

# SOCIAL MEDIA SENTIMENT ANALYSIS

Social media sentiment analysis using Python and TextBlob! Here's a step-by-step guide to integrate this with Power BI:

## Install Required Libraries:

- `pip install textblob pandas`

## Python Code for Sentiment Analysis:

```
1. import pandas as pd
2. from textblob import TextBlob
3.
4. # Path to your CSV file
5. csv_path = r"C:\power bi\social media sentiment\Tweets.csv"
6.
7. # Load the dataset
8. df = pd.read_csv(csv_path)
9.
10. # Function to get the sentiment
11. def get_sentiment(text):
12.     analysis = TextBlob(text)
13.     if analysis.sentiment.polarity > 0:
14.         return 'Positive'
15.     elif analysis.sentiment.polarity == 0:
16.         return 'Neutral'
17.     else:
18.         return 'Negative'
19.
20. # Drop rows with missing 'text' values
21. df = df.dropna(subset=['text'])
22.
23. # Apply the function to the text column
24. df['sentiment'] = df['text'].apply(get_sentiment)
25.
26. # Save the results to a new CSV file
27. output_path = r'C:\power bi\social media sentiment\sentiment_analysis_results.csv'
28. df.to_csv(output_path, index=False)
29.
30. print("Sentiment analysis completed and results saved!")
```

## OutPut:

## Import the CSV into Power BI:

- Open Power BI Desktop.
- Click on **Get Data** and select **CSV**.
- Load the sentiment\_analysis\_results.csv file.

## Create Visualizations:

- Use the imported data to create various visualizations like bar charts, pie charts, or word clouds to represent the sentiment distribution.

visualizations in Power BI using the sentiment analysis results. Here are the steps to follow:

**1. Load the Data into Power BI:**

- Open Power BI Desktop.
- Click on **Get Data** and select **CSV**.
- Load the sentiment\_analysis\_results.csv file.

**2. Create a Bar Chart for Sentiment Distribution:**

- Go to the **Visualizations** pane and select the **Clustered Bar Chart**.
- Drag the sentiment column to the **Axis** field.
- Drag the sentiment column again to the **Values** field and set it to **Count**.

**3. Create a Pie Chart for Sentiment Proportions:**

- Select the **Pie Chart** from the **Visualizations** pane.
- Drag the sentiment column to the **Legend** field.
- Drag the sentiment column again to the **Values** field and set it to **Count**.

**4. Create a Word Cloud for Common Words in Tweets:**

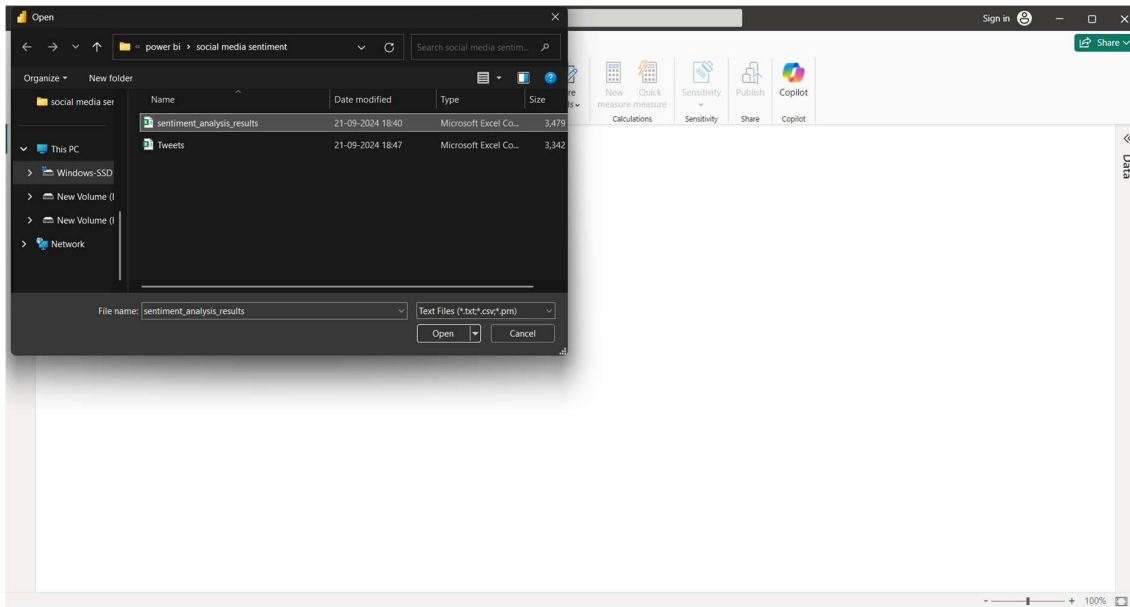
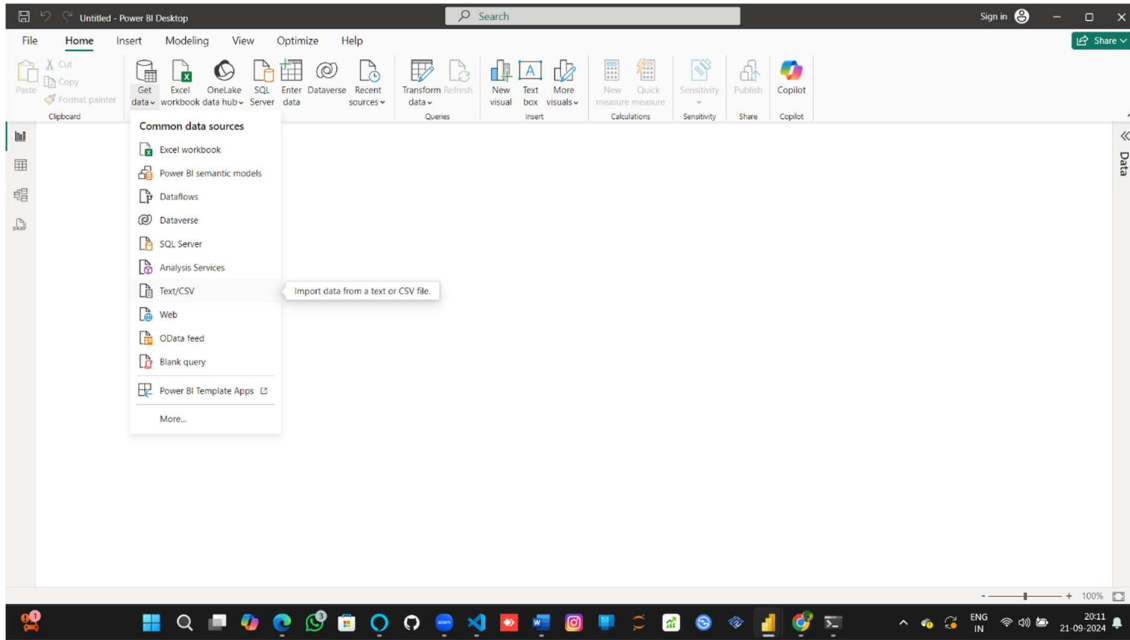
- You might need to install a custom visual for the word cloud. Go to the **Visualizations** pane, click on the three dots (...), and select **Get more visuals**.
- Search for **Word Cloud** and add it to your visualizations.
- Drag the text column to the **Category** field.
- Adjust the settings to customize the appearance of the word cloud.

