

Prediction of 2023 Presidential Election Winner (Using Tweets from Twitter about each candidate for Sentiment Analysis)

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Introduction

Sentiment Analysis



Positive



Negative



Neutral

Forecasting and analysis of election results have gained wide popularity in the field of political methodology, a subfield of political science and political research concerned with the study of quantitative and qualitative approaches used to understand politics and political systems.

Sentiment Analysis is the computationally identifying and categorizing opinions expressed in a piece of text, especially to determine whether the writer's attitude towards a particular topic, product, etc. is positive, negative, or neutral.

Sentiment analysis has been used to predict the opinions of the citizens on the US election using Twitter data. The authors used 17,000 tweets to train their model (Naïve Bayes) and the model achieved less than 60% prediction accuracy by classifying the tweets into positive, negative, neutral, and not-sure and this assisted them in analyzing real-time tweets from the people who gave great insights about public opinions on each candidate.

Raw datasets concerning discourse around Nigeria's 2023 elections from Twitter of about 5000 \times 10 dimensions were collected. Sentiment analysis was performed on the preprocessed dataset.

This analysis has been conducted to understand the national and international opinions on Nigeria's 2023 presidential election using the Twitter dataset. It aims to capture, process, and evaluate public opinion from three main perspectives: sentiment and timeline analysis of the personal accounts of contesting candidates; sentiment and general tweet analysis of the public on the three candidates and sentiment and general tweet analysis of the public on the Nigeria 2023 elections.

Every tweet with political content either contains a neutral, positive, or negative sentiment for or against a party or candidate. The sentiments contained in tweets especially when it is specific to a candidate are not easy to compute with algorithms since emotional expression varies with the personality, region, and cultural background of each person. Since this is an unstructured (unlabelled) dataset, sentiment analysis is often challenging because of the features, context, and semantics peculiarity of each tweet.

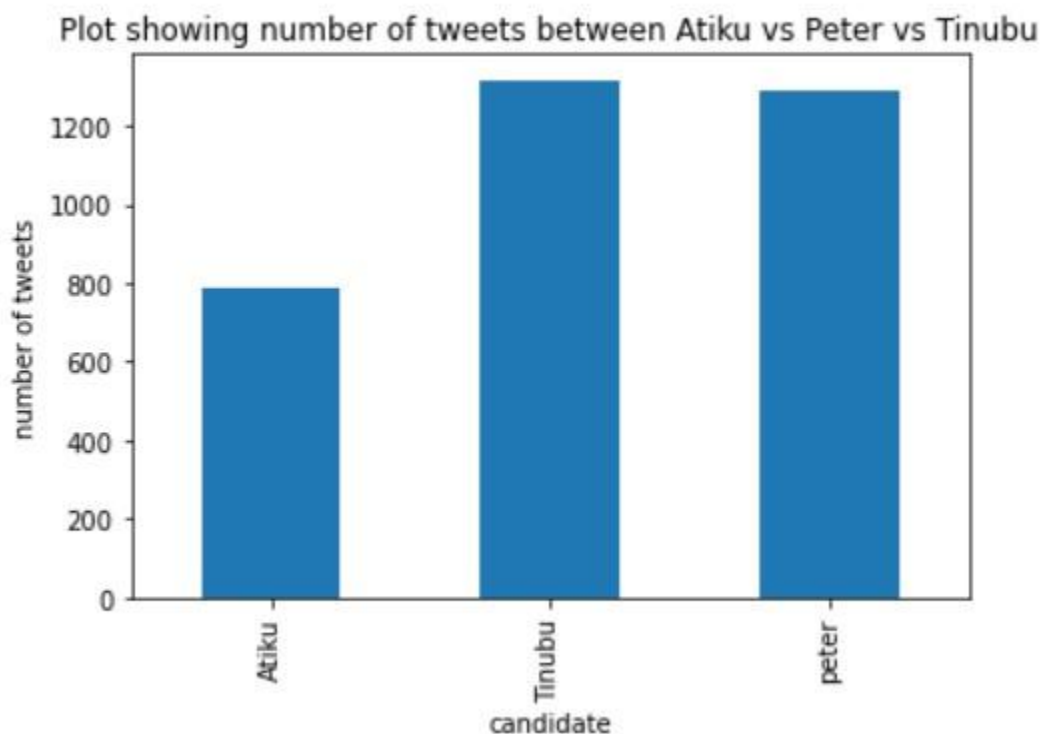
This process started with the identification of tweets, trends, keywords, and hashtags which wholistically represents the discourse around Nigeria's 2023 elections. This is used in a logical structure to scrape tweets from Twitter. The tweets are grouped into the personal tweets of each candidate and the general tweets of the public about the election. The preprocessed dataset was passed into our NLP pipeline to detect

