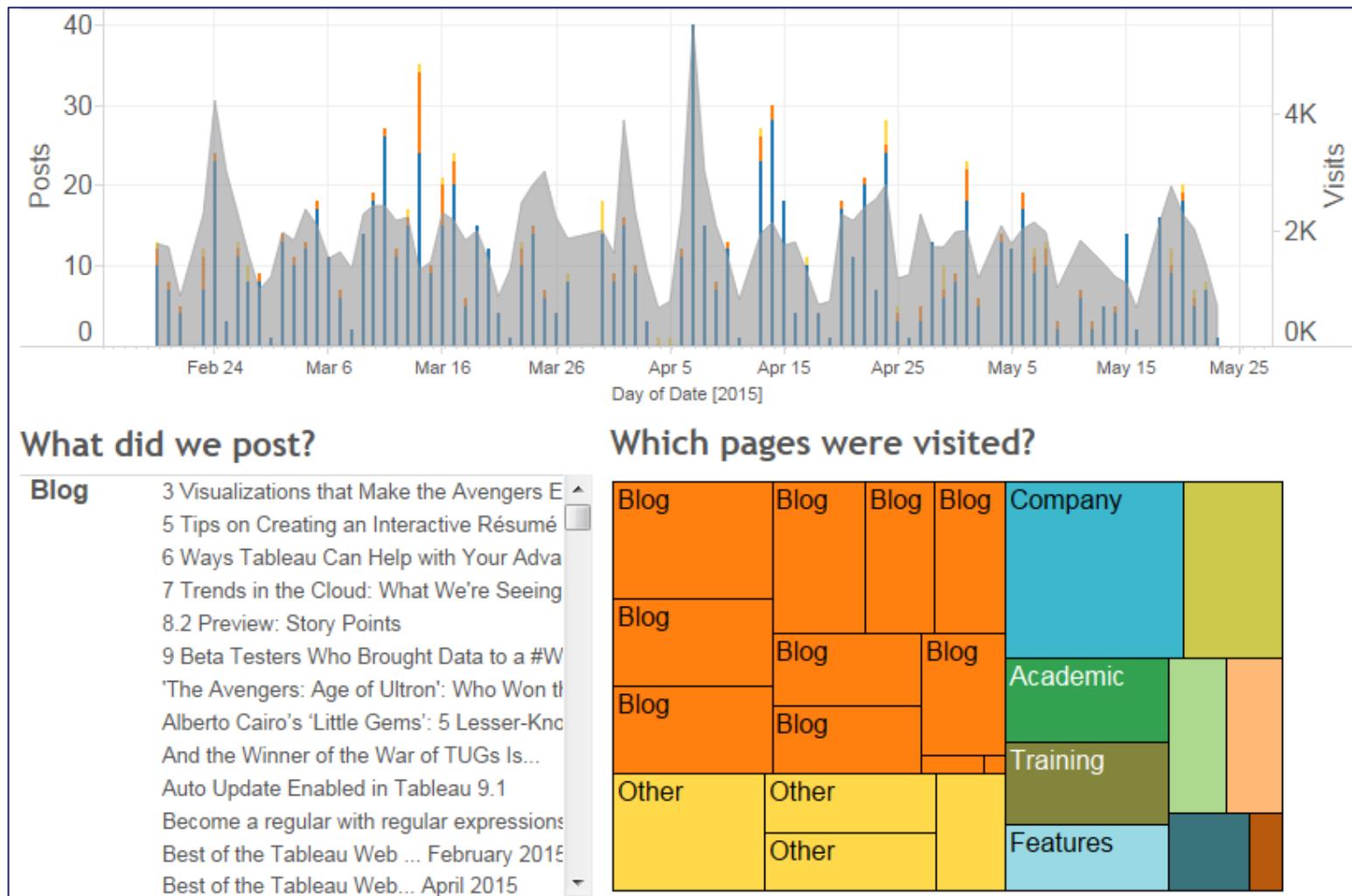
Followers growth (Twitter)



Brand Awareness and Reputation



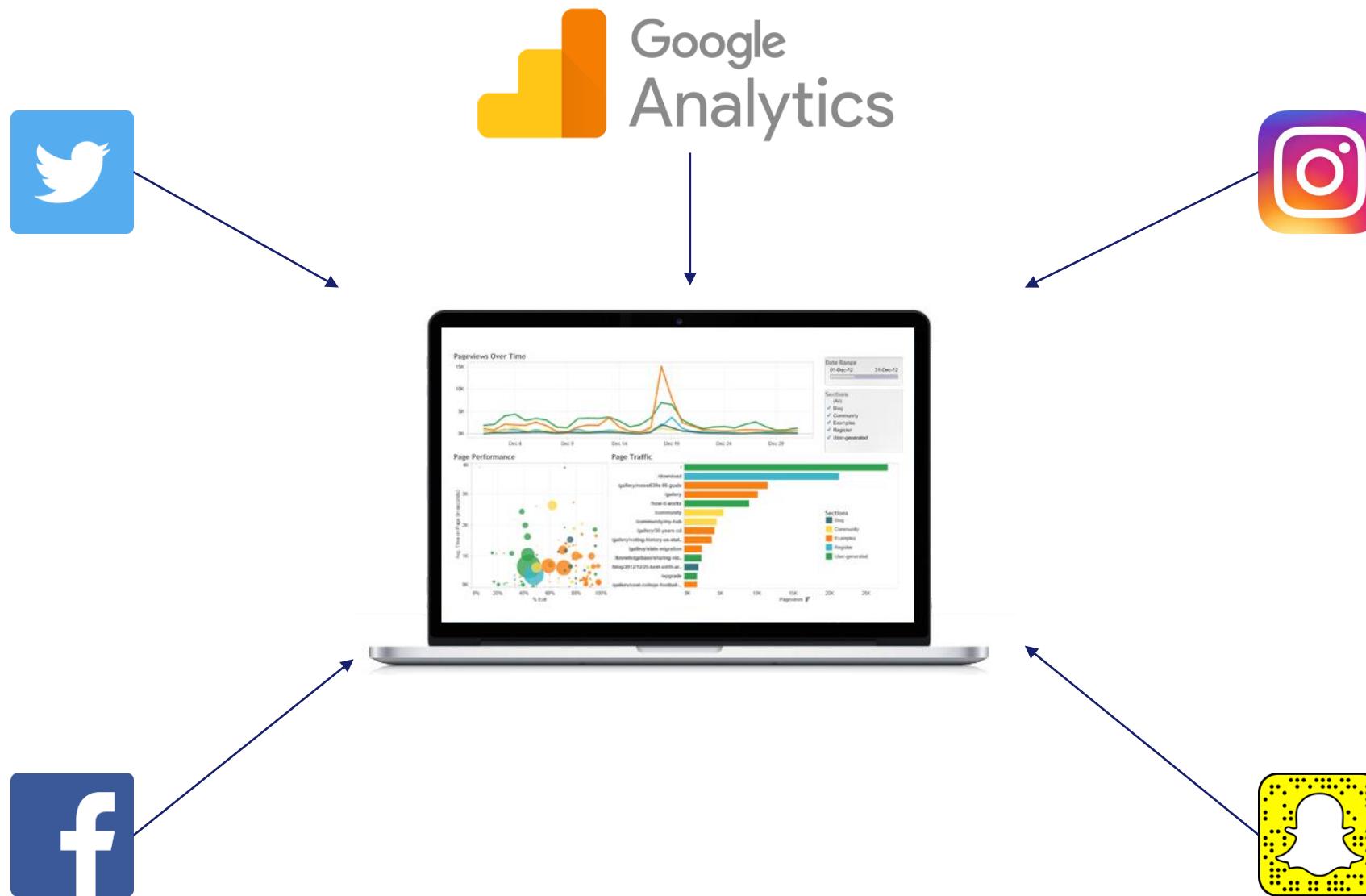
Lead Generation Effectiveness



Step 4: Connect Your Social Media with Tableau



How to Get Social Media in Tableau?



#TC18 #TableauGetsSocial @xlth

How to Get Social Media in Tableau?

Option 1: Directly from the platform

Get data directly from Facebook, Twitter, YouTube, and more

Option 2: Via web automation

Use a service like IFTTT to store data on Google Sheets

Option 3: Via web data connector

Use Tableau's web data connector

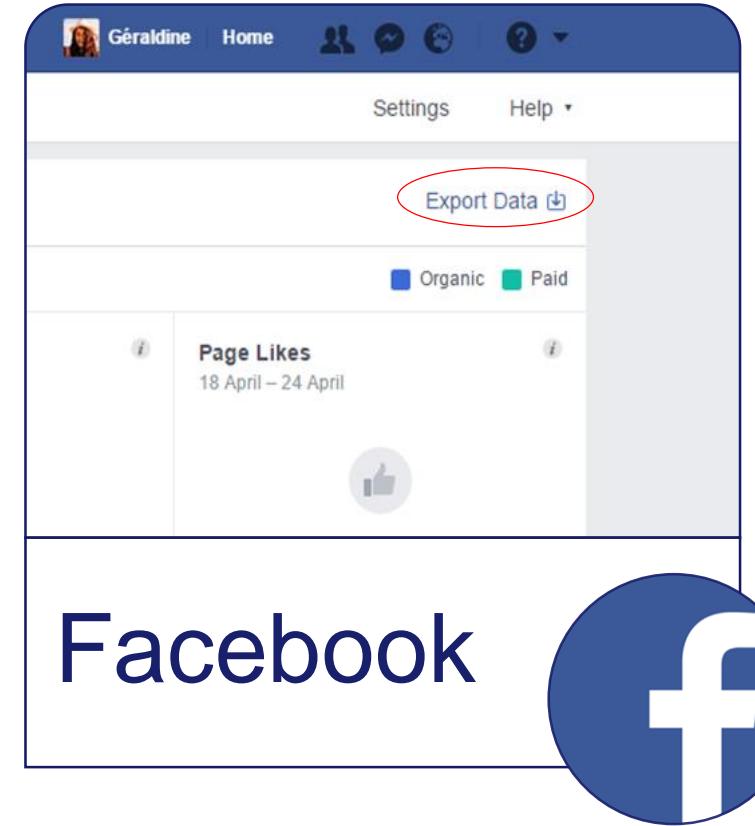
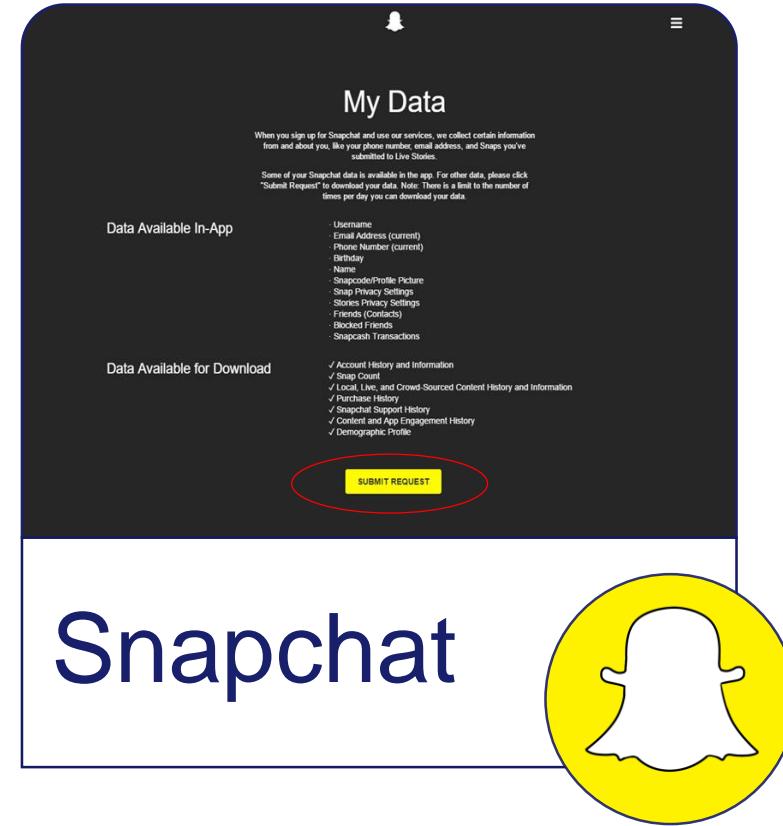
Option 4: Code your own solution

