



## ABSTRACT

The Nigeria's 2023 Presidential Election was eagerly anticipated by its citizens, primarily due to the country's bad state of leadership and governance. This study aims to solve political problems by exploring how Artificial Intelligence (AI), specifically Natural Language Processing (NLP), analyzes people's political choice. NLP was employed to analyze sentiments regarding the top 3 Presidential Candidates in the 2023 election using Twitter data. The results showed sentiment percentages of 51.95% positive, 30.69% neutral, and 17.35% negative. Conclusions were drawn based on the election outcomes, comparing citizens' preferred candidates, and excluding external factors affecting the election process. NLP holds promise for addressing political challenges in Africa.

## INTRODUCTION

Looking at the possibility of a better Nigeria this study aims to explore Nigeria most preferred choice of presidential candidate pre-election by studying the conversations of the citizens of Nigeria from one of the most popularly used social media platform "Twitter". This social media platform provided a rich source of data for this project for these major study which are:

1. Observing Nigerians opinions and sentiment in anticipation to the Presidential election
2. Determining citizens most preferred presidential choice based on tweets made
3. Comparing the research outcome to the final Electoral result to study any discrepancy
4. Utilizing sentiment analysis for future election and seeing if it can be used to mitigate electoral fraud knowing there is already a pointer on the direction of the result.

Disclaimer: This study is not for the prediction of the winner of the 2023 presidential election as there are other factors to be considered to determine that which are not covered in the scope of this research.

## DATA COLLECTION

This study was carried out using Twitter (social media) data basically because of it being a rich source of accessing people opinions across different subject. The dataset was collected using snscraper a library for scraping Twitter data.

Using keywords linked to the election such as the top 3 presidential candidates names, aliases, their political parties and trending hashtags. A total of 58,633 data was collected from 1/January 2022 to 30/July/2022.



## METHODOLOGY

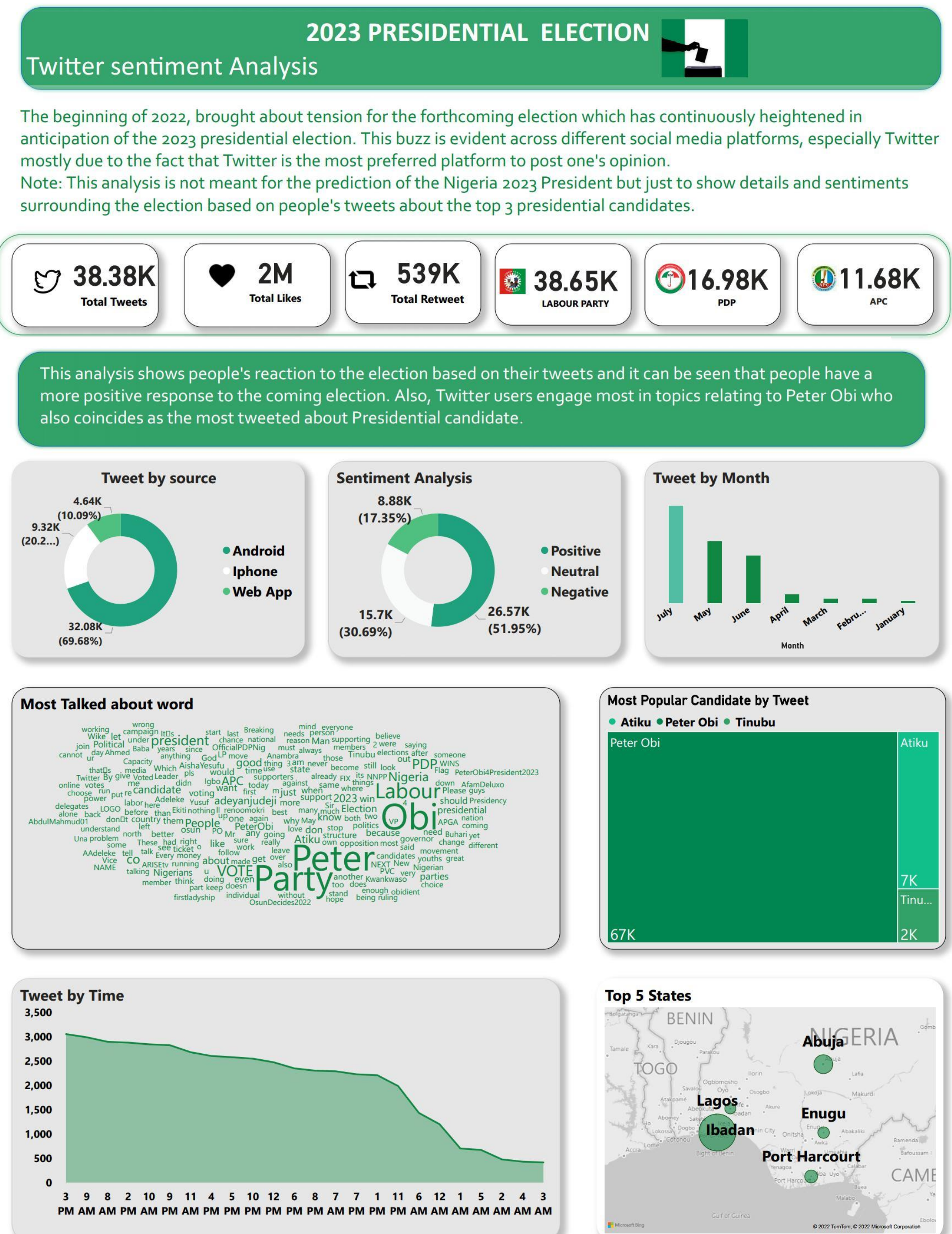
After data collection, the data was preprocessed using the nltk library by converting every words to lower case, removing stop words, lemmatizing and tokenizing the words. The keywords were then labelled for each tweets in the dataset.

The sentiments was derived based on the polarity score for each tweets using the TextBlob library.

The rest of the dataset was analyzed using Power BI a data visualization tool to derive more insights on the data.

## RESULT

The sentiments derived from the polarity of the Tweets was categorized into three which are Positive, Neutral and Negative at 51.95%, 30.69% and 17.35% respectively. This was a reflection on people perception of the election. The result of the analysis carried out in Power BI showed that Peter Obi was the most talked about candidate who had the most opinions expressed about. The political party also talked about mostly was the Labour Party from which Peter Obi is also a part of. The overall result can be seen in the below image.



## CONCLUSION

The outcome of this research points to Peter Obi and his party Labour party being the forerunner of the 2023 Election. Even though this research wasn't aimed at predicting the winner of the Nigeria 2023 Presidential Election this research could serve as a pointer towards the exploration on the use of sentiment analysis to determine the most likely winner of an election and could be used to reduce electoral fraud and look into discrepancies in electoral result.