sentiments in the posts which are in turn used to perform analyses and provide insights concerning the election.

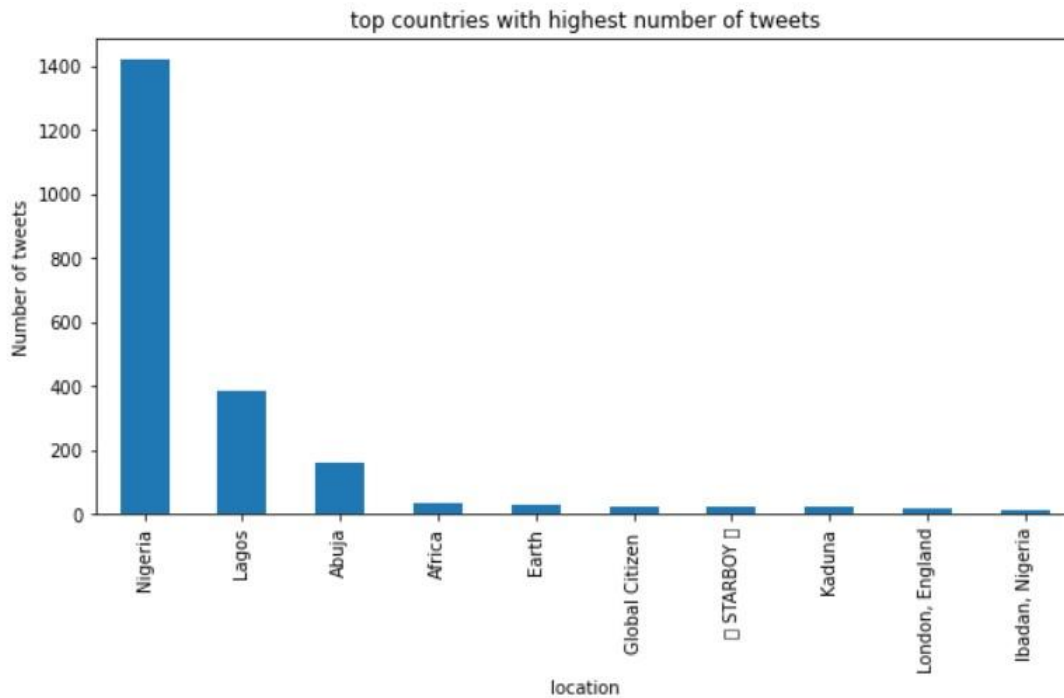
Questions For Insights

- What is the number of tweets received by each candidate?
- What Location has the highest number of Tweets?
- What sentiments were generally related to Peter obis tweets?
- What sentiments were generally related to Atiku's tweet?
- What sentiments were generally related to Tinubu's tweets?
- What are the most common words in relation to Peter Obi?
- What are the most common words in relation to Atiku?
- What are the most common words in relation to Tinubu?

