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AI IN MARKETING

A CASE STUDY OF THE DREAM CRAZY CAMPAIGN

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CONTENT

INTRODUCTION

Thoroughly analyzing marketing data, especially from social media, has traditionally been one of the most effective methods for gaining a deeper understanding of customers' preferences, behaviors, and overall engagement patterns. These insights empower digital marketers to tailor their strategies more effectively to their target audience.

PROBLEM STATEMENT

As artificial intelligence continues to gain prominence, the digital marketing realm, especially within social media, faces an increasing demand for a streamlined approach to data retrieval, cleaning, and interpretation. It's crucial to have an integrated environment that negates the need for transferring data between software platforms, thereby optimizing time and resource utilization.

SOLUTION

Using the platform X (formerly Twitter), this project showcases a robotic process automation system that facilitates the extraction of tweet data via X's API. It then refines the data based on a user’s preferences and presents an analytical visualization in a comprehensible format. This was tested using Nike's 'Dream Crazy' social media marketing campaign, tasks like data retrieval, cleaning, and interpretation were not only automated but also enhanced in terms of accuracy and efficiency, leading to significant time savings

GOALS AND OBJECTIVES

Perform Automated Text Preprocessing

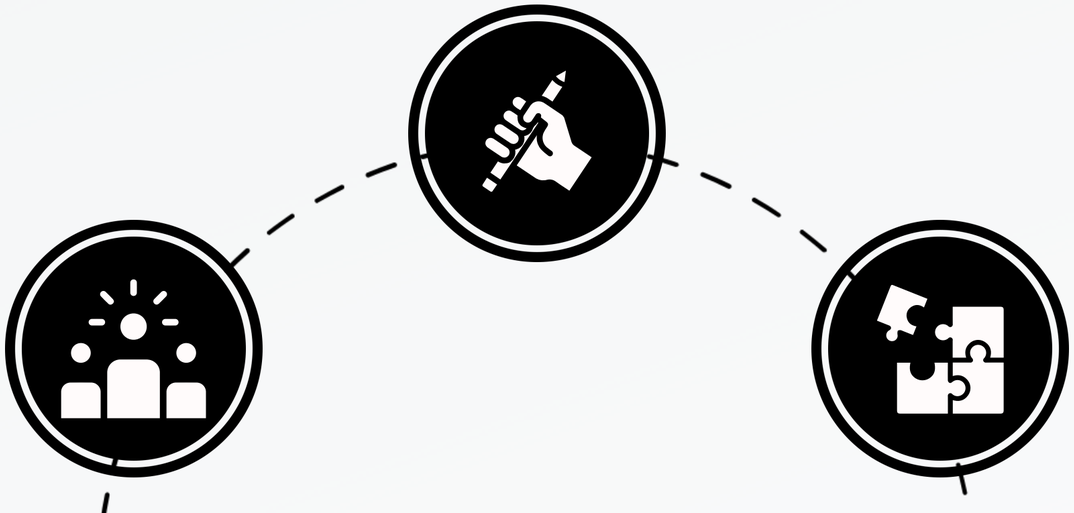
Implement algorithms and tools to automate the pre-processing of tweet data. E.g. tokenization, stemming, and removal of stop words.

Perform Text Analysis on Keywords and Hashtags on Any Tweets Data

Conduct in-depth textual analytics on tweet content, focusing especially on prominent keywords and hashtags. By using advanced data mining techniques, extract meaningful patterns and insights from the vast sea of information present in tweets.

Examine the Performance of 'Dream Crazy' Tweets

Utilize tailored search parameters and analytics tools to pinpoint specific trends and feedback, offering a detailed view of the campaign's online impact.



PAST WORKS

A classification model trained from a Naïve Bayes sentiment model. It was used in classifying tweets between just positive and negative. It was however reported to be less efficient due to the limiting level of tweets with emoticons used.

TWEET CLASSIFIER

Built on a set of models usually base classifiers to develop a new model that yields better result when compared to what a single model can achieve. The performance of this model especially on tweets having fuzzy sentiments proved to be more efficient giving a better percentage value of accuracy, which was way better than that of single models.

