

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 analytics
- Classify sentiment on tweets
- Help clients improve products/ marketing
- Use natural language processing techniques.



Data Understanding:

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

Brands



Emotions



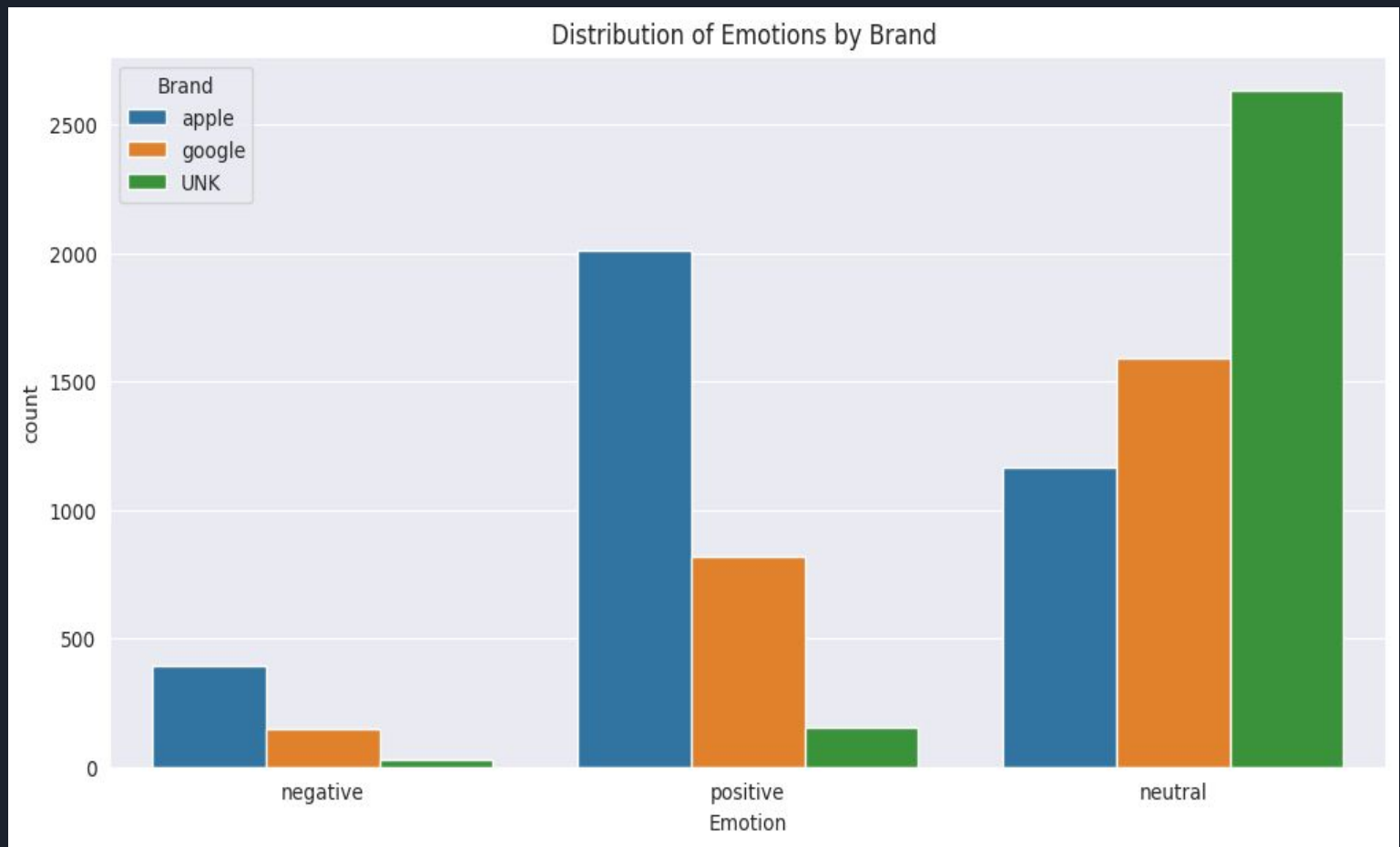


Business Problem:

- Is this Tweet positive neutral or negative?