Use an API provided by the platform

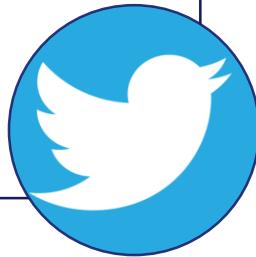
Option 5: Via a third party platform

Get data from an integrated social media platform, such as Talkwalker

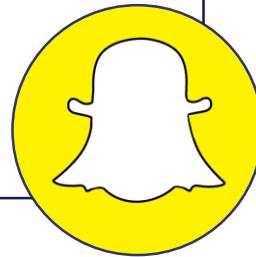
Option 1: Directly From the Platform



Twitter



Snapchat



Facebook



Option 1: Directly From the Platform

Post ID	Permalink	Post Message	Type	Countries	Languages	Posted	Audience Targeting	Lifetime Post Total Reach
27228877081_1	https://www.facebook.com/tabsoftco/posts/27228877081_1	What are your game-day food plans? See how they compare with your neighbors'. #SB48 http://tabsoft.co/1fueFLX	Link			2/1/2014 11:00		4428
27228877081_10	https://www.facebook.com/tabsoftco/posts/27228877081_10	Tableau employees are showing their spirit! #SB48 #GoHawks http://tabsoft.co/1cEc3L3	Photo			2/2/2014 13:01		5406
27228877081_11	https://www.facebook.com/tabsoftco/posts/27228877081_11	Congratulations to the Seahawks on a Super Bowl win tonight. It's a great time to be in Seattle!	Photo			2/2/2014 19:36		5454
27228877081_12	https://www.facebook.com/tabsoftco/posts/27228877081_12	Wish you could go back to #TCC13? Wish no longer! The highest rated customer sessions are all here to view for free. What wa	Link			2/4/2014 15:41		2832
27228877081_13	https://www.facebook.com/tabsoftco/posts/27228877081_13	Who Really Won the "Big Game"? http://tabsoft.co/1e2IzSJ - great superbowl ad analysis by Nelson Davis	Link			2/5/2014 1:45		4646
27228877081_14	https://www.facebook.com/tabsoftco/posts/27228877081_14	Data for Olympic fans! #sochi2014 http://tabsoft.co/1k59xI0	Link			2/6/2014 7:31		3278
27228877081_15	https://www.facebook.com/tabsoftco/posts/27228877081_15	Do you think Gantt charts are just for project planning? You're wrong! http://tabsoft.co/1j7JYj1	Link			2/6/2014 11:02		6608
27228877081_16	https://www.facebook.com/tabsoftco/posts/27228877081_16	The speaker application deadline for the #Sydney conference is 7 February! People want to hear your #Tableau story—let it be	Link			2/6/2014 13:31		1650
27228877081_17	https://www.facebook.com/tabsoftco/posts/27228877081_17	Next week, the Tableau Experience comes to 6 cities: Minneapolis, Chicago, St. Louis, Philadelphia, Baltimore, and Alexandria!	Link			2/7/2014 6:32		2048
27228877081_18	https://www.facebook.com/tabsoftco/posts/27228877081_18	Data-system conversions aren't always this fun. Learn how the University of West Florida has handled the challenge at http://t	Photo			2/7/2014 9:45		2355
27228877081_19	https://www.facebook.com/tabsoftco/posts/27228877081_19	Hungry in San Fran? Here's how to find the right food truck for you. #3minwin http://tabsoft.co/1cZlxkd	Link			2/10/2014 9:31		2802
27228877081_20	https://www.facebook.com/tabsoftco/posts/27228877081_20	What's your ideal job? This new tool by PayScale can help you find it. http://tabsoft.co/1buOikx	Link			2/11/2014 9:31		3672
27228877081_21	https://www.facebook.com/tabsoftco/posts/27228877081_21	The Tableau Experience in Alexandria has been canceled and will be rescheduled for a later date. This is the only cancellation.	Link			2/11/2014 15:39		1528
27228877081_22	https://www.facebook.com/tabsoftco/posts/27228877081_22	Attendees at TC On Tour want to hear YOUR Tableau story! Next Friday is the application deadline for European conference spe	Link			2/12/2014 1:00		1719
27228877081_23	https://www.facebook.com/tabsoftco/posts/27228877081_23	Extreme winds in the UK right now - explore on this amazing global wind #dataviz http://tabsoft.co/1eqpBWe	Link			2/12/2014 4:20		3728
27228877081_24	https://www.facebook.com/tabsoftco/posts/27228877081_24	We must have vizzes on the brain... 'Cause this pattern makes us think of one!	Photo			2/12/2014 7:46		2052
27228877081_25	https://www.facebook.com/tabsoftco/posts/27228877081_25	Someone needs to fix this! (Thanks to @yobiebs on Twitter for this)	Photo			2/13/2014 1:05		2353
27228877081_26	https://www.facebook.com/tabsoftco/posts/27228877081_26	KK Molugu explores Chicago pothole data in "3 minutes flat"! #3minwin http://tabsoft.co/1ixs4Tf	Link			2/13/2014 7:02		2470

Option 2: Via Web Automation

Save tweets featuring specific content to a spreadsheet

Keep a database of tweets that might interest you. Just enter the hashtag, term, or phrase you want to search for and new tweets that include it will be saved in a Google spreadsheet. For best results, be specific!

[View activity log](#)

Receive notifications when this Applet runs



New tweet from search

This Trigger fires every time a new tweet matches your search query.
NOTE: limited to 15 tweets per check.

What are you searching for?

#data18 OR
#anewdayfordata OR
@tableau

Use Twitter's [search operators](#) for advanced search. For example: ("@twitter" "#followfriday")

Add row to spreadsheet

This action will add a single row to the bottom of the first worksheet of a spreadsheet you specify. Note: a new spreadsheet is created after 2000 rows.

Spreadsheet name

Tweets data18

Will create a new spreadsheet if one with this title doesn't exist

Drive folder path (optional)

IFTTT/Twitter

Format: some/folder/path (defaults to "IFTTT")