FEATURE ENSEMBLE MODEL

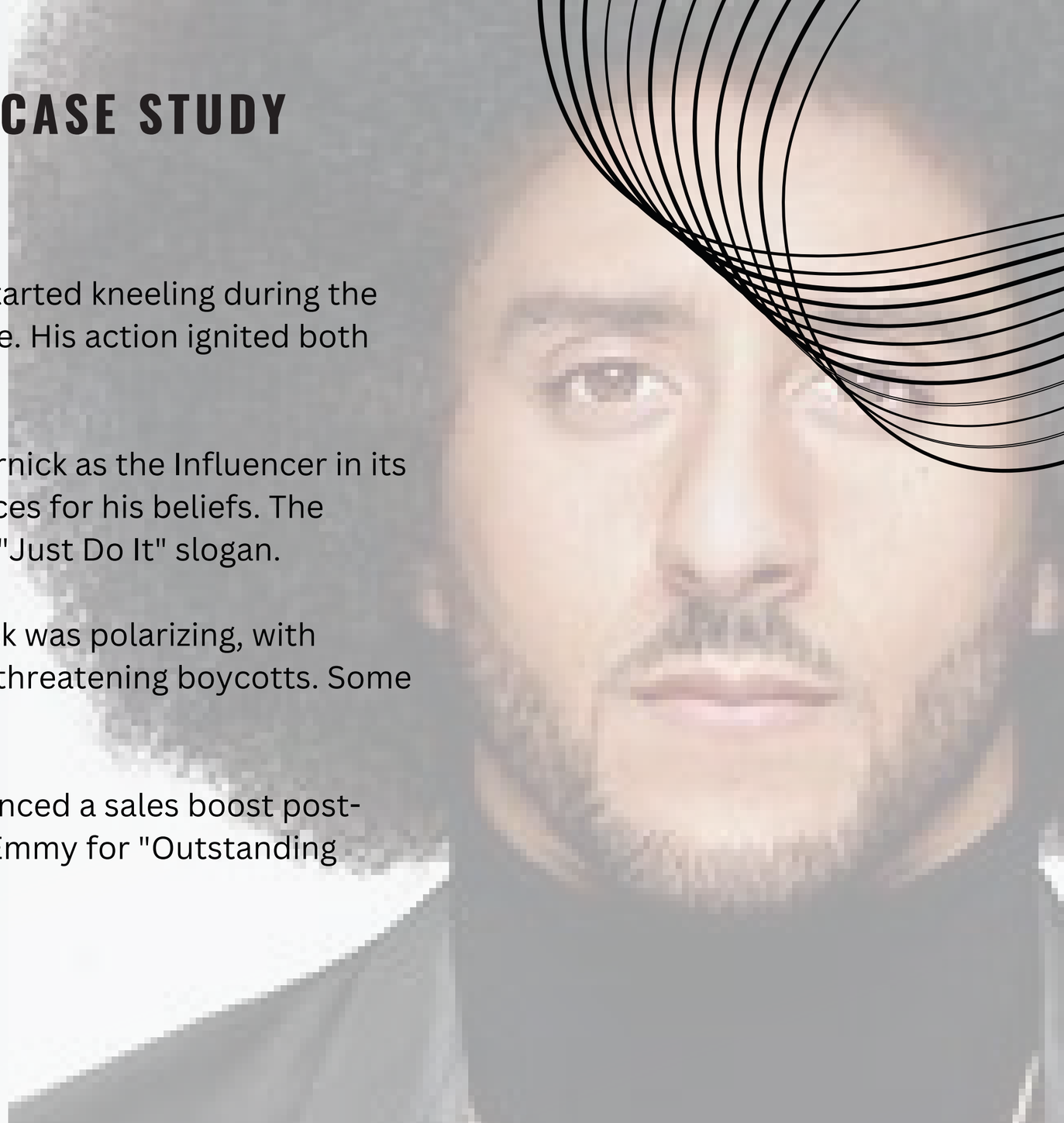
A generic user networking model that was termed a dynamically socialized user networking (DSUN), used to detect and describe implicit and explicit user relationships in a given social context by uniting user topic-aware features and interactional behaviours

SIMILARITY SEARCH

WHAT WAS DONE DIFFERENTLY

Beyond the automated data retrieval process, and the inclusion of a Sentiment Analyzer Tool that analyses each tweet, the DashApp feature offers enhanced interactivity for various visualizations and further streamlining of the dataset. Users can manipulate, zoom, and adjust these charts for a tailored view. For added convenience, an integrated chatbot—trained automatically on the fetched dataset—allows users to pose questions relevant to the data and receive immediate answers.

BRIEF BACKGROUND OF THE CASE STUDY



Colin Kaepernick's Protest: Colin Kaepernick started kneeling during the national anthem in 2016 to protest racial injustice. His action ignited both admiration and controversy across the U.S.

