Text Mining with Twitter APIs

Group Members: Peter Brito, Reema Ratnani, Deepika Chaudhary, Neha Talwar

Why Twitter Data?

- Popular Microblogging Site
- 240+ million active users
- 500 million tweets are generated everyday
- Twitter audience varies from common man to celebrities
- Short text messages of 140 characters
- Tweets are small in length and hence unambiguous
- Users often discuss current affairs and share personal views on various subjects

Why Narendra Modi?

- Current PM and PM candidate for upcoming elections (April-May, 2019) in India.
- No. 8 on World's Most Admired List.
- No. 21 on Twitter's Most Popular.
- 45.4 Million Followers.

Sentiment Analysis: Piece of writing positive, negative or neutral. Deriving the opinion or attitude of a speaker

Getting ready with Twitter APIs

We created a Developer account with Twitter and requested the 4 access key (consumer_key, consumer_secret_key, access_token, access_token_secret).

Since we got approved by Twitter we get started to Mining the data using "#modi" and "modi"(personal account). Link: https://github.com/Piterbrito

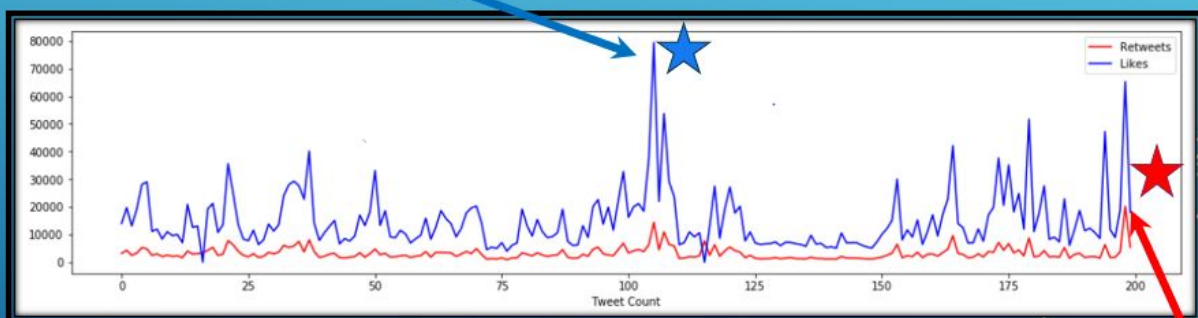# Getting started with the Analysis and Vizualizations

Bar plot about Modis profile that shows a pattern in most of his tweets was 100 to 140 Character length.
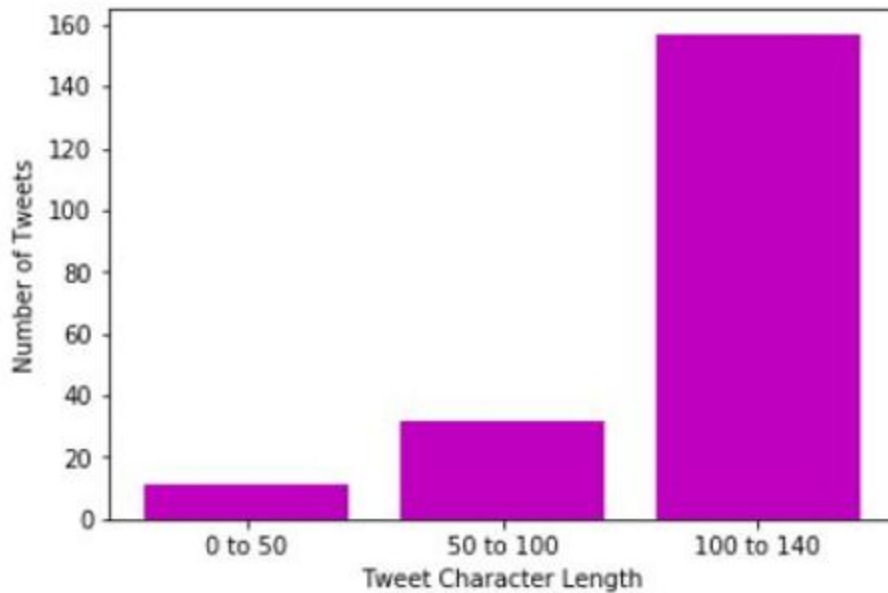
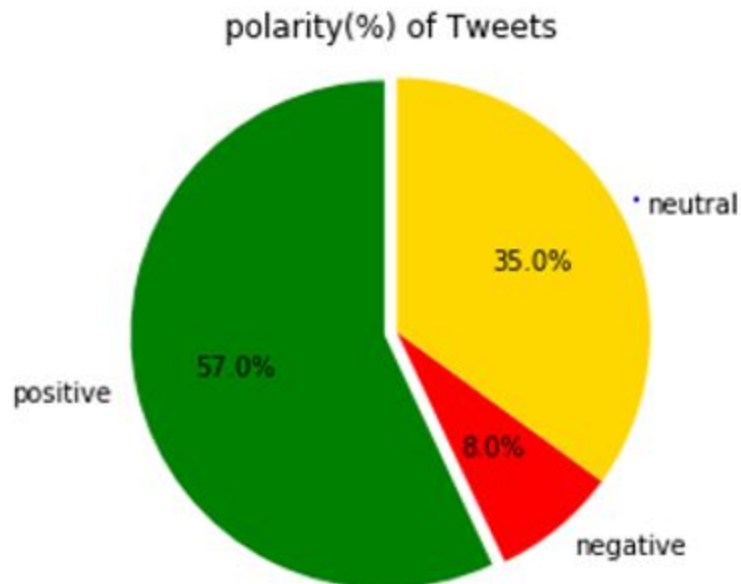Scatter plot that shows #modi Tweets with higher number of Likes/Retuits.

