

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one partially covering the green one.

Sentiment Analysis with NLP

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Overview:

- Conduct market research for Prestige marketing firm
- Classify sentiment on tweets
- Use natural language processing techniques.



Data Understanding:

- Data from Data.World
- Over 9,000 Tweets
- 3 Columns Tweet, Brand, Emotion

Brands



Emotions



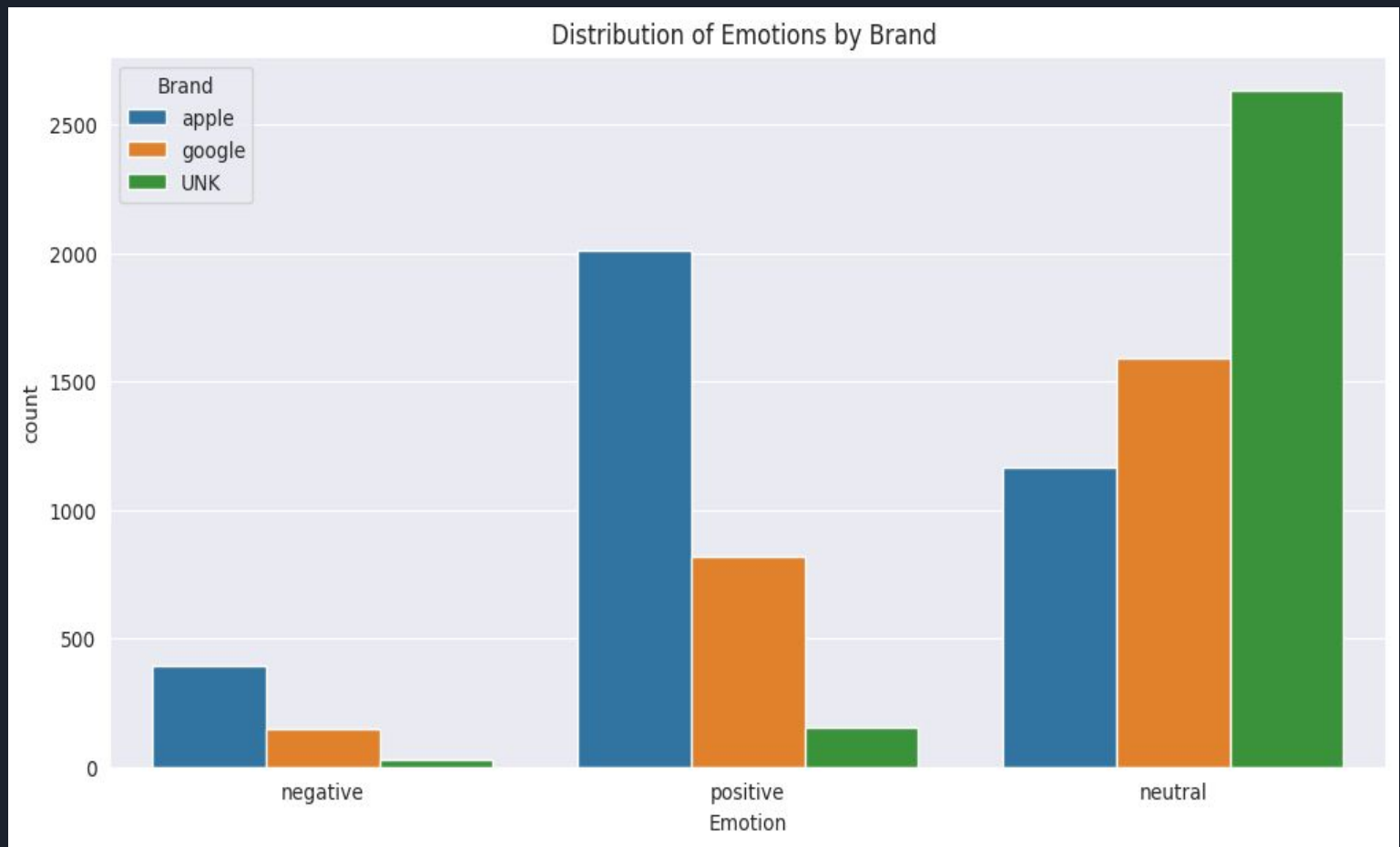


Business Problem:

- Is this Tweet positive neutral or negative?