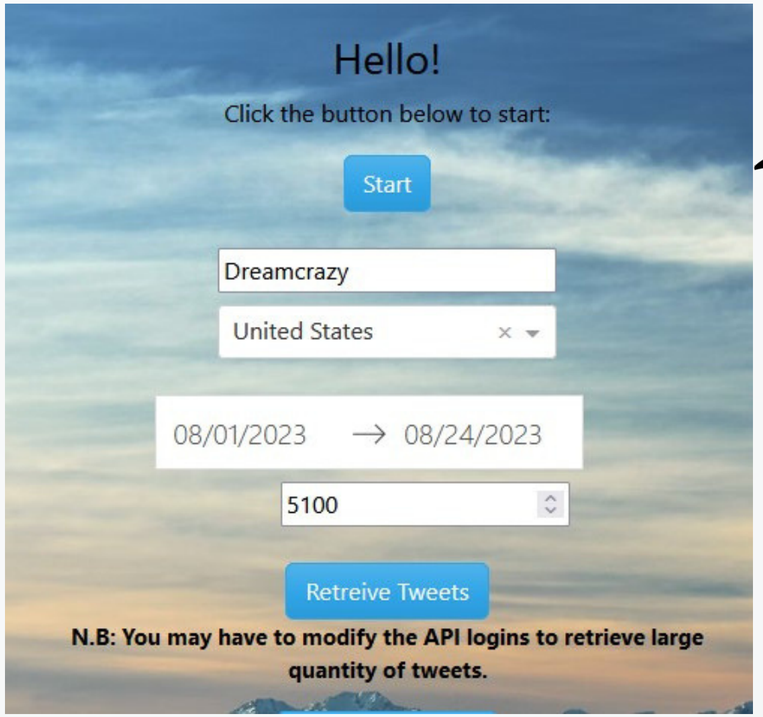
Nike's Campaign: In 2018, Nike featured Kaepernick as the Influencer in its "Dream Crazy" campaign, emphasizing his sacrifices for his beliefs. The campaign marked the 30th anniversary of Nike's "Just Do It" slogan.

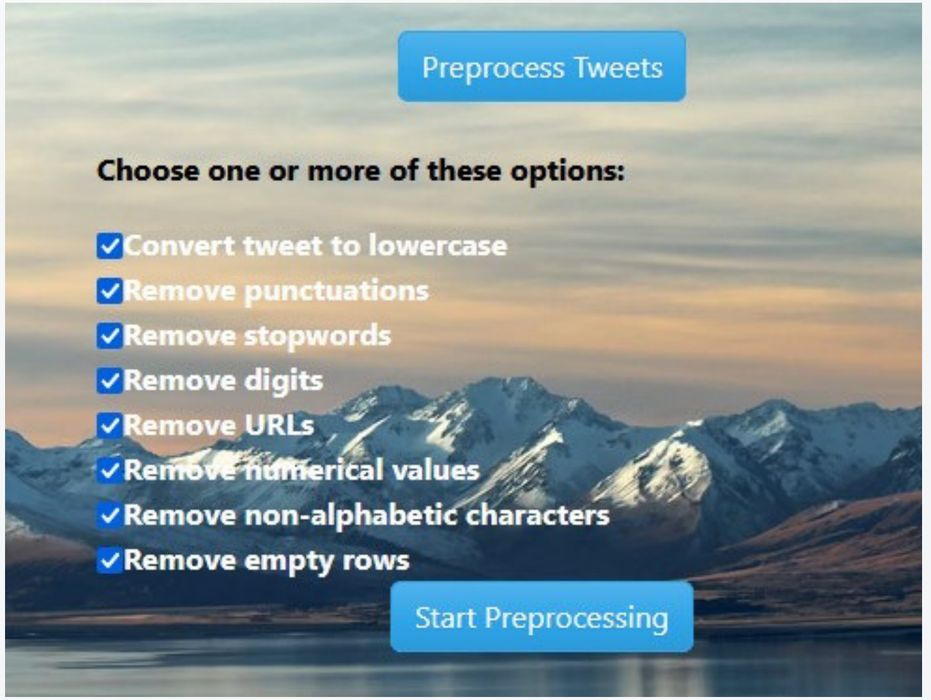
Reactions: Nike's decision to feature Kaepernick was polarizing, with supporters lauding the company and detractors threatening boycotts. Some even destroyed Nike products in protest.

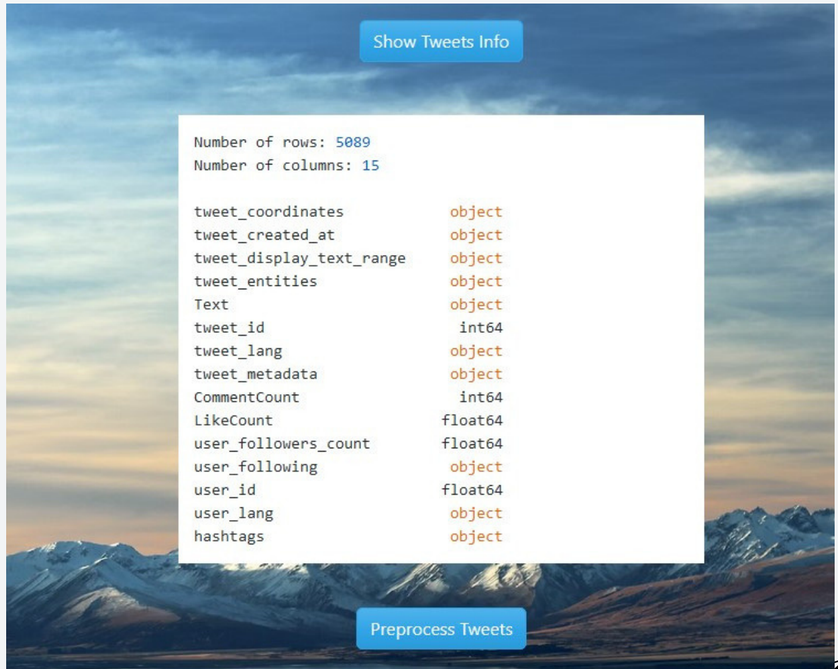
Outcome: Despite some backlash, Nike experienced a sales boost post-campaign. The impactful advertisement won an Emmy for "Outstanding Commercial" in 2019.

