Twitter Analysis Technical Report

vivek

July 27, 2017

Aim: We intend to search for last 5000 tweets , which have referred in one way or another to President Trump and will try to objectively find the sentiments keeping our biases out. Let us see what the sentiments are :

we will load the packages required for this analysis as these have already been installed on local machine.

library(twitteR)  
library(tm)

## Loading required package: NLP

library(tidytext)  
library(ggplot2)

##   
## Attaching package: 'ggplot2'

## The following object is masked from 'package:NLP':  
##   
## annotate

library(stringi)  
library(stringr)  
library(wordcloud)

## Loading required package: RColorBrewer

we will now create a connection to twitter :

source("c:\\vik\\r\\r\\TwitterAnalysis\\twitterconnection.r")

## [1] "Using direct authentication"

Our Analysis will focus on the following :

I. Analysis of the user i.e. we will analyse the twitter handle "POTUS"" used by president Trump initially for when was the acoount setup, how many tweets has he sent as of now, how many retweets has he done, how many friends he has, which locations are the tweets done from and other user related data analysis :

tw\_user\_potus<-getUser(user = "POTUS")

Following are few of the fields available to use:

class(tw\_user\_potus)

## [1] "user"  
## attr(,"package")  
## [1] "twitteR"

str(tw\_user\_potus)

## Reference class 'user' [package "twitteR"] with 18 fields  
## $ description : chr "45th President of the United States of America, @realDonaldTrump. Tweets archived: https://t.co/eVVzoBb3Zr"  
## $ statusesCount : num 949  
## $ followersCount : num 19568347  
## $ favoritesCount : num 57  
## $ friendsCount : num 42  
## $ url : chr "https://t.co/IxLjEB2zlE"  
## $ name : chr "President Trump"  
## $ created : POSIXct[1:1], format: "2017-01-19 22:54:28"  
## $ protected : logi FALSE  
## $ verified : logi TRUE  
## $ screenName : chr "POTUS"  
## $ location : chr "Washington, D.C."  
## $ lang : chr "en"  
## $ id : chr "822215679726100480"  
## $ lastStatus :Reference class 'status' [package "twitteR"] with 17 fields  
## ..$ text : chr "RT @realDonaldTrump: Join me live as we recognize the first responders to the June 14th shooting involving @SteveScalise. #Team"| \_\_truncated\_\_  
## ..$ favorited : logi FALSE  
## ..$ favoriteCount: num 0  
## ..$ replyToSN : chr(0)   
## ..$ created : POSIXct[1:1], format: "2017-07-27 19:10:27"  
## ..$ truncated : logi FALSE  
## ..$ replyToSID : chr(0)   
## ..$ id : chr "890650611439423488"  
## ..$ replyToUID : chr(0)   
## ..$ statusSource : chr "<a href=\"http://twitter.com/download/iphone\" rel=\"nofollow\">Twitter for iPhone</a>"  
## ..$ screenName : chr "Unknown"  
## ..$ retweetCount : num 1428  
## ..$ isRetweet : logi TRUE  
## ..$ retweeted : logi FALSE  
## ..$ longitude : chr(0)   
## ..$ latitude : chr(0)   
## ..$ urls :'data.frame': 0 obs. of 4 variables:  
## .. ..$ url : chr(0)   
## .. ..$ expanded\_url: chr(0)   
## .. ..$ dispaly\_url : chr(0)   
## .. ..$ indices : num(0)   
## ..and 53 methods, of which 39 are possibly relevant:  
## .. getCreated, getFavoriteCount, getFavorited, getId, getIsRetweet,  
## .. getLatitude, getLongitude, getReplyToSID, getReplyToSN,  
## .. getReplyToUID, getRetweetCount, getRetweeted, getRetweeters,  
## .. getRetweets, getScreenName, getStatusSource, getText, getTruncated,  
## .. getUrls, initialize, setCreated, setFavoriteCount, setFavorited,  
## .. setId, setIsRetweet, setLatitude, setLongitude, setReplyToSID,  
## .. setReplyToSN, setReplyToUID, setRetweetCount, setRetweeted,  
## .. setScreenName, setStatusSource, setText, setTruncated, setUrls,  
## .. toDataFrame, toDataFrame#twitterObj  
## $ listedCount : num 14664  
## $ followRequestSent: logi FALSE  
## $ profileImageUrl : chr "http://pbs.twimg.com/profile\_images/859982100904148992/hv5soju7\_normal.jpg"  
## and 59 methods, of which 45 are possibly relevant:  
## getCreated, getDescription, getFavorites, getFavoritesCount,  
## getFavouritesCount, getFollowerIDs, getFollowers, getFollowersCount,  
## getFollowRequestSent, getFriendIDs, getFriends, getFriendsCount, getId,  
## getLang, getLastStatus, getListedCount, getLocation, getName,  
## getProfileImageUrl, getProtected, getScreenName, getStatusesCount,  
## getUrl, getVerified, initialize, setCreated, setDescription,  
## setFavoritesCount, setFollowersCount, setFollowRequestSent,  
## setFriendsCount, setId, setLang, setLastStatus, setListedCount,  
## setLocation, setName, setProfileImageUrl, setProtected, setScreenName,  
## setStatusesCount, setUrl, setVerified, toDataFrame,  
## toDataFrame#twitterObj