Save

Option 2: Via Web Automation

Tweets data18

File Edit View Insert Format Data Tools Add-ons Help Last edit was 8 hours ago

SHARE

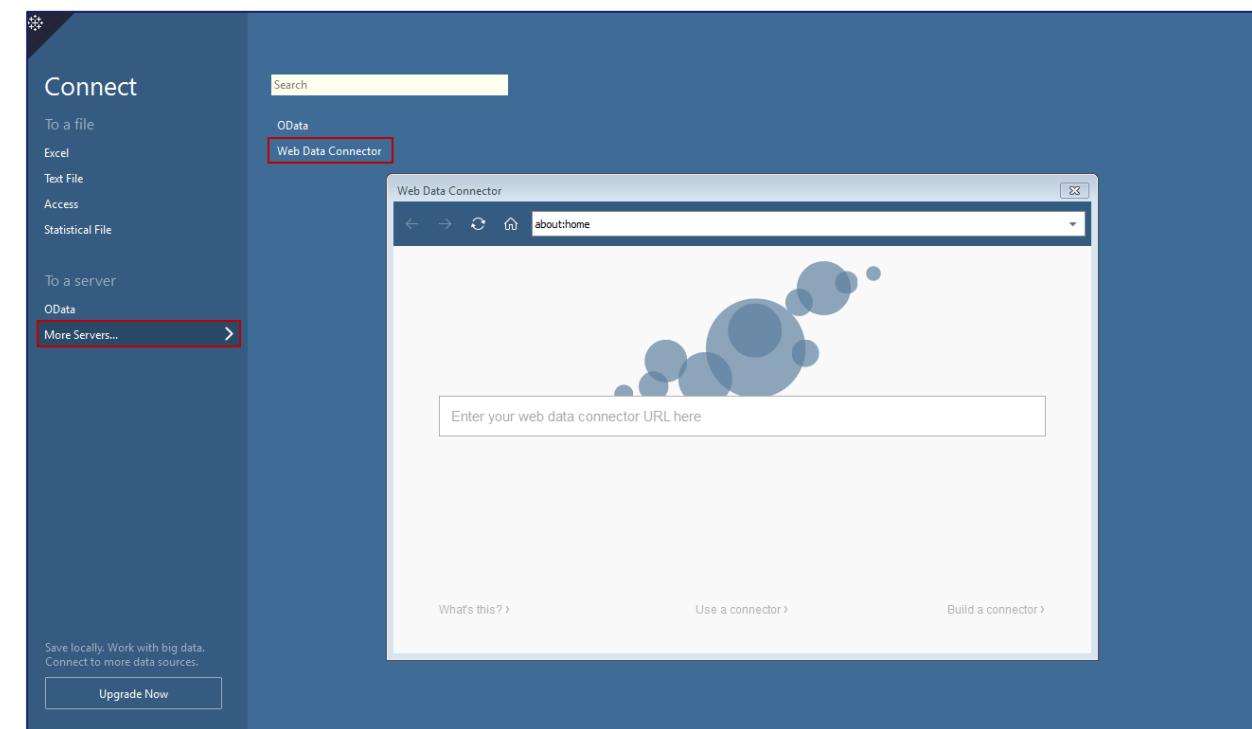
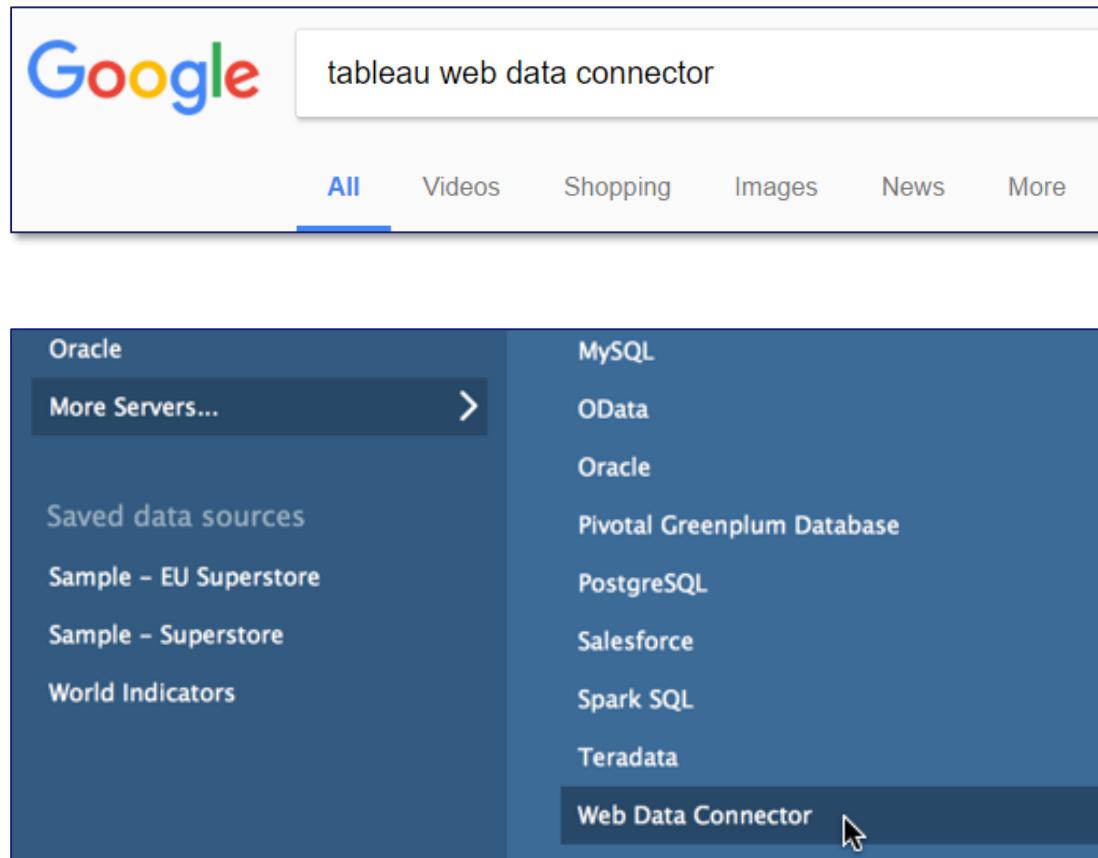
User

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	User	Tweet	URL	Date											
2	@sonofGod0023	RT @xith: Get T	http://twitter.com	April 24, 2018 at 03:35PM											
3	@xith	Successful busin	http://twitter.com	April 24, 2018 at 09:17PM											
4	@NVSData	RT @xith: Succe	http://twitter.com	April 24, 2018 at 09:20PM											
5	@xith	Very exciting #Ta	http://twitter.com	April 25, 2018 at 01:21PM											
6	@M2dot	📢 another great	http://twitter.com	April 25, 2018 at 02:11PM											
7	@lukestanke	Oh hey it's @que	http://twitter.com	April 25, 2018 at 10:07PM											
8	@afcisnal	Big data, e-learn	http://twitter.com	April 25, 2018 at 10:11PM											
9	@rafavidalperez	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:13PM											
10	@onmedic	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:19PM											
11	@caring_mobile	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:22PM											
12	@carga_viral	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:22PM											
13	@on_reuma3	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:24PM											
14	@Aurora_UDIM	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:24PM											
15	@dr_reuma	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:31PM											
16	@noticias_traum	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:35PM											
17	@farmamarketing	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:36PM											
18	@drrreumanews	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:38PM											
19	@on_deporte	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:39PM											
20	@validado	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:47PM											
21	@on_neurologia	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 10:57PM											
22	@on_neumologia	RT @afcisnal: Bi	http://twitter.com	April 25, 2018 at 11:16PM											
23	@CIAPE	Data' 2018 organ	http://twitter.com	April 26, 2018 at 04:24AM											
24	@FuturaAnalytic	RT @xith: Succes	http://twitter.com	April 26, 2018 at 06:27AM											

Option 3: Via Web Data Connector



Option 3: Via Web Data Connector

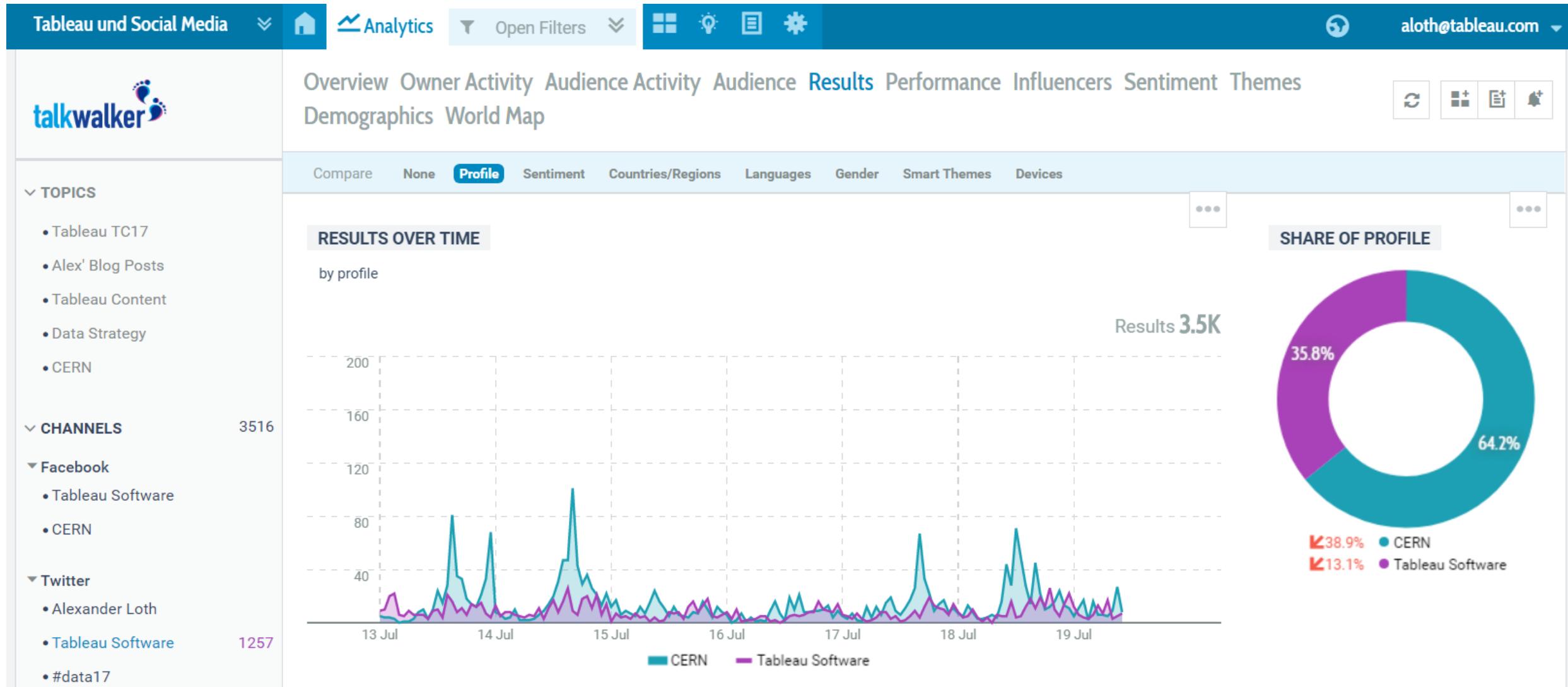


Option 4: Code Your Own Solution

Fetching tweets with R:

```
library(twitteR)  
  
library(ROAuth)  
  
setup_twitter_oauth("consumer_key", "consumer_secret",  
                    "access_token", "access_secret")  
  
tweets <- userTimeline("xlth", n = 3200)  
  
tweets.df <- twListToDF(tweets)  
  
write.csv(tweets.df, file="tweets.csv")
```

Option 5: Via a Third Party Platform



Option 5: Via a Third Party Platform

Tableau und Social Media ▾  Analytics Open Filters     aloth@tableau.com ▾

 Overview Results Performance Influencers Sentiment Themes Demographics World Map

Compare None Profile Countries/Regions Languages Gender Smart Themes

TOPICS

- Tableau TC17
- Alex' Blog Posts
- Tableau Content
- Data Strategy
- CERN

CHANNELS 25.1K

- ▼ Facebook 66
 - Tableau Software
 - CERN
- ▼ Twitter 36
 - Alexander Loth
 - Tableau Software
 - #data17