We used **TextBlob** library looping thru our Data Frame to classify the Tweets accordly with sentiment(positive, negative, neutral)

Most of Modi personal accounts Tweets was posted using web, 20% automated tweets, 16% video type of media. Also looks like He uses iOS and Android.
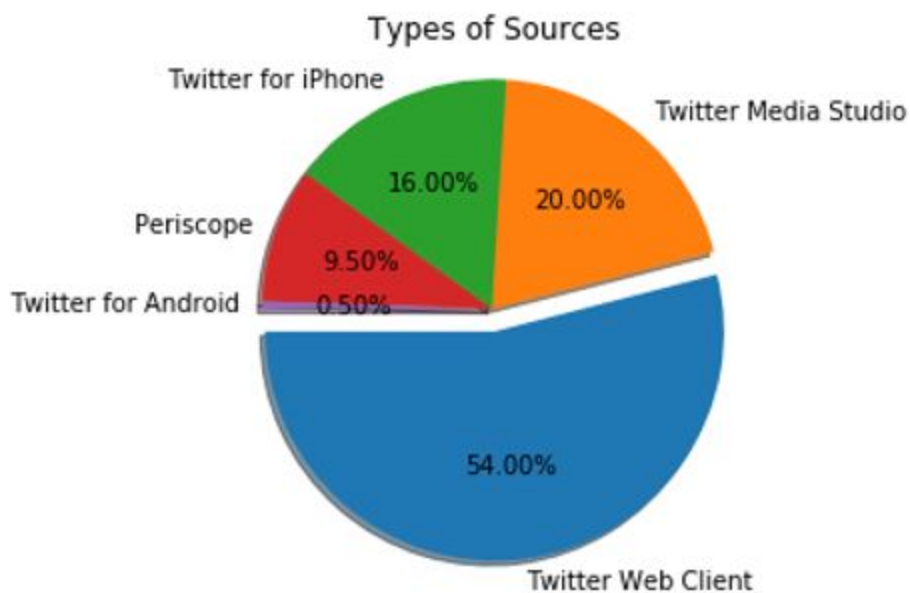
Using the **WouldCloud** library we created the visualization below that shows the most frequently words in his Tweets which is.. (India, people, young, will, thank)

Conclusion:

Based on Modi's Popularity on Twitter, he is front and center in upcoming election

 Only 8% of his tweets has negative sentiment, doing fairly good in writing tweets.

~32% of twitter users have positive sentiment for him.

Roughly 20% of users are against him. This may include the opposition.