RESULTS [USING A DATSET FROM THE DREAM CRAZY MARKETING CAMPAIGN BY NIKE]

1ST INTERFACE

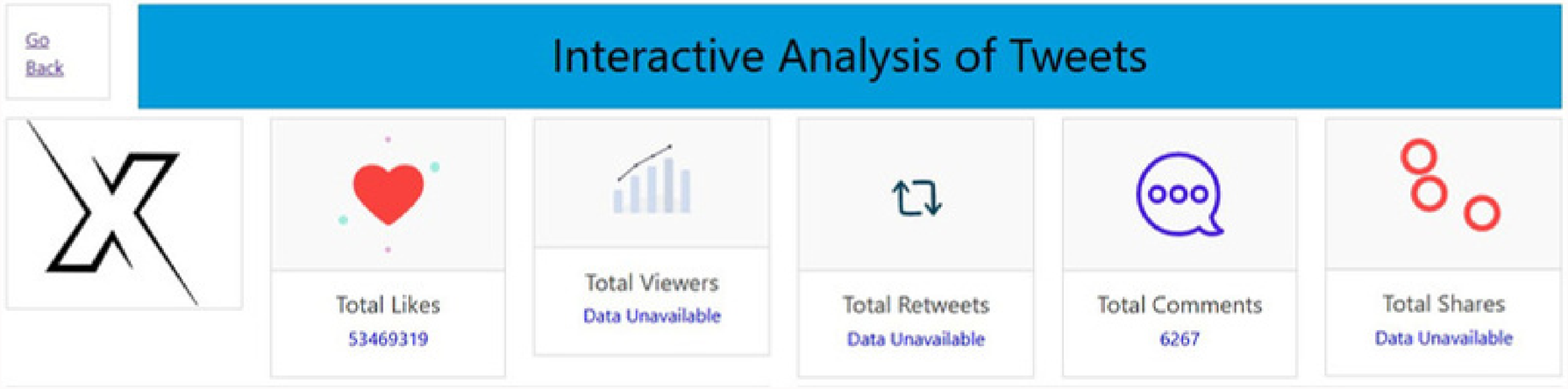


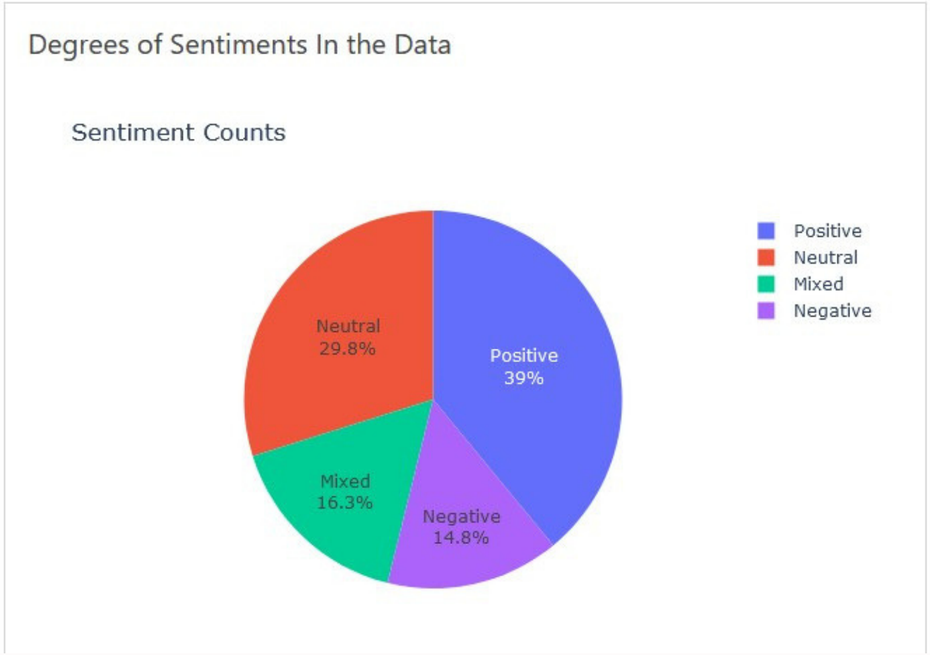




RESULTS

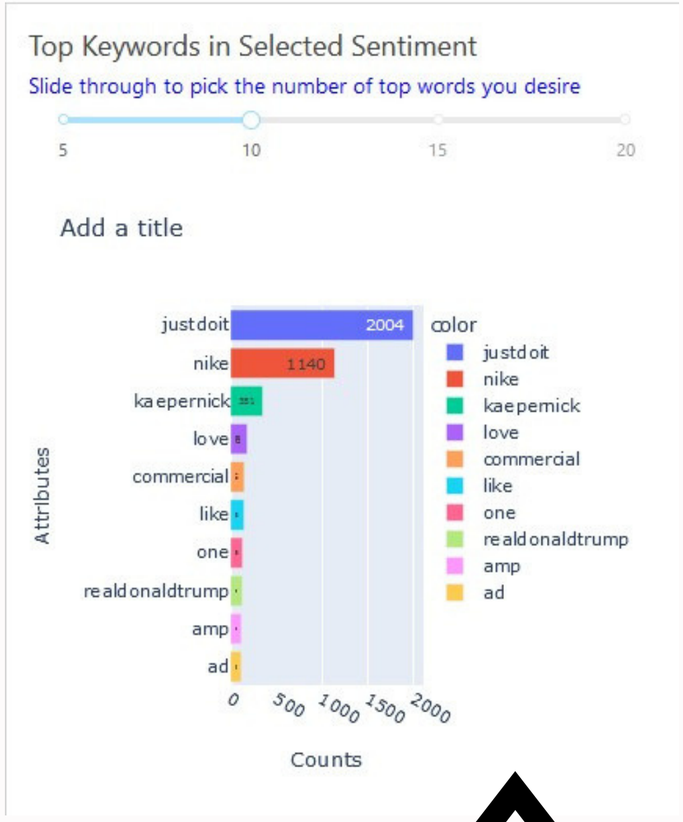
2ND INTERFACE

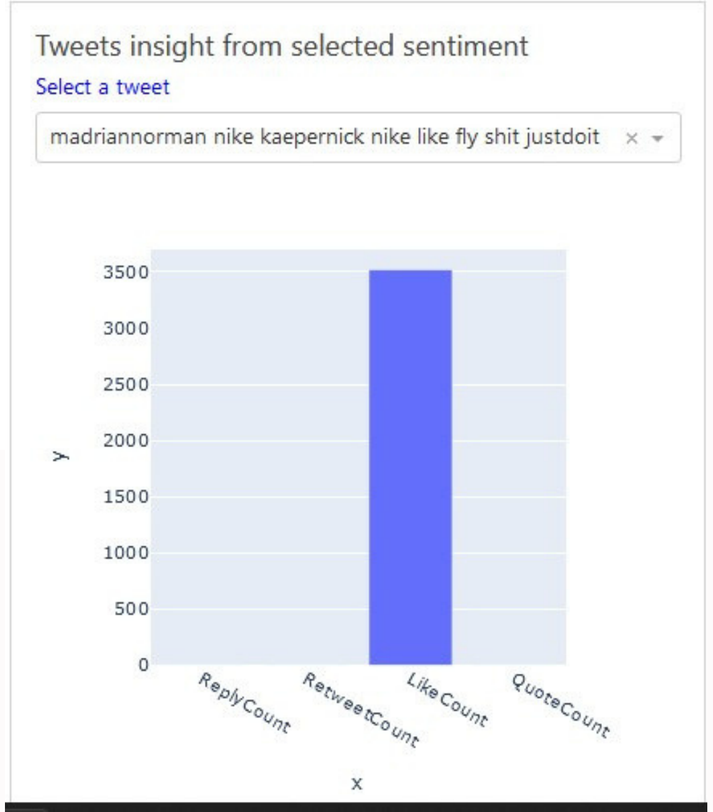




FURTHER RESULTS

ON POSITIVE SENTIMENTS