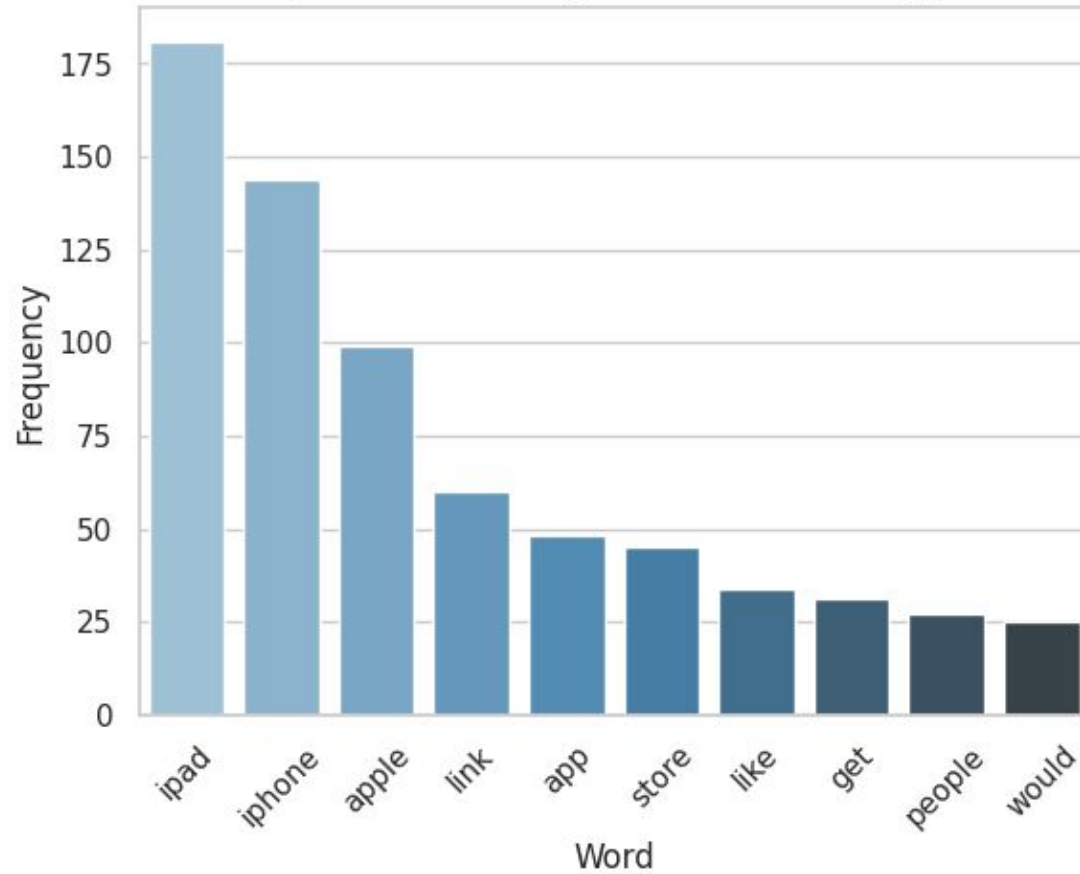
Multiclass classification

- Focus on improving accuracy of model

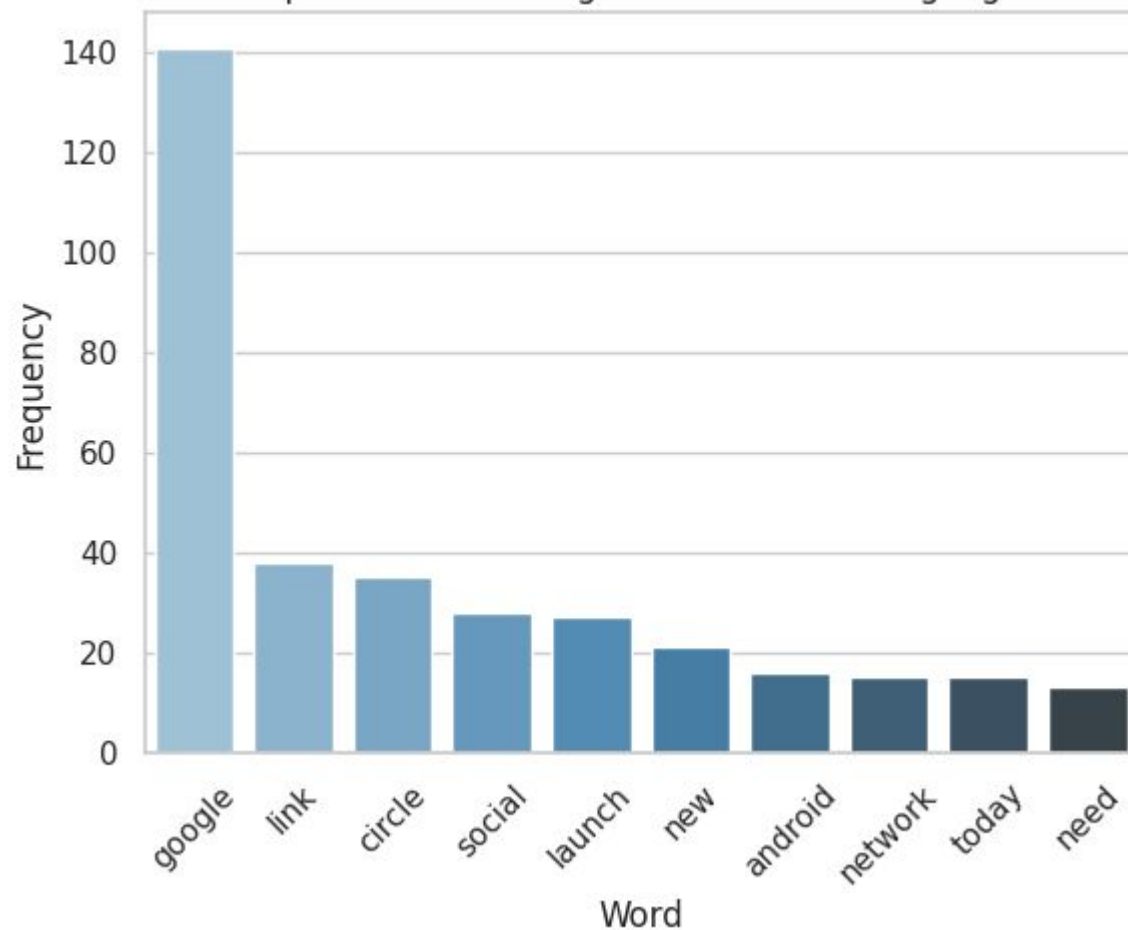




Top 10 words for negative tweets about apple



Top 10 words for negative tweets about google



Results:

Confusion Matrix			
Actual	Negative	Neutral	Positive
	58	29	39
	11	952	131
Positive	22	125	421
	Predicted		

Accuracy : 80%



Recommendations:

- Focus on negative sentiment
- Leverage positive sentiment
- Use targeted ads



Whats next?

- Collect more Tweets
- Use twitter api for Tweet performance
- Use more complex models



Thank You!

- Full analysis below:
- <https://github.com/inagib21/TweetSentiment>