Sentiment – Overall

SENTIMENT

by profile

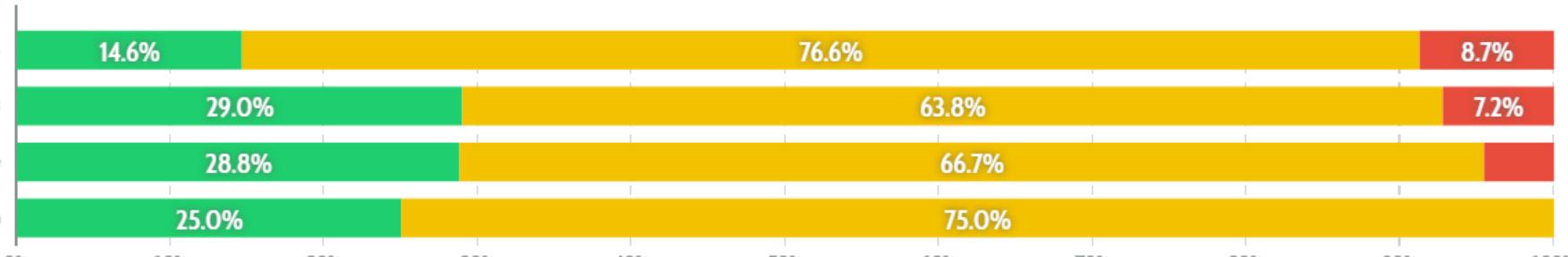
Results 25.1K

#python 14.6% 76.6% 8.7%

CERN 29.0% 63.8% 7.2%

Tableau Software 28.8% 66.7%

Alexander Loth 25.0% 75.0%



0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

31% 5.9% 17.6% Positive Neutral Negative

Sentiment – Tableau Software

Step 5: Apply some Tips to Level Up

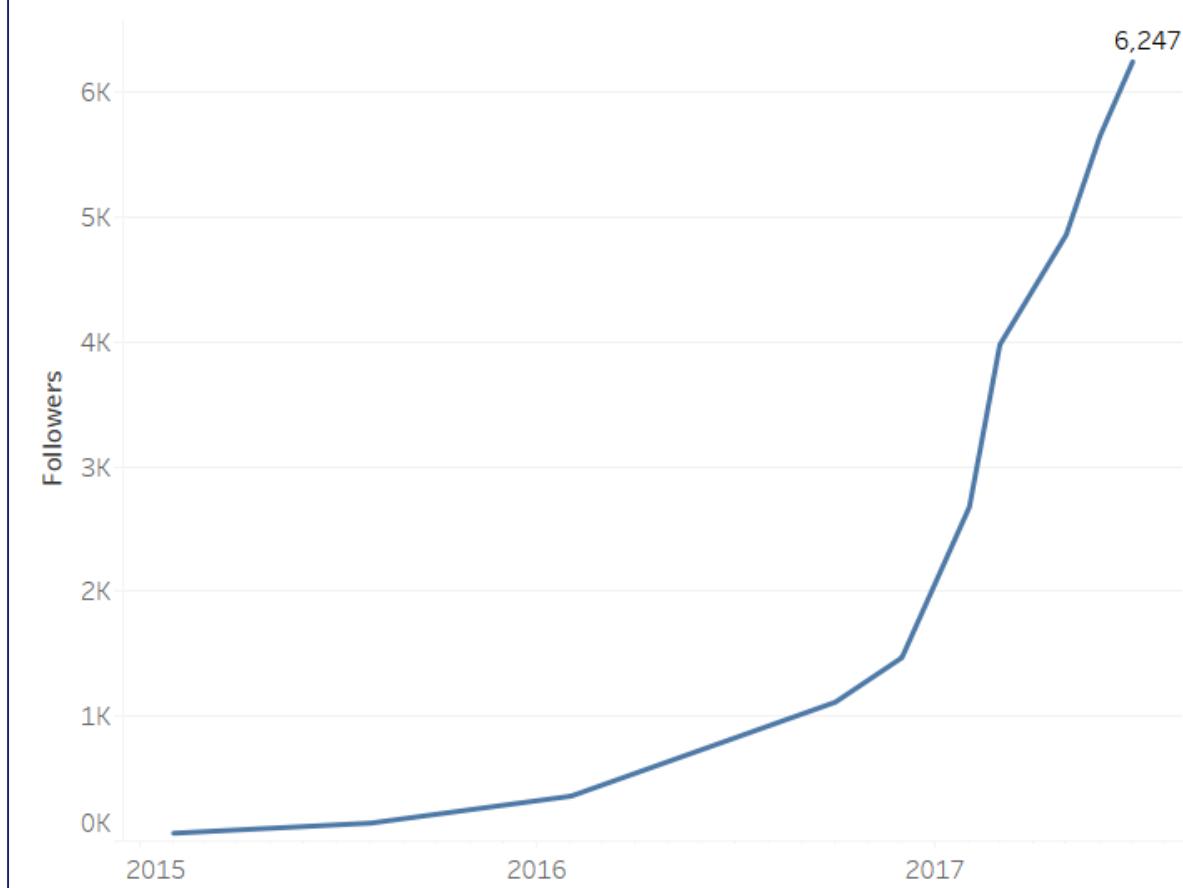


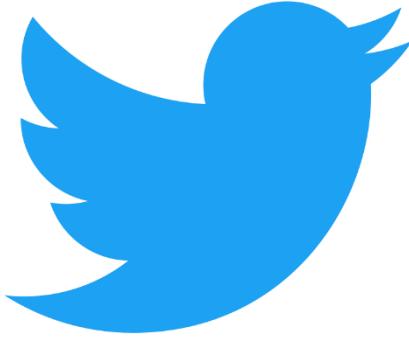
1. Gather Historic Data

Followers @xlth



Followers @xlth





Twitter Stats

TWEETS

605

FOLLOWING

329

FOLLOWERS

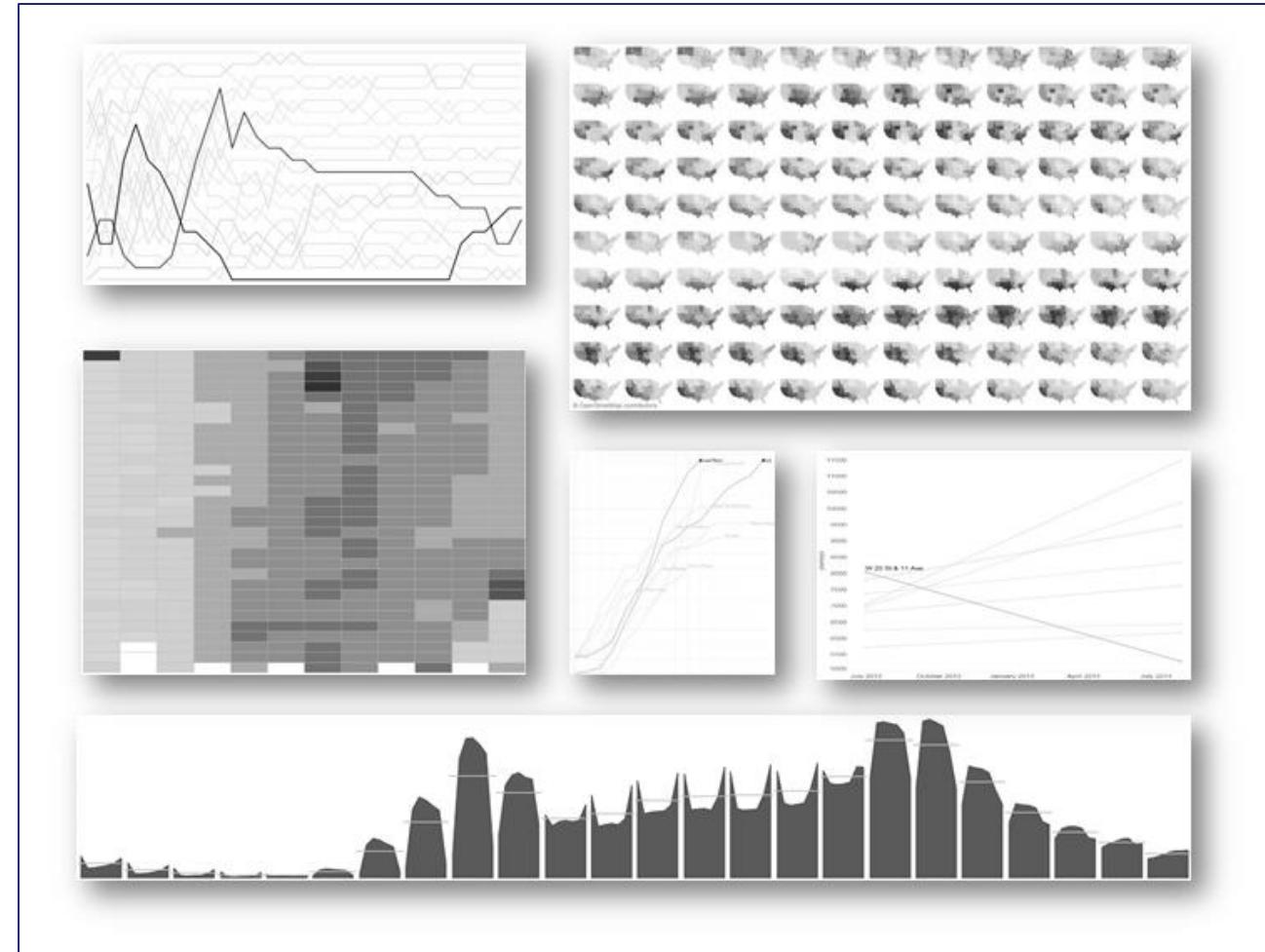
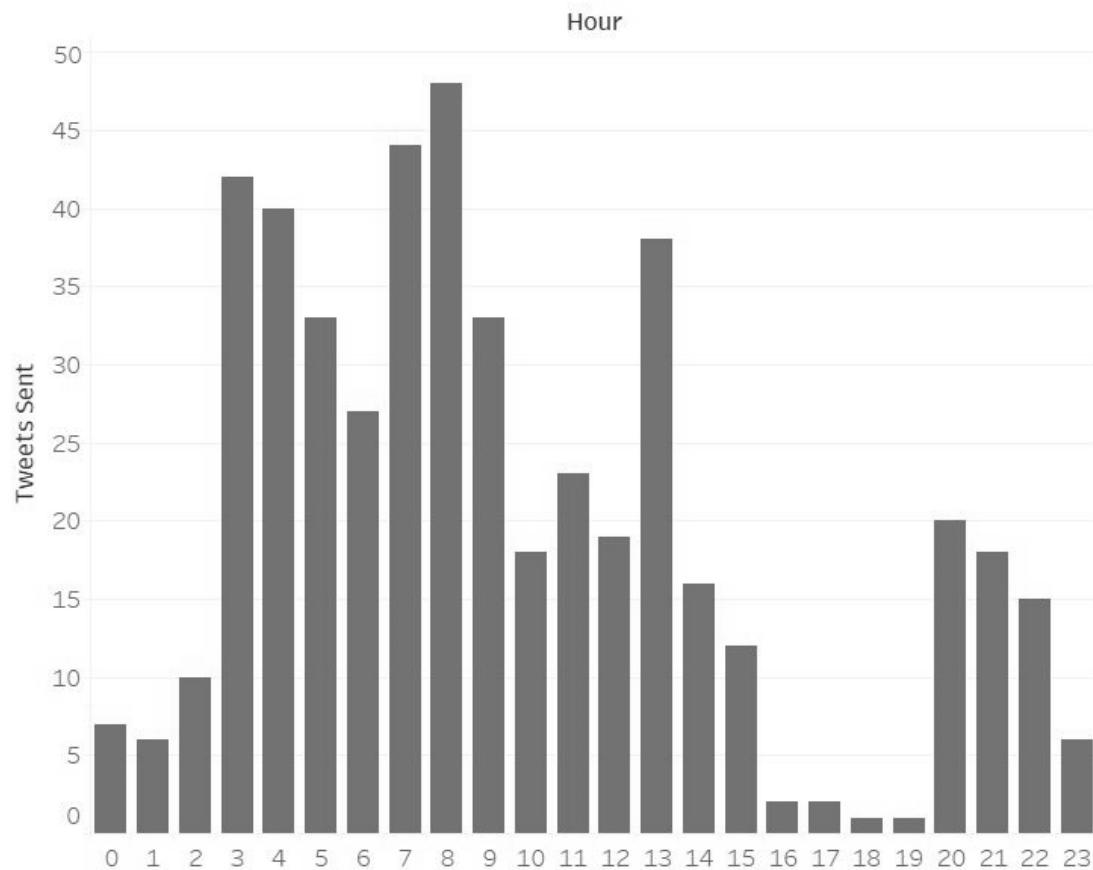
144