SPECIFIC KEYWORD FROM THE POSTIVE SENTIMENTS SET

Input a keyword

trump

trump

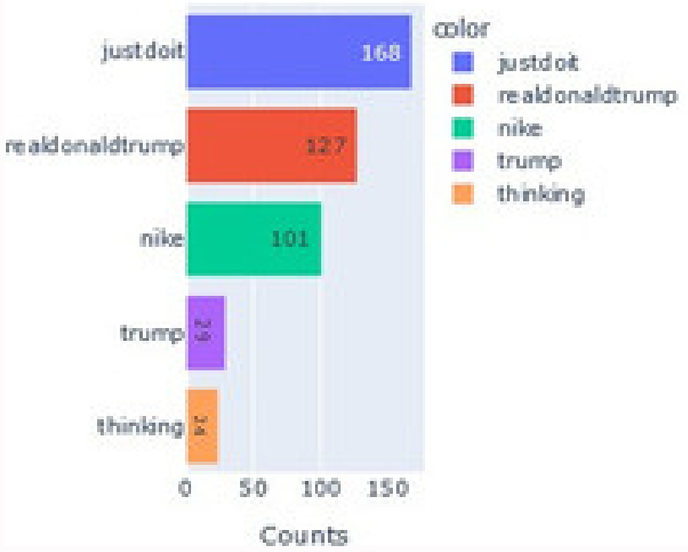
Search

Words surrounding the Keyword typed In

through to pick the number of top words you desire

10 15 20

dd a title



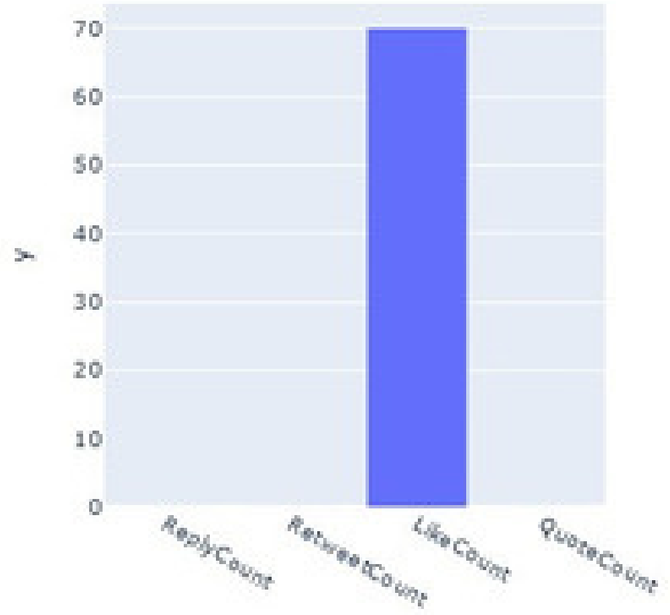
Hashtags used in Tweets having the Keyword