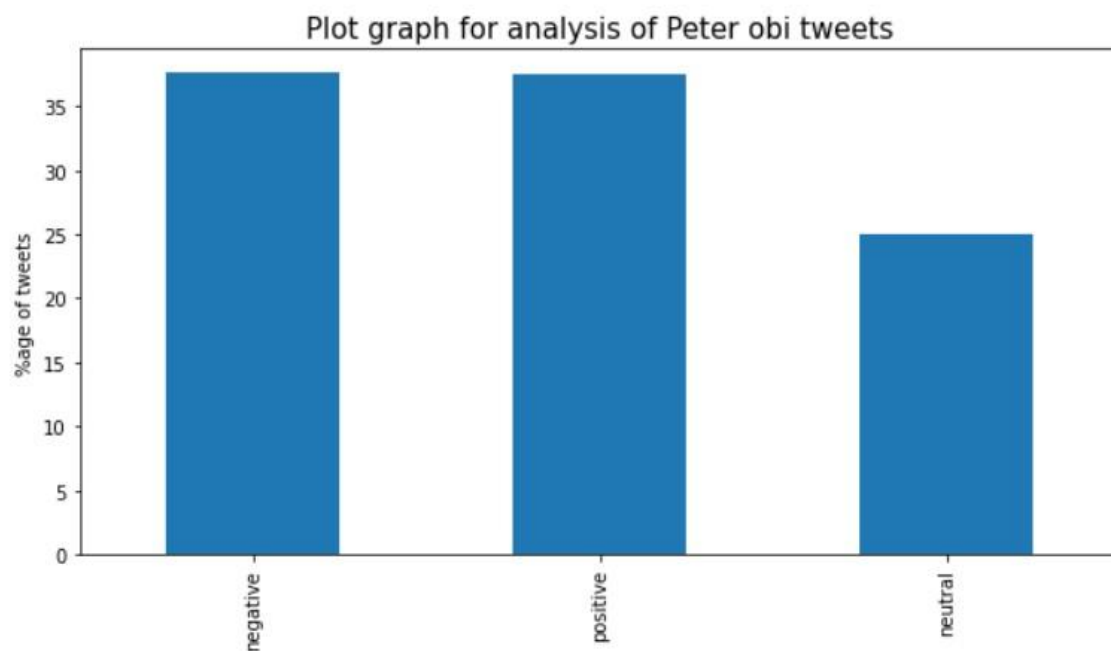
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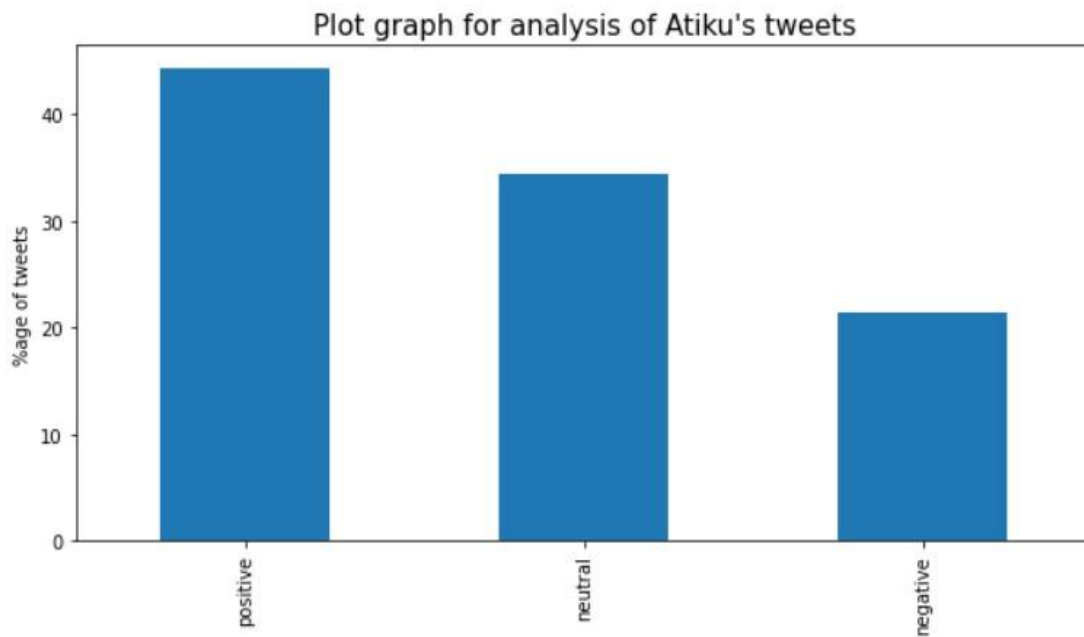
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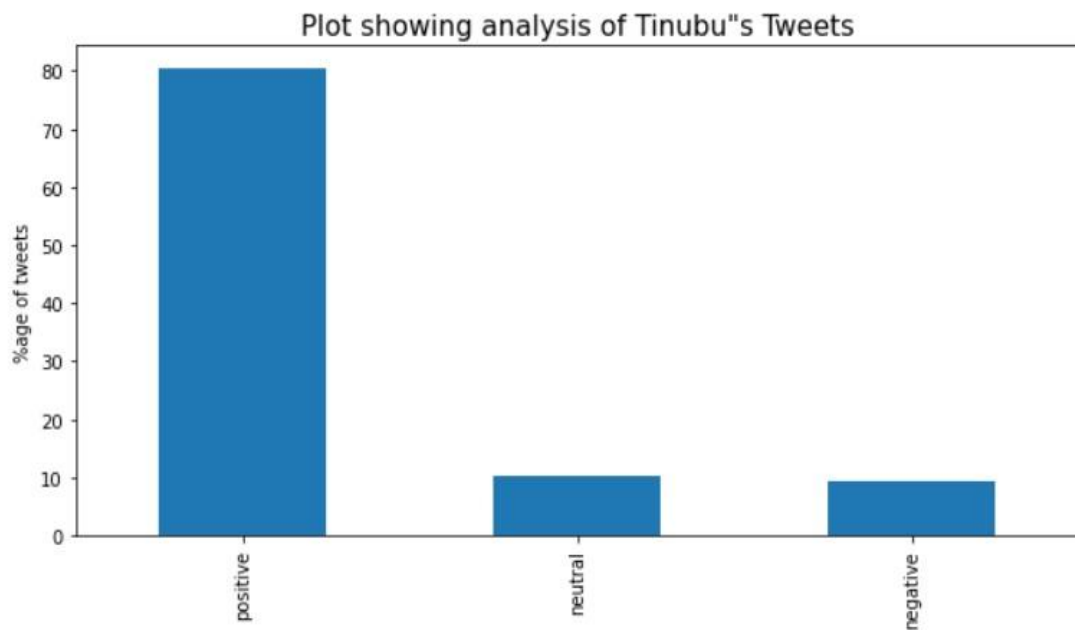
What sentiments were generally related to Peter obi's tweets?



What sentiments were generally related to Atiku's tweet?



What sentiments were generally related to Tinubu's tweets?



What are the most common words in relation to Tinubu?



CONCLUSION

Social media platforms have proven to be excellent tool that gives us opportunities to share thoughts, ideas, and opinions. Due to the upsurge in the number of internet users, social media networks have grown in popularity. As a result, there has been a tremendous increase in the number of tweets from individuals who expressed their opinions about the Nigeria 2023 elections all over the world. Users have shown their personal agitation on this discourse. Finally, it is noteworthy that:

- Tinubu shows the strongest connection with active friends. This is a hidden winning strategy for the presidential election.
- Atiku, although with the most followers, made the least impression on Twitter.
- If Nigeria's 2023 presidential election is a two-horse race then Tinubu and Peter Obi are the real candidates to beat in the forthcoming presidential race.

According to sentiment analysis Tinubu has the upper hand over Atiku and Peter Obi in Nigeria which actually matters in presidential elections.