Jonghyun Park

Zhi Li

MIS3640

11/12/18

Assignment 2 Report

1. Project Overview

For this assignment, I used to twitter to conduct a sentiment analysis on recently happened Jimmy Butler trade in NBA. The trade happened on November 10th 2018. On this trade, Minnesota Timberwolves traded Jimmy Butler to Philadelphia 76ers in order to receive Robert Convington, Dario Saric and Jerryd Bayless.

By conducting Sentiment analysis on this topic, I wanted to analyze the general public mood about this trade, weather it is on the positive side or negative side. From this assignment, I hope to create the effective analysis on this topic.

2. Implementation

Main two things I installed for this twitter sentiment analysis are tweepy and textblob. Tweepy was installed in order to enable python library to access to Twitter API which is our main source for this assignment. Textblob was installed in order for python library to perform the sentiment analysis on tweets that I fetched. The reason I chose Textblob over other different program was because it was known for sentiment analysis and it was fairly easy to use comparing to other programs.

After I successfully installed these two, I created multiple functions that could leads to successfully sentiment analysis. After I authenticate my keys and token with the authentication code, first thing I did was cleaning text tweet with clean_tweet function. After that, I created

get_tweet_sentiment which uses textblob's for sentiment method. If polarity of the tweet is more than 0, it will be classify as positive. If polarity is equal to 0, tweet will be classify as neutral. If polarity is less than 0, tweet will be classify as negative. Lastly, I created get_tweets function which is the main function to fetch tweets and parse them.

After establish main functions, I worked with code in order to represent data clearly and effectively. As a result, I decided to display percentage of both positive and negative polarity about Jimmy Butler Trade and then display recent five positive and negative tweets. By doing this, people will not only see the percentage for each positive and negative but also check what kind of information they have it for each sides.

3. Results [~2-3 paragraphs + figures/examples] Present what you accomplished:

After I fetched 250 tweets about #Jimmybutlertrade, I came up with this result:

Positive tweets percentage: 22.22222222222222 %

Negative tweets percentage: 11.11111111111111 %

From this result, we can see around 22% was positive while 11% was negative. This implies that rest of the tweets, which is about 67%, are neutral. This signifies most of the people have neither positive or negative feeling about the Jimmy butler trade. And from the rest of those neutral people, there are twice more positive people than negative people.

When you look at some positive and negative tweets, following could be found:

Positive side: "Thrilled for Butler to be heading to Philly. Kind of an amazing trade, actually."

Negative side: "Hot take: Philadelphia got worse."

As you can see, I could find many tweets from 76ers fans rather than Timberwolves fans. As I already mentioned there were more people celebrating about Butler coming to Philly as you can see in the positive side tweets. However, some people were very negative about Butler coming to Philly as it can be found in negative side tweets from above.

4. Reflection

It was kind of hard to do very accurate sentiment analysis because some of the tweets that were in either positive or negative were advertising tweets. This might have decrease the accuracy of the overall sentiment analysis. Other than that, I think my sentiment analysis was pretty clear and accurate. From this assignment, I learned how python could be used to analyze many different kinds of data and by able to use the right program for that data, it is very helpful for programmer to come up with a great result.