add a title

Evaluation Metrics of Tweets

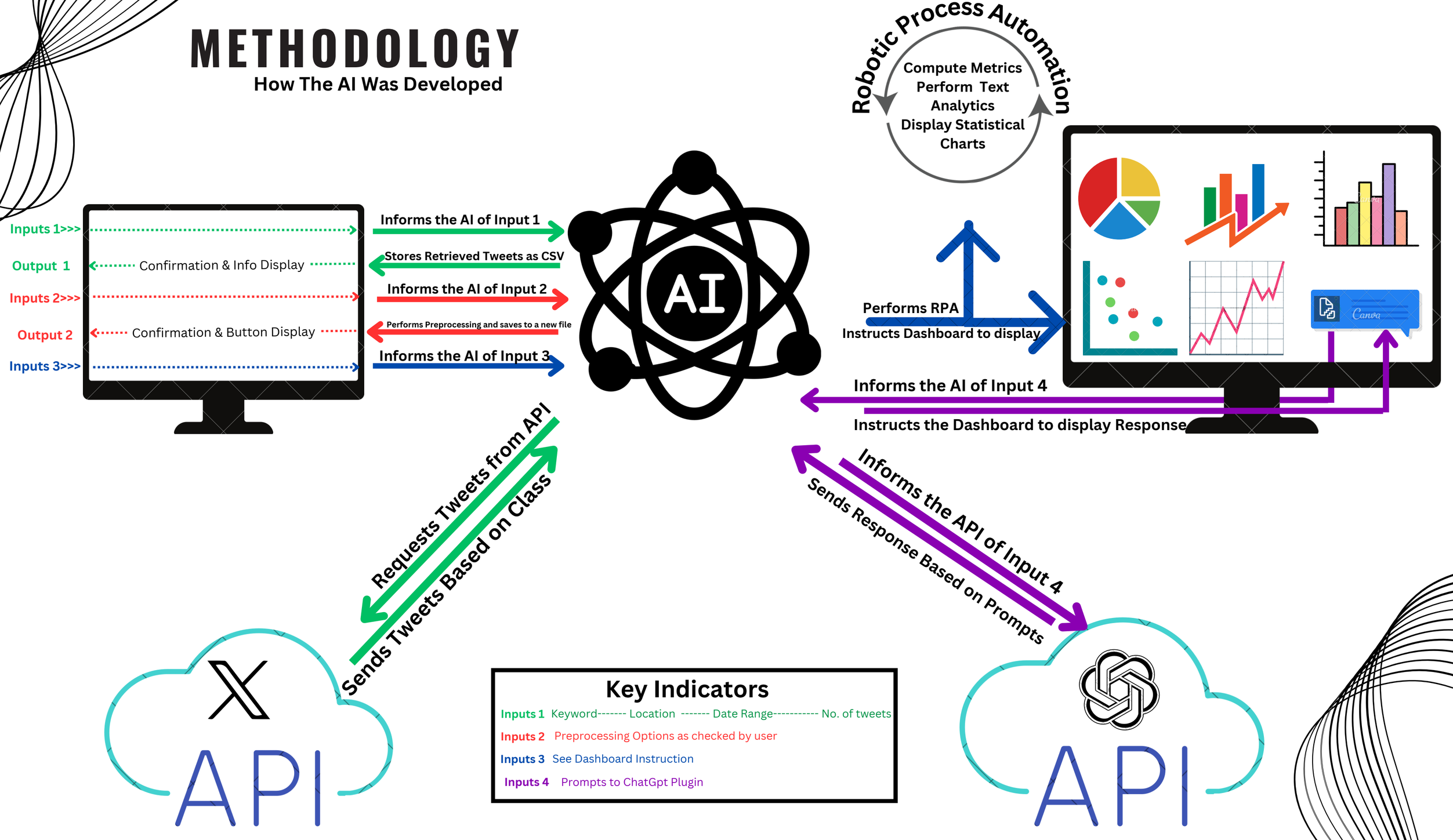
Select a tweet

realdonaldtrump thinking lets use talented football star wh