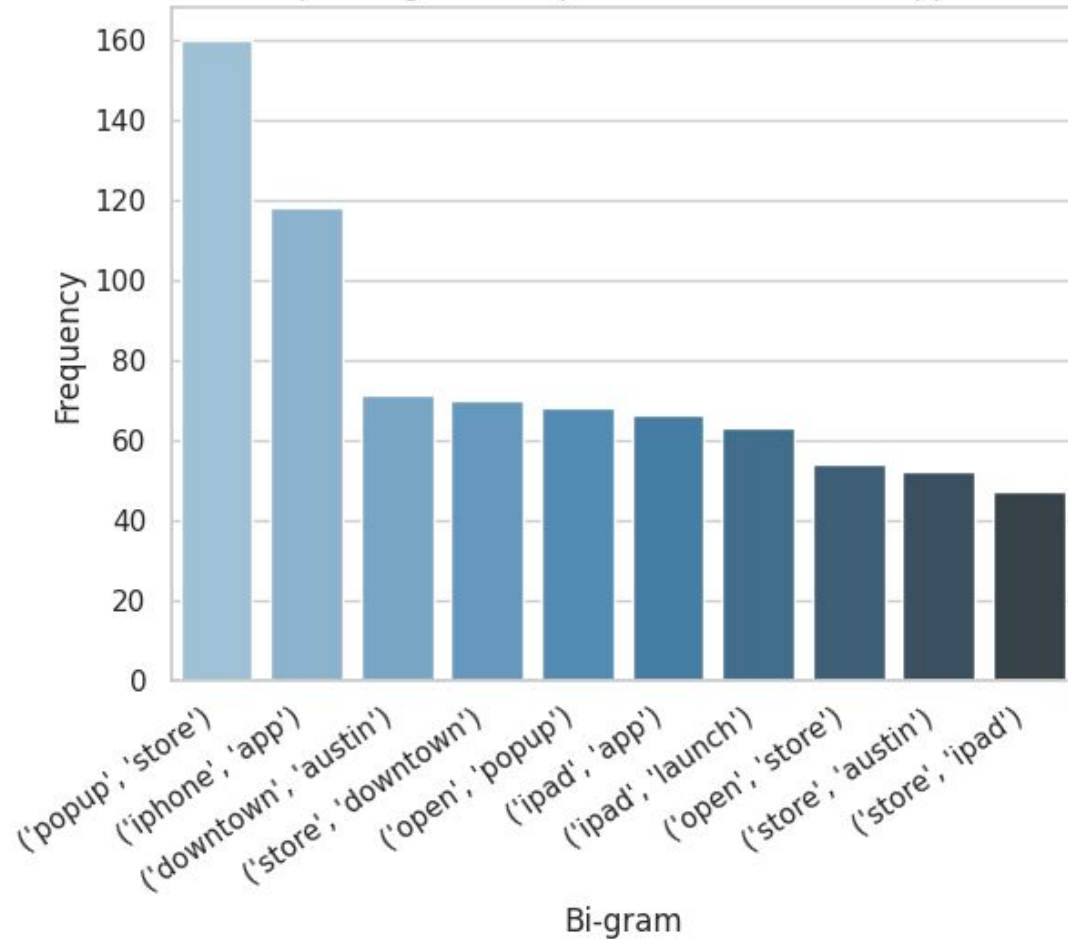
Multiclass classification

- Focus on improving accuracy of model