Following us the little insight that we got from the user account information :

1. Description on this account is : 45th President of the United States of America, @realDonaldTrump. Tweets archived: <https://t.co/eVVzoBb3Zr>
2. Status Counts are : 949
3. Follower Counts is : 1.956834710^{7}
4. Friends Counts are : 42
5. Account was Created on : 2017-01-19 22:54:28
6. favorite counts are : 57
7. Last Status is : :

tw\_user\_potus$lastStatus

## [1] "Unknown: RT @realDonaldTrump: Join me live as we recognize the first responders to the June 14th shooting involving @SteveScalise. #TeamScalise http"

1. Last Status is Retweeted : 1428 times
2. The no. of lists he is in : 1.466410^{4}

II . Twitter Analysis and word Cloud :

Our second task is to get the insight into two kinds of twitter messages. First is the analysis of twitter messages in which "trump" word appears i.e the insights of what people are tweeting with word "Trump" in it . Second will be tweets that are sent by official " POTUS" account. This we are doing to find out that the sentiments conveyed by Trump and sentiments of the people are in sync or not.

II-a. Collection of last 5000 tweets about "trump"

tw\_trump\_search <- searchTwitter(searchString = "trump",n = 5000,lang = "en")  
head(tw\_trump\_search)

## [[1]]  
## [1] "Jeff2Serenity: RT @MichaelSkolnik: 61 days of protecting Melania living in Trump Tower cost more than the medical services for all 15,000 transgender memb"  
##   
## [[2]]  
## [1] "Hehe24Small: RT @ColinKahl: White House fires Derek Harvey. \"McMaster wanted his own guy.\" https://t.co/tjXMYOmuMI"  
##   
## [[3]]  
## [1] "cbear032: RT @eternalkerri: Seriously. \n\nTrump can suck the Iraqi sand off my transgender veteran cock."  
##   
## [[4]]  
## [1] "oliviadrakee: RT @jk\_rowling: Truly, whom amongst us can forget Trump ordering the killing of bin Laden? Or Obama bragging about barging in on naked beau"  
##   
## [[5]]  
## [1] "KariannHart: RT @politicususa: From @PoliticusSarah Trump WH claims historic accomplishment in first 100 days. Yeah, historic shame. #100DaysOfShame"  
##   
## [[6]]  
## [1] "Taoresias: RT @washingtonpost: Trump administration is sitting on tens of thousands of student debt forgiveness claims https://t.co/EBOL580zYp"

II-b. Collection of last 5000 tweets from handle "POTUS"

tw\_POTUS\_search <- searchTwitter(searchString = "@potus",n = 5000,lang = "en")