METHODOLOGY

How The AI Was Developed



Key Indicators

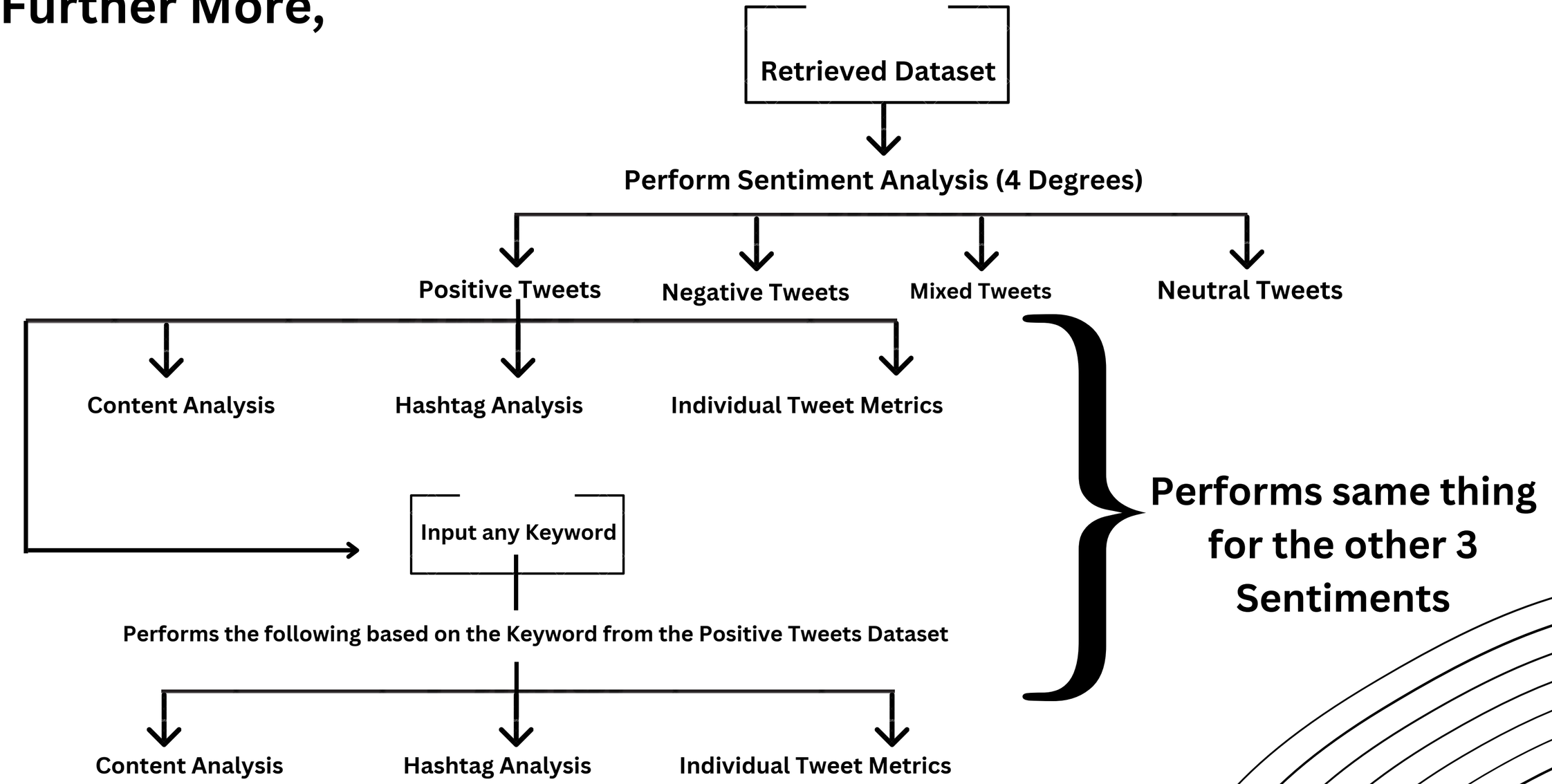
Inputs 1 Keyword------- Location ------- Date Range---------- No. of tweets