	A	B	C	D	E
1	Date	Screen Name	Tweets	Following	Followers
2	July 20, 2015 at 11:45 AM	xlth	603	327	138
3	July 21, 2015 at 11:45 AM	xlth	603	329	140
4	July 22, 2015 at 11:45 AM	xlth	605	329	144

2. It's About Time!

When do we Tweet the most?



3. Be Consistent

Date

Channel

Content

Post type

Impressions, reach, likes, comments, shares, replies

4. Think About Your Words

Small variations can make a difference! Example of A/B testing on Twitter content:



Alexander Loth @xlth · Jun 22

We are looking for #data rockstars to share our vision for #analytics @tableau. Talk to me if you are interested! bit.ly/2slliy



6

12



Alexander Loth @xlth · Jul 7

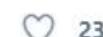
Get hired by @tableau! We are looking for #data rockstars to share our vision for #analytics. Submit your CV today: bit.ly/2sU162Z



1



9



23

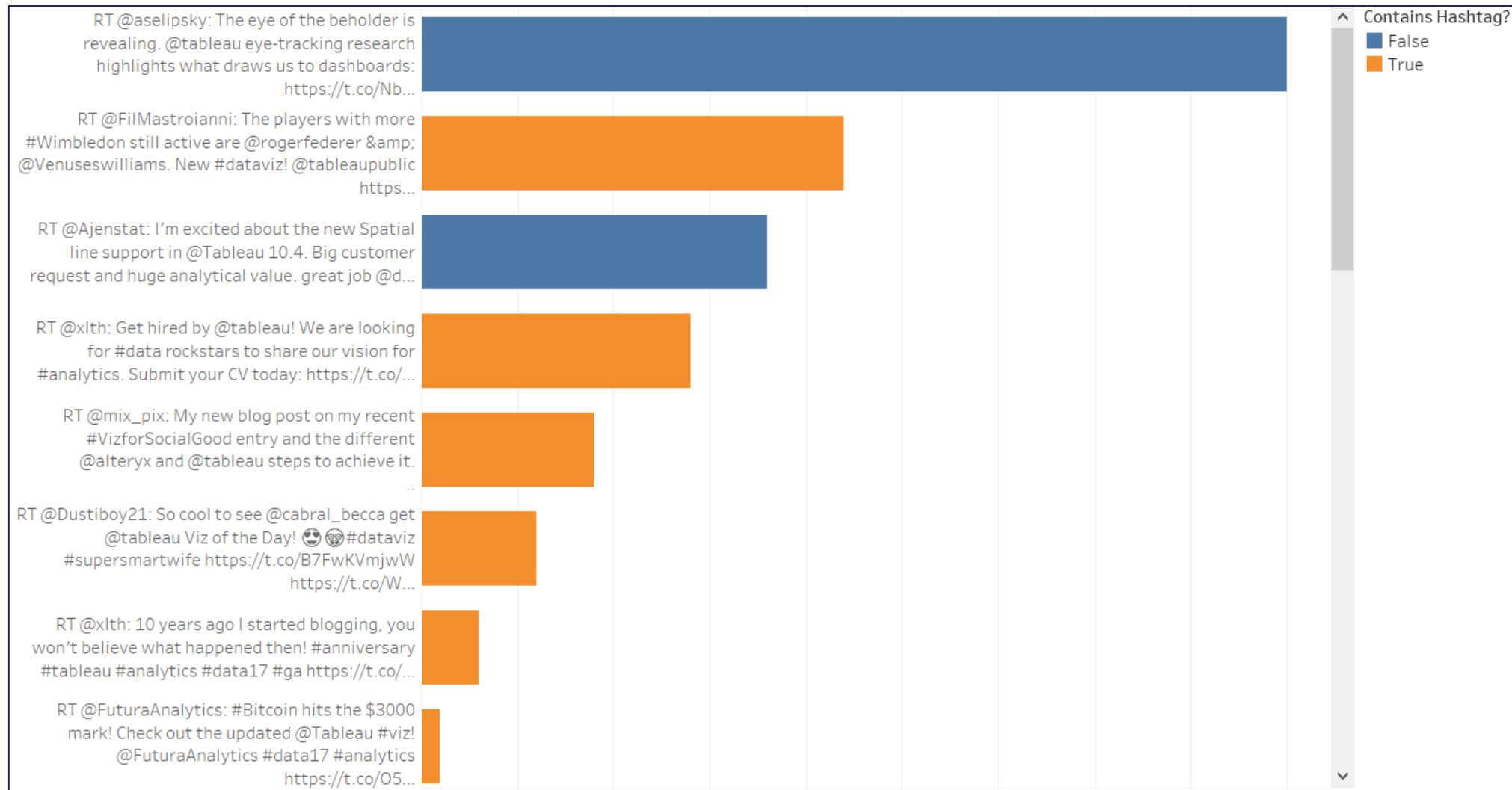


4. Think About Your Words

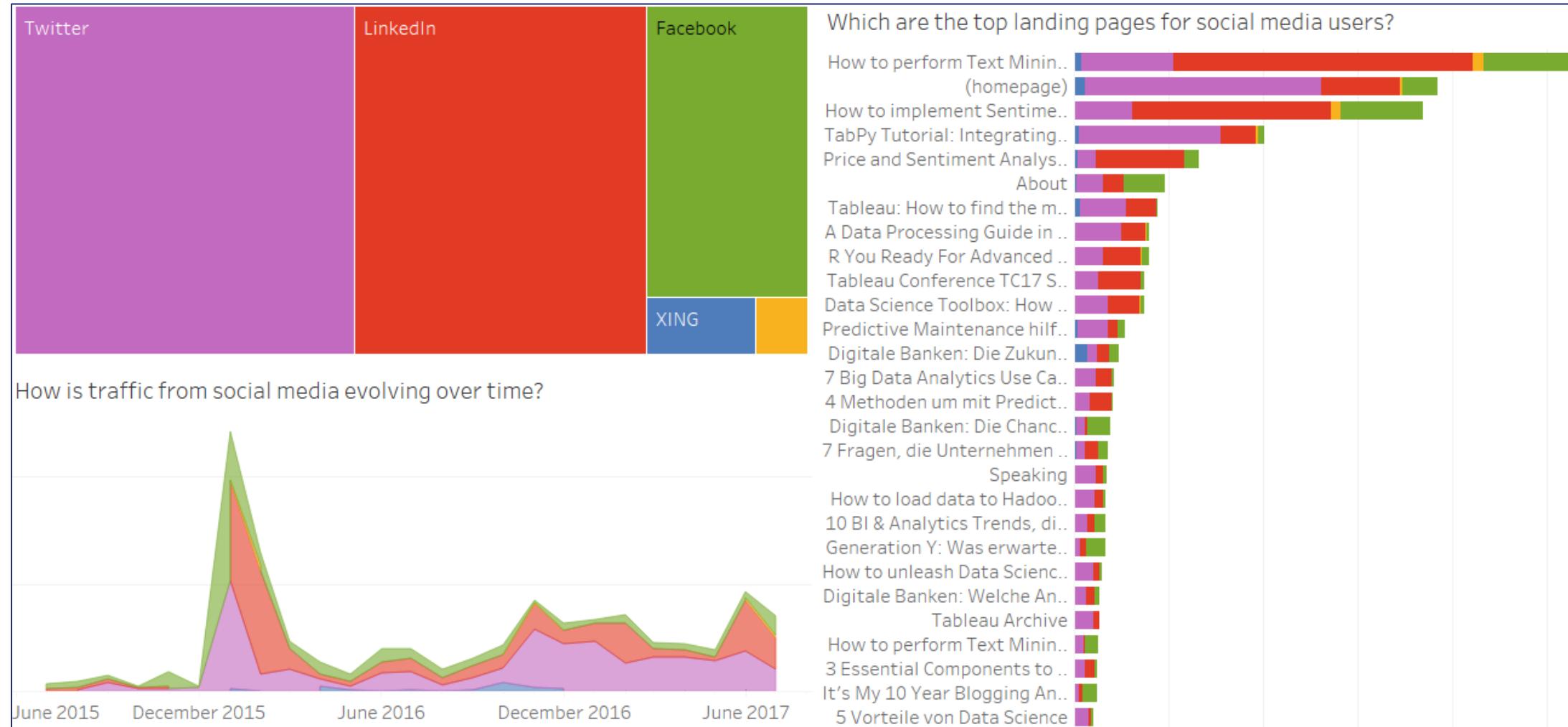
Starting with a Call to Action (CtA) is always a good idea!