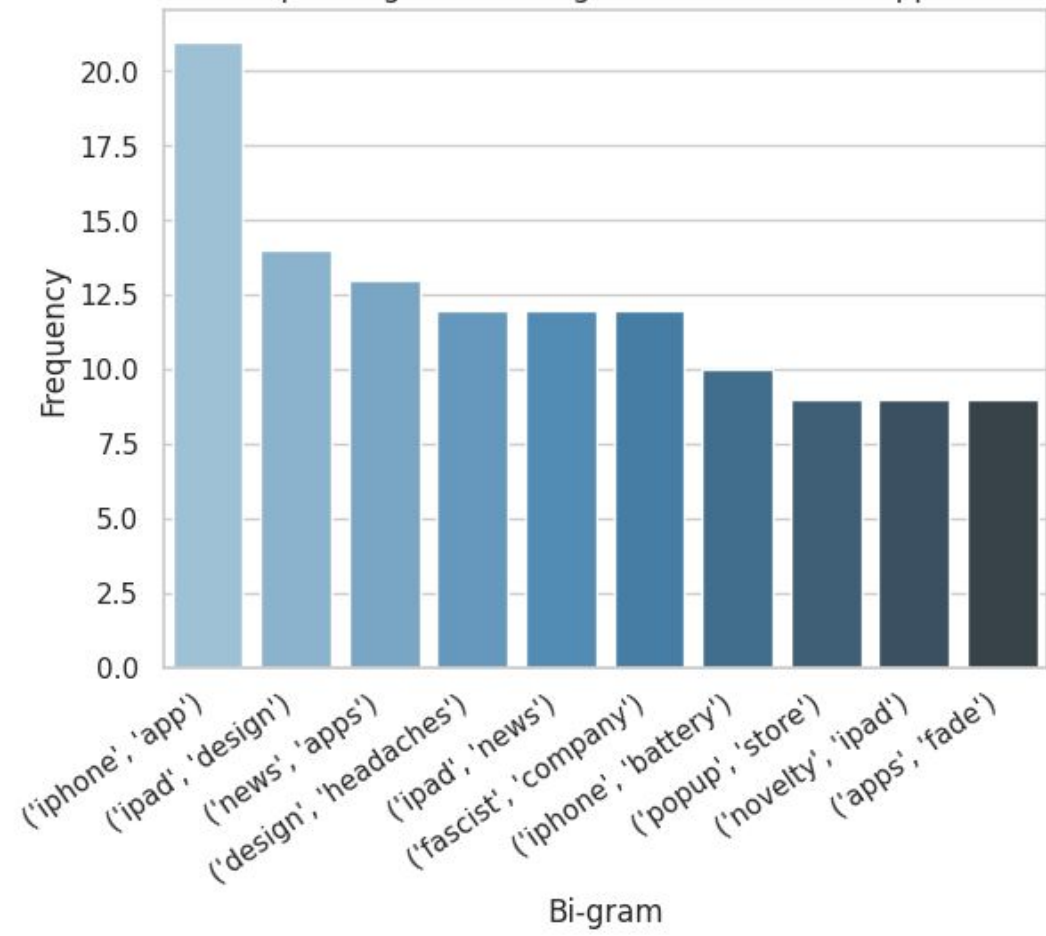


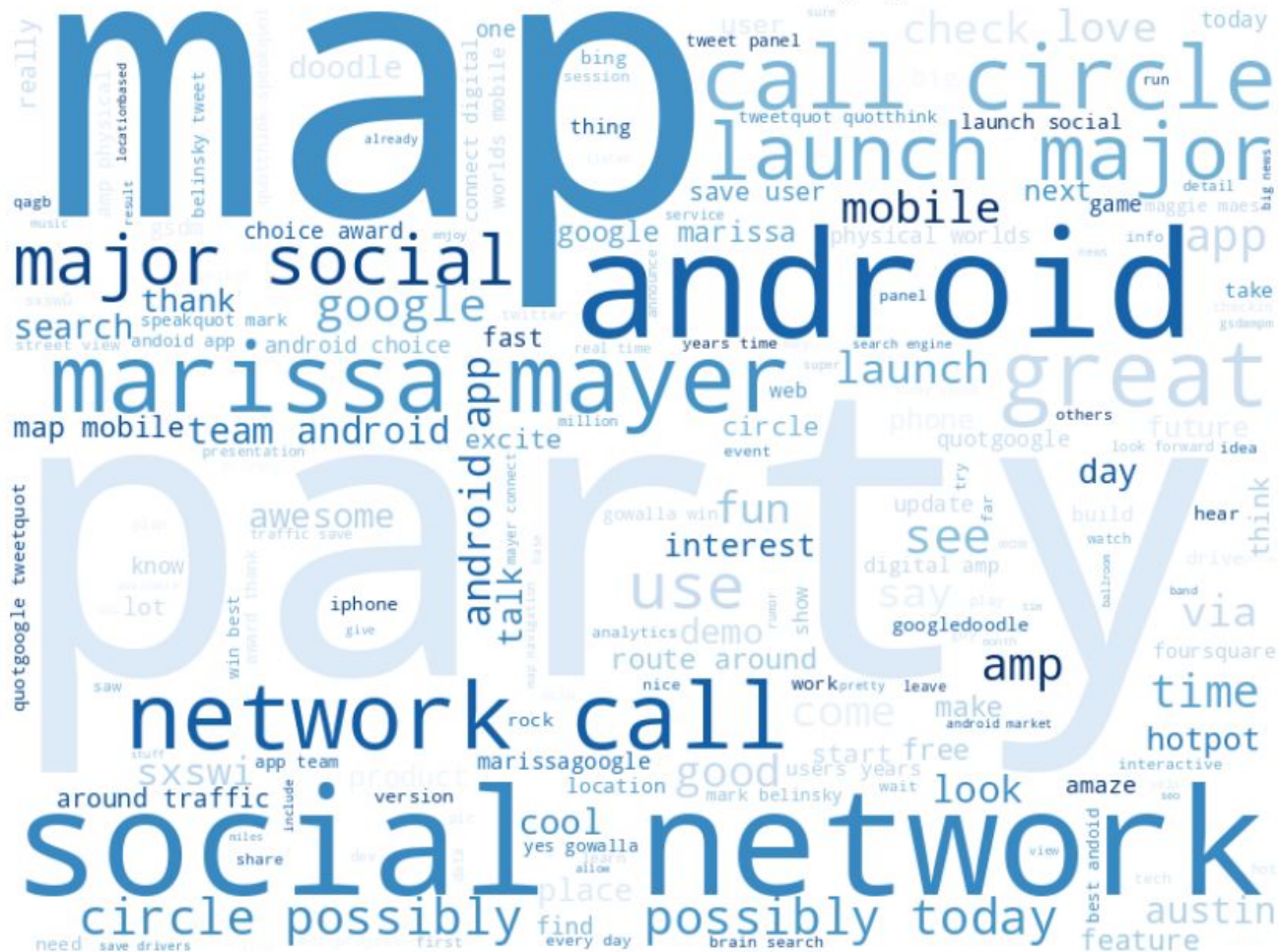
Top 10 bigrams for positive tweets about apple