Inputs 2 Preprocessing Options as checked by user

Inputs 3 See Dashboard Instruction

Inputs 4 Prompts to ChatGpt Plugin

Further More,

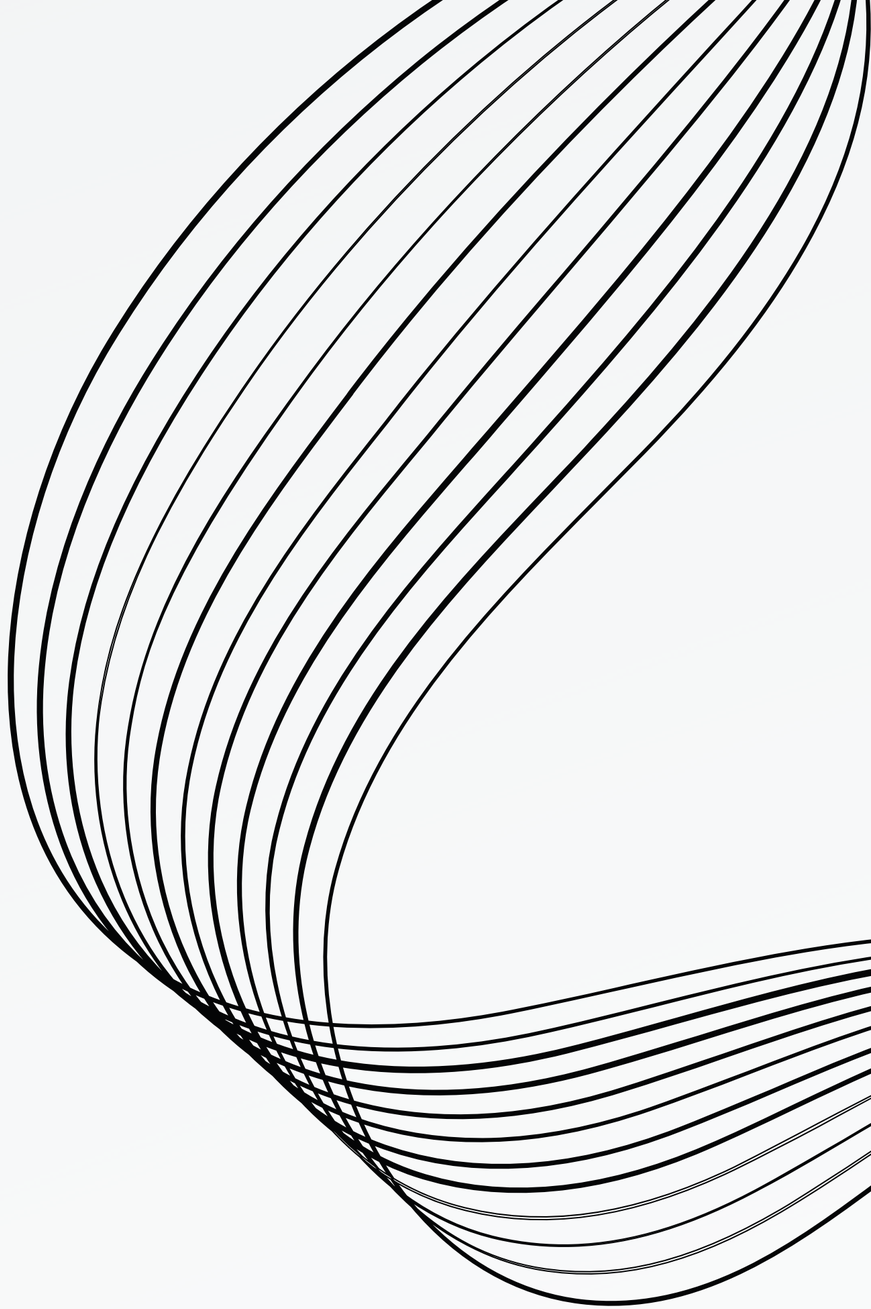


LIMITATION

Due to limitations with Dash and X, only a single keyword can be used for data retrieval, which may or may not include a hashtag. Also, the Twitter API connected to this project have certain restrictions due to their data policies. Effective Twitter scraping requires pro-level API keys, which are costly. The 'basic' access of the Twitter API only permits limited data retrieval from the past seven days, making data extraction from 2016 unfeasible.

RECOMMENDATION

To better meet global needs, the software could introduce a multilingual feature and expand beyond just English-speaking marketers. Additionally, while it currently focuses on text data and sentiment analysis, the incorporation of advanced algorithms could allow processing of diverse data types and integration with other social media platforms beyond Twitter.



CONCLUSION

The outcomes indicate that this project successfully met its objectives and goals. An automation system for fetching tweets was established, complemented by capabilities to analyze these tweets via statistical visualizations. The entire process was tested using the Dream Crazy Campaign as a case study, generating marketing insights.

These insights derived from the campaign highlighted the impacts or effects, especially when gauging the rate of positive sentiment. This explains why, despite the surrounding controversies, Nike still registered significant profits.

THANK'S FOR WATCHING