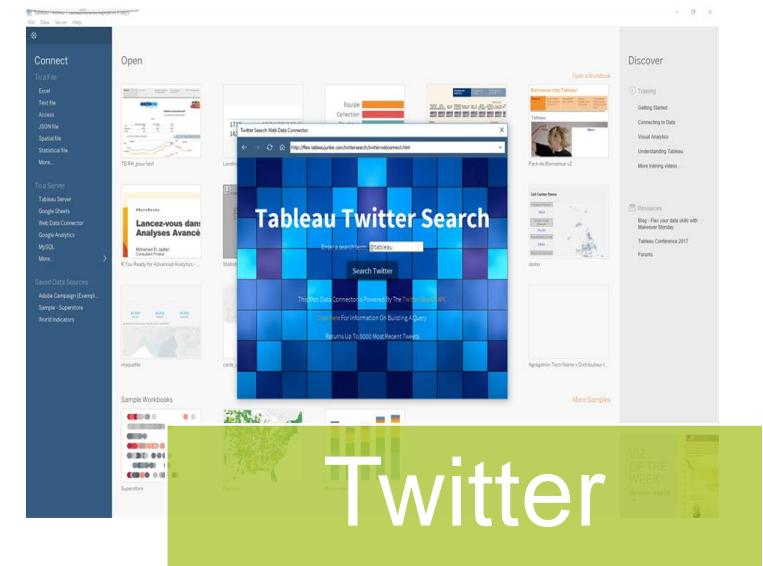
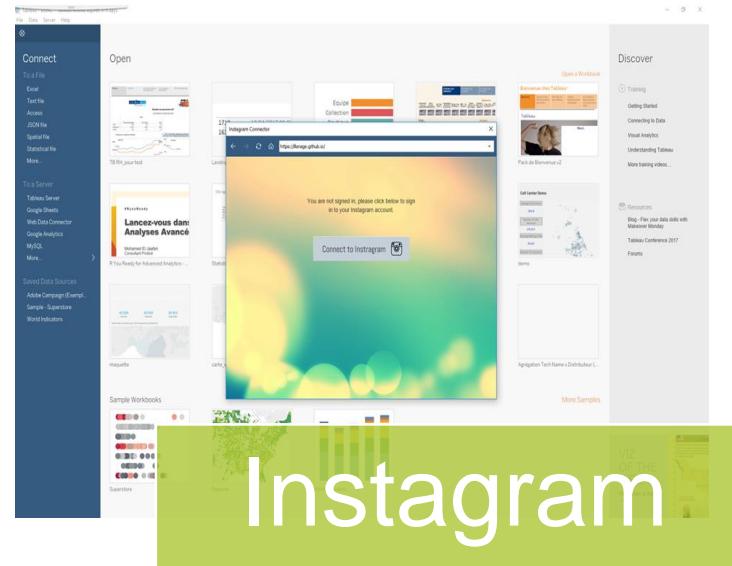
5. Use Logical Calculations



6. Design for Interactivity



7. Use a Web Data Connector: Take Advantage of Our Community



8. Free Your Data!

Projects 13 Workbooks 345 Views 1,646 **Data Sources** 62

▼ 0 selected

	Name	Views: All	Workbooks
<input type="checkbox"/>	Carrier Logistics	38,980	26
<input type="checkbox"/>	Case Reports	35,486	20
<input type="checkbox"/>	Certified by Alex Morozoff For all support case reports	3	16
<input type="checkbox"/>	LAST EXTRACT Today 05:34 AM	20,202	33
<input type="checkbox"/>	Customer Values	20,202	33
<input type="checkbox"/>	Defects Store	51,201	5
<input type="checkbox"/>	Event Leads	36,497	35
<input type="checkbox"/>	Indicators	34,475	26
<input type="checkbox"/>	Network Status	37,611	26

General Filters

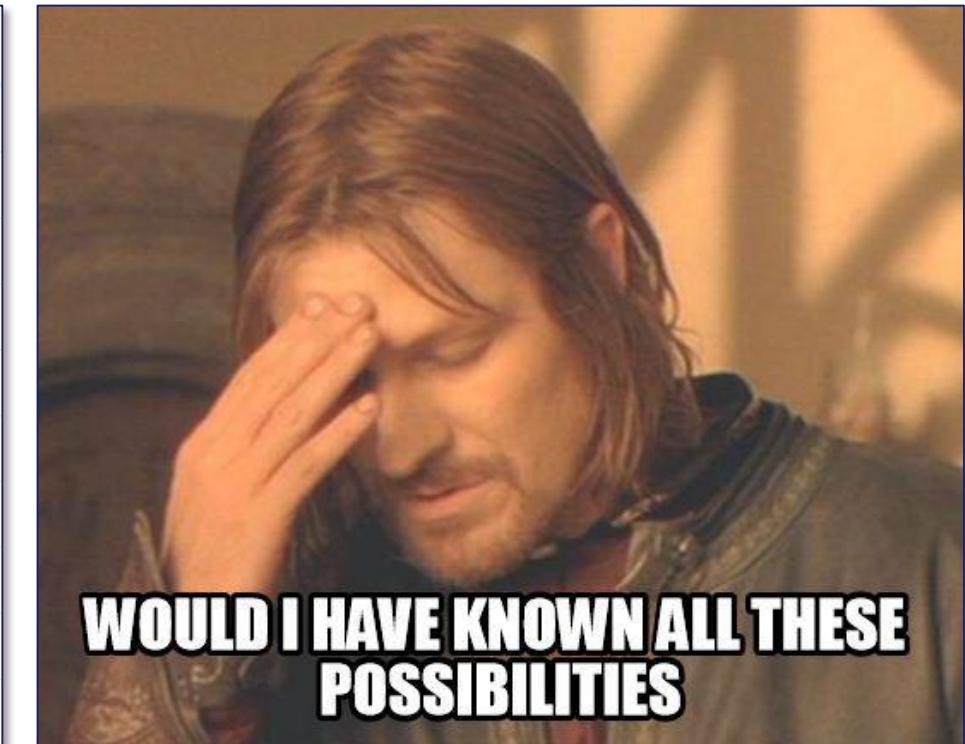
Project

Owner

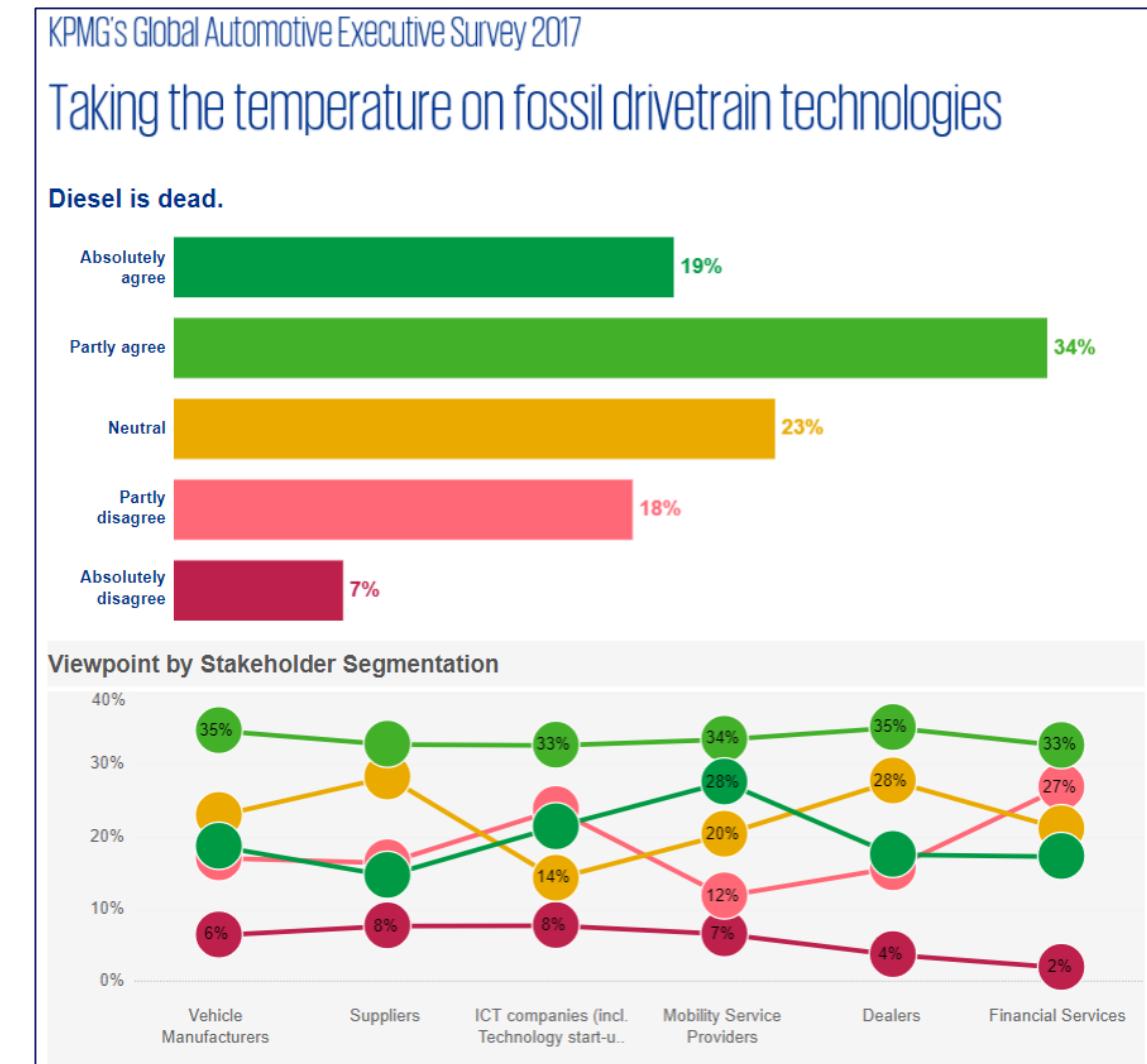
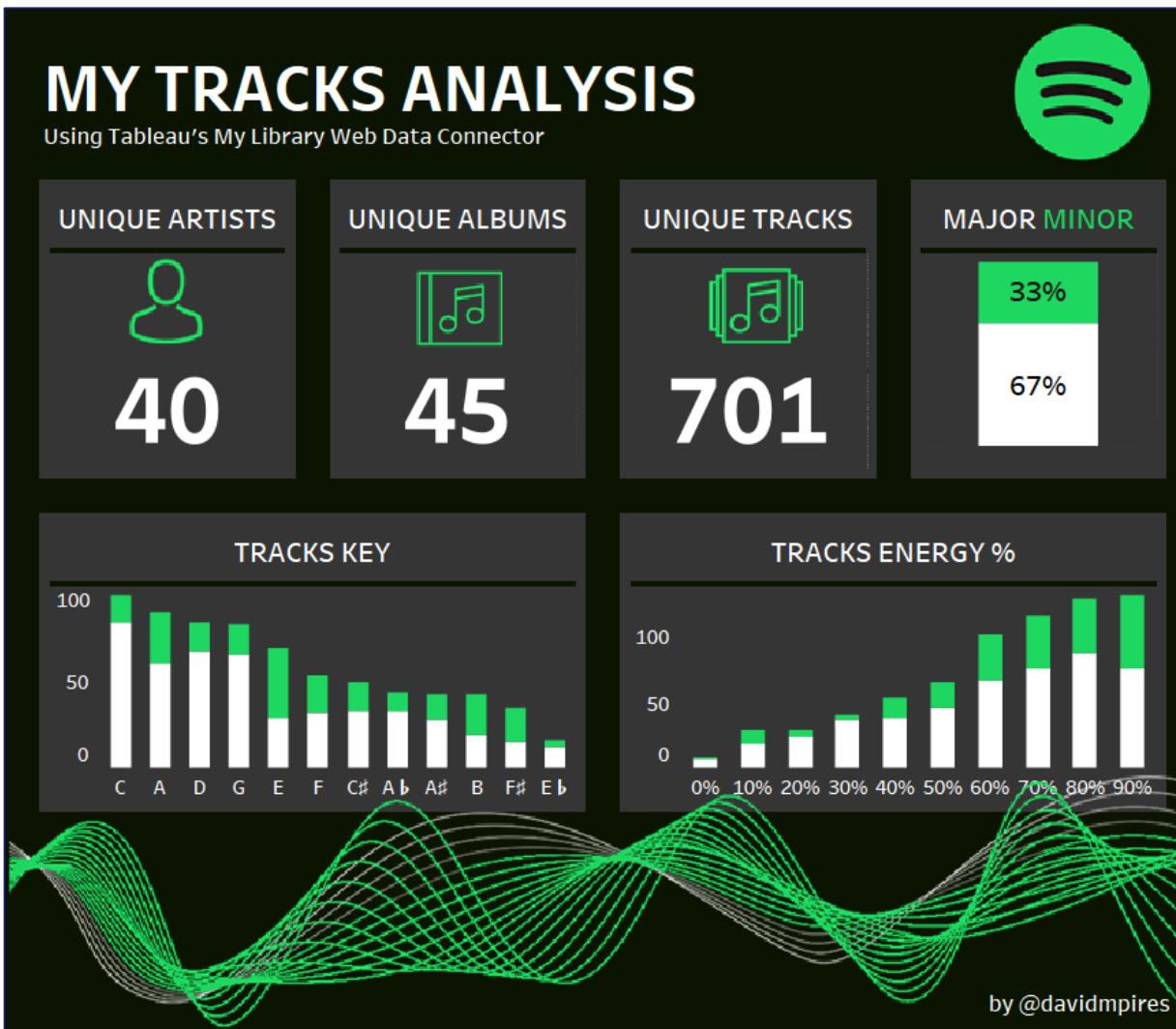
Tag

Modified on or after

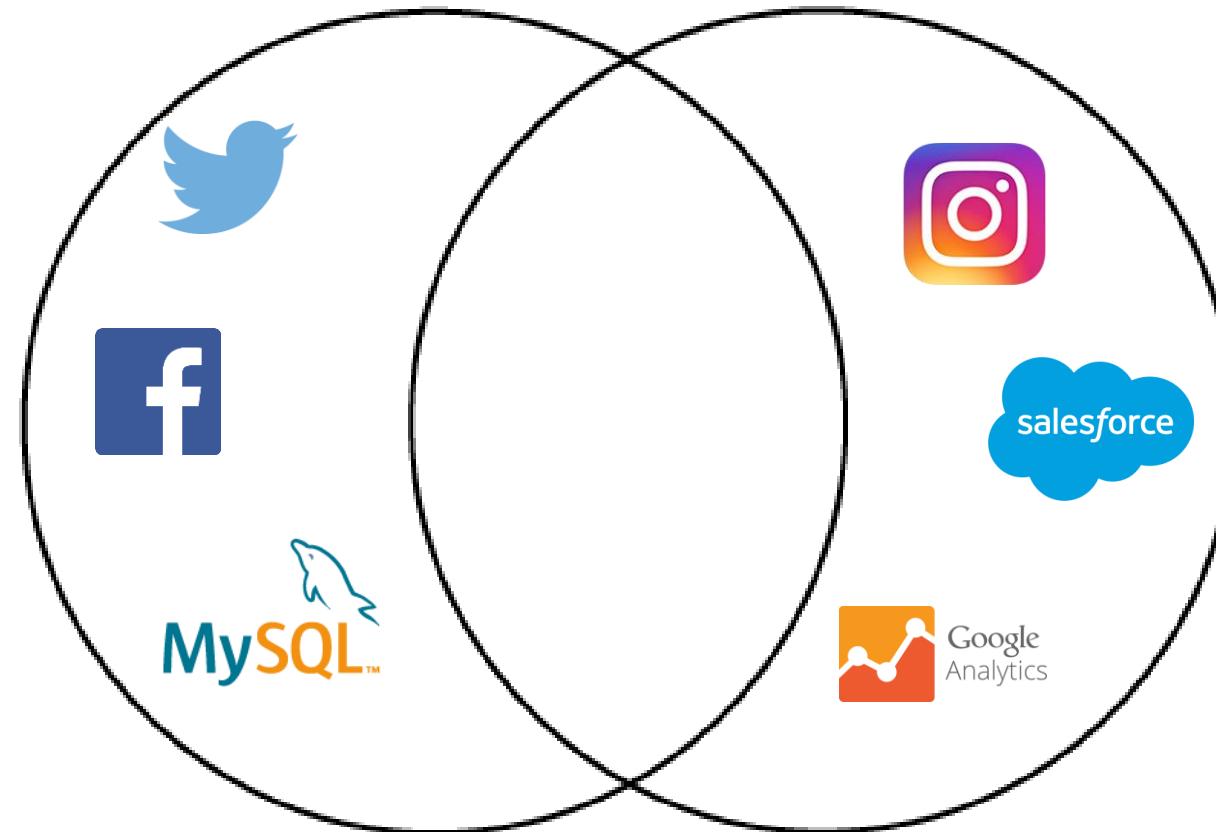
Modified on or before



9. Don't Forget to Localize Your Data



10. Blend and Join Various Data Sources



Step 6: Explore Social Media Listening





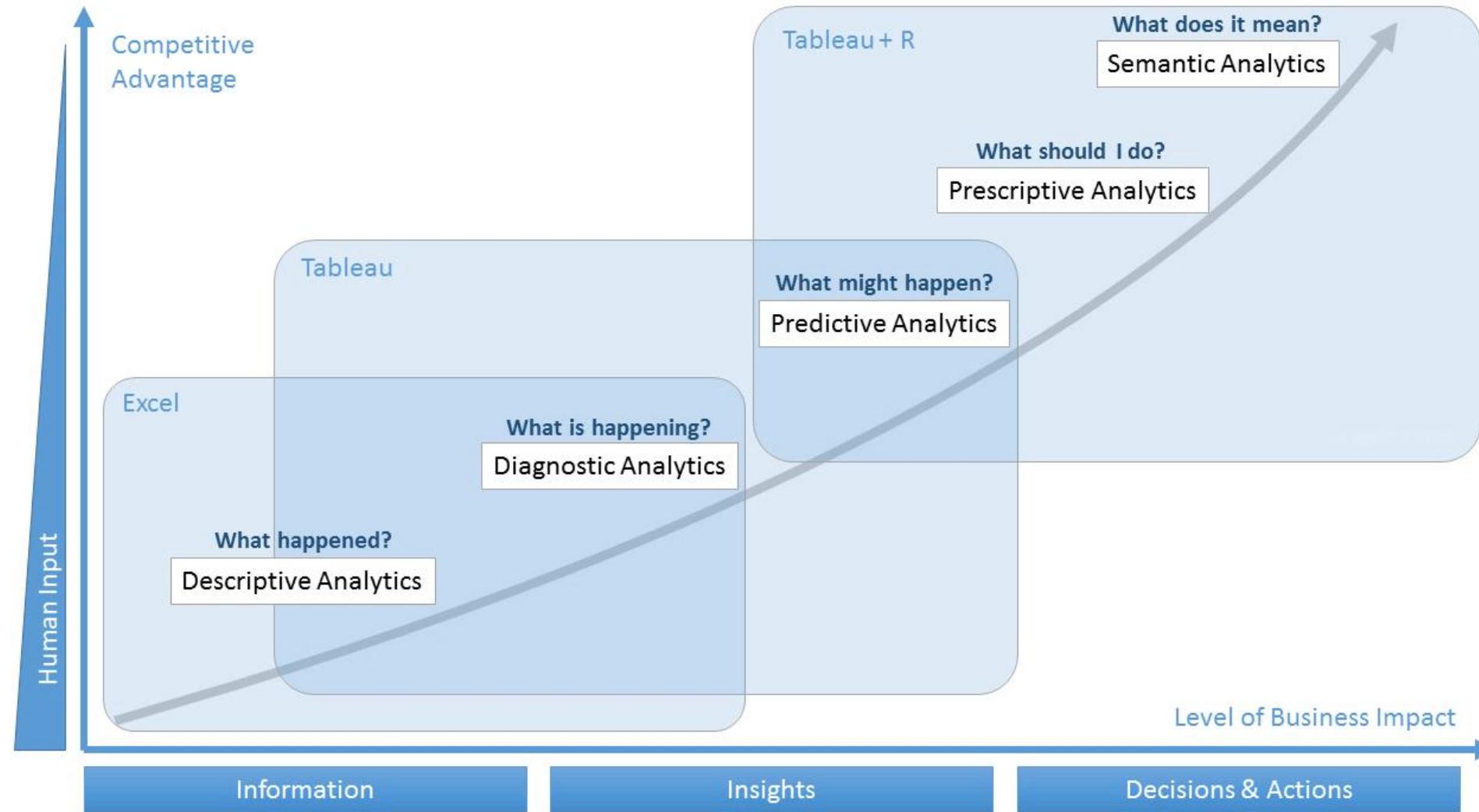
Explore Social Media Listening



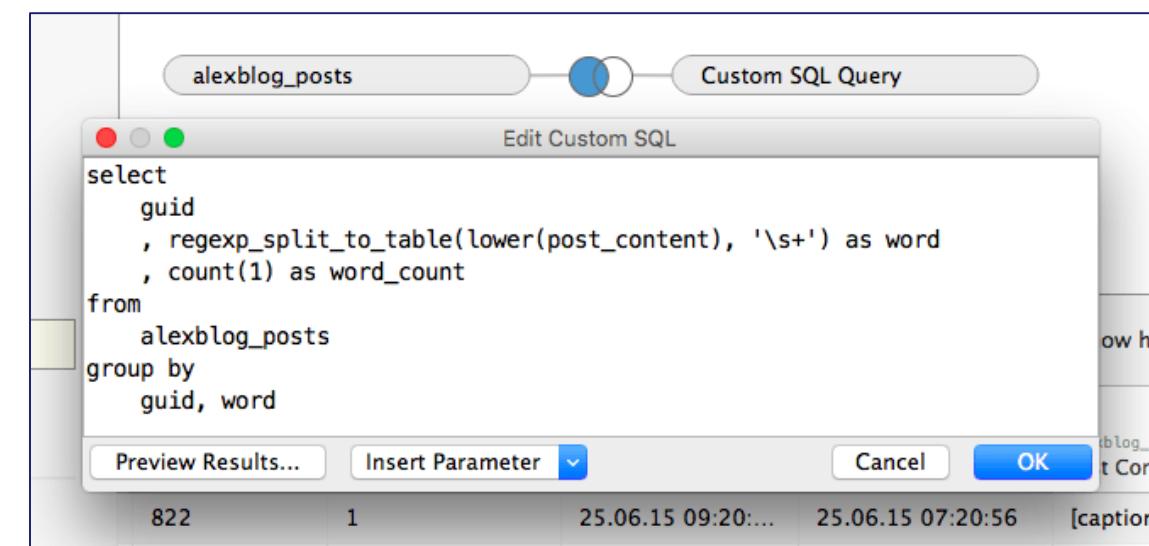
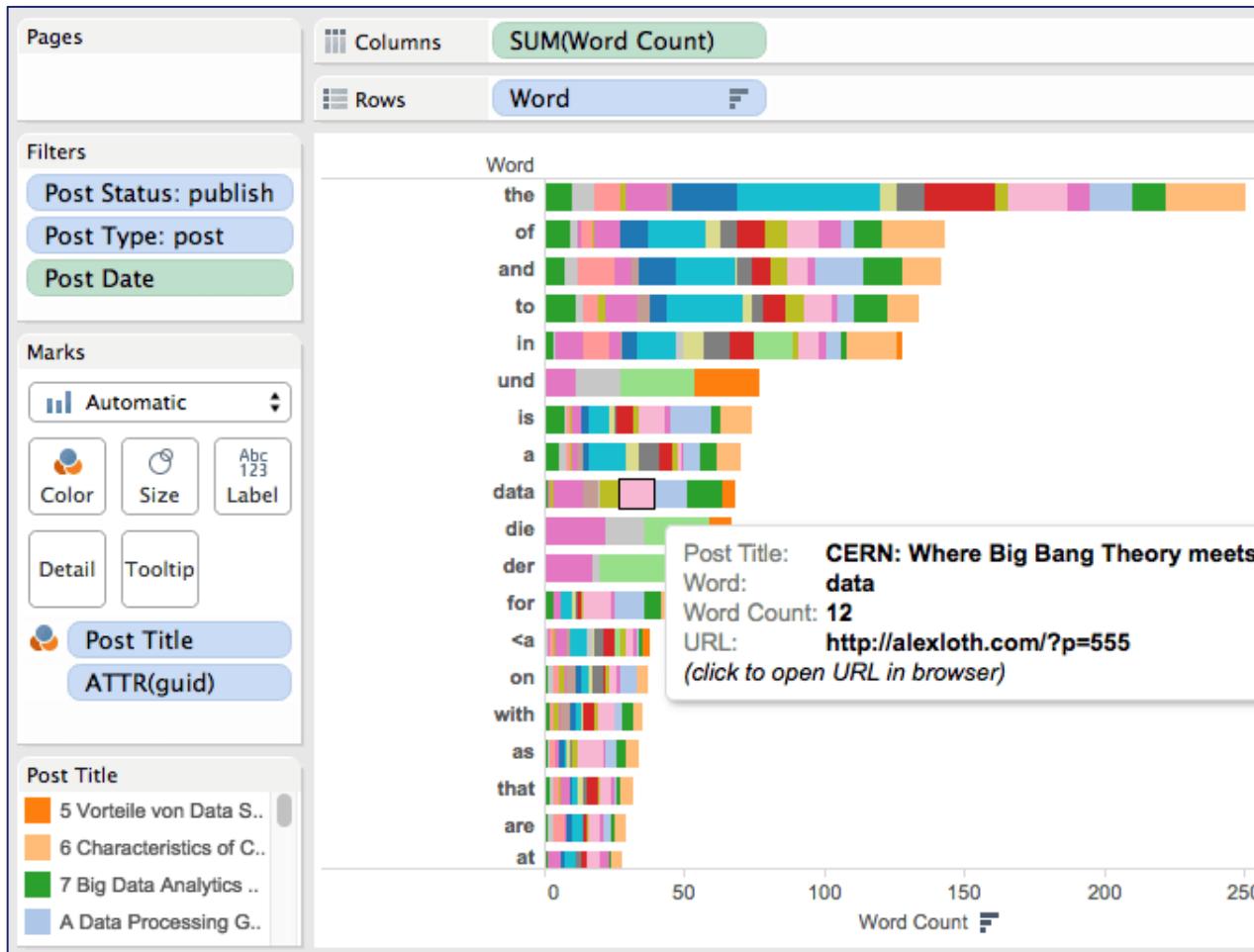
Step 7: Leverage Your Analytics Tool Chain



Leverage Your Analytics Tool Chain



Apply Text Mining



Parse Messages with Regex

Extract URLs in Tableau with Regex:

```
REGEXP_EXTRACT(  
    [Post Message],  
    '(((?:http|https)://(?:[\w_-]  
]+(?:(?:\.[\w_-]  
]+)+))(?:[\w.,@?^=%&:/~+#+  
]*[\w@?^=%&/~+#+])'))'
```

Post Message

10 years ago I started blogging, you won't believe what happened then! #anniversary #tableau #analytics #data17 #ga
<http://bit.ly/2tG8V1I>

Post Message

URL Extract

10 years ago I started blogging, you won't believe what happened then! #anniversary #tableau #analytics #data17 #ga
<http://bit.ly/2tG8V1I>

<http://bit.ly/2tG8V1I>

Use Your R and Python Skills

Unshorten URLs in Tableau with R:

```
SCRIPT_STR('
  newurl <- .arg1
  url <- ""
  while(url != newurl){
    data <- system(toString(paste0("curl -I ", newurl)), intern=T)
    if(sum(grepl("location: ", tolower(data))) == 0){
      url <- newurl
    }else{
      data <- subset(data, tolower(substring(data, 1, 9))=="location:")
      stringurl <- substring(data[1], 11, nchar(data[1])-1)
      if(substring(stringurl, 1, 4)=="http"){
        newurl <- stringurl
      }else{
        url <- newurl
      }
    }
  }
  return(newurl)
',
ATTR([URL Extract]))
```

URL Extract

10 years ago I started blogging, you won't believe what happened then! #anniversary #tableau #analytics #data17 #ga
<http://bit.ly/2tG8V1l>

<http://bit.ly/2tG8V1l>



URL Unshorten

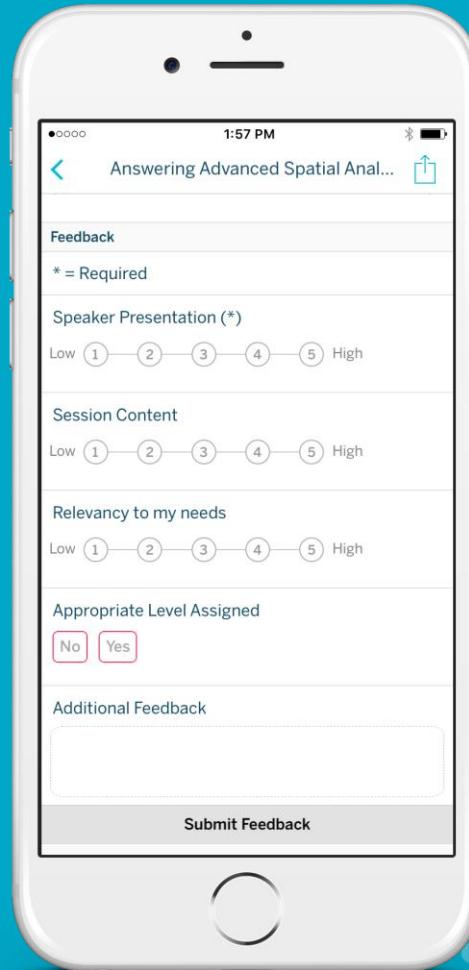
10 years ago I started blogging, you won't believe what happened then! #anniversary #tableau #analytics #data17 #ga
<http://bit.ly/2tG8V1l>

<http://bit.ly/2tG8V1l>

<http://alexloth.com/2017/07/15/my-10-year-blogging-anniversary/>

Let's See this in Tableau!





Please complete the
session survey from the
Session Details screen
in your TC18 app

#TC18

#TableauGetsSocial

@xith

Thank you!

<http://bit.ly/tab-social>

TABLEAU CONFERENCE

