

# SENTIMENTAL ANALYSIS FROM TWEETS TO FIND POSITIVE, NEGATIVE, NEUTRAL OPINIONS

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**Abstract** - Twitter motivates people to share their thoughts and express their opinions. The sentiment analysis of **political tweets** becomes more valued over time. These sentimental analysis from tweets according to many articles it is not so efficient to determine exact people mind and their wavelength, so to perform sentiment analysis which is more efficient one we are using **Natural Language Processing** and make use of **Naive bayes** algorithm. Everything the analysis results will be easily understandable form as **Bar chart** and **Pie chart**. Here we use **Topic Modeling** to determine on which topic the keyword is particularly used for multiple times to determine its frequency of occurrence.

# **1. INTRODUCTION**

Nowadays, Most of the people considering people's thoughts and words as a valuable thing. Even the political issues, governments, and other environmental factors are considered by people opinions and their views. Sentiments are the expressions given by the user which is the main source of our interest in that particular matter if we could evaluate that better we can get positive and negative view of particular situation which matters most of the time from people.

# **1.1 Existing Methodology**

This research proposed a technology that from the product reviews given by the user the software will analyze it and recommend similar products to the user. It will recommend the user based on the frequent reviews for the products given by them.

# **1.2 Proposed Methodology**

Twitter plays a vital role in spreading information and influencing people's opinions in a specific direction. As an easy-to-use platform, Twitter motivates people to share their thoughts and express their opinions. In this we use machine learning techniques to analyze the tweets by Natural Language Processing to process the datasets.

# **2. SYSTEM ARCHITECTURE**

Initially Data collection is done where all the data is gathered from the twitter media, Then stop words removal Duplicates, Punctuations and Special Characters Removal are done in the Data cleansing layer. Then it comes to Preprocessing where all the data gets segregated as per tokenization, stemming and lemmatization. After preprocessing, Sentimental analysis will be done from the gathered tweets using Natural language processing. And finally topic modeling is done using Naive bayes decision making algorithm.

#### DATA FLOW DIAGRAM



#### 2.1 Gathering Tweets



Fig 2.1 Twitter Extraction based on query

Fig 2.1 shows the extracting process of tweets in our project, These texts are the tweets extracting from the twitter.

2.2 Bar chart





Fig 2.2 shows the results in positive, negative and neutral on the bar charts from analyzed tweets. From this chart we could conclude the thoughts of the people on twitter.

#### 2.3 Pie chart



# Fig 2.3 Results displayed in PIE Chart based on analysis

Fig 2.3 shows the results in positive, negative and neutral on the pie charts from analyzed tweets. From this chart we could conclude the thoughts of the people on twitter.

#### 2.4 Topic modeling



FIG 2.4 Topic modeling

Fig 2.4 shows the analysis bar chart of topics which was frequently used on the twitter about the given query, this can show that on which topic was most spoken about the particular query.

#### **3. HARDWARE REQUIREMENTS**

Processor	: Intel Core i3, 2.70 GHz
RAM	: 4 GB
System Type	: 32-Bit Operating System

# **4. CONCLUSION**

The Sentimental analysis done here is obtaining opinions of the people either positive or negative depends upon the views extracted from tweets, These analysis will helps in more places even for news, political issues ,about current issue happening in our country and people views about it could be get to know and utilized properly. Sometimes political leader could know about people's opinion and act upon to that with these analysis and it will be very use useful in business developments.

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### BIOGRAPHIES



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