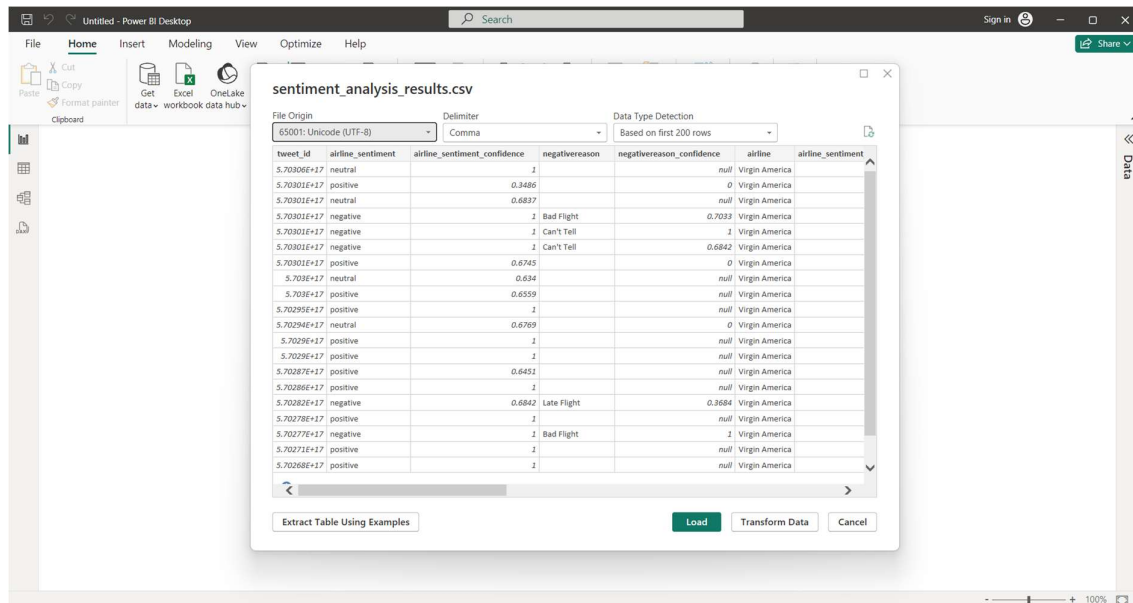
**5. Create a Line Chart for Sentiment Over Time:**

- If your dataset includes a timestamp, you can visualize sentiment trends over time.
- Select the **Line Chart** from the **Visualizations** pane.
- Drag the timestamp column to the **Axis** field.
- Drag the sentiment column to the **Values** field and set it to **Count**.
- Add a filter to show sentiment counts for each time period.

**6. Enhance Your Dashboard:**

- Add slicers to filter data by date, user, or other relevant fields.
- Use Power BI's formatting options to make your dashboard visually appealing and easy to understand.





## Enhance Your Dashboard:

- Add filters to allow users to explore sentiments by date, user, or other relevant fields.
- Use Power BI's built-in features to create interactive and insightful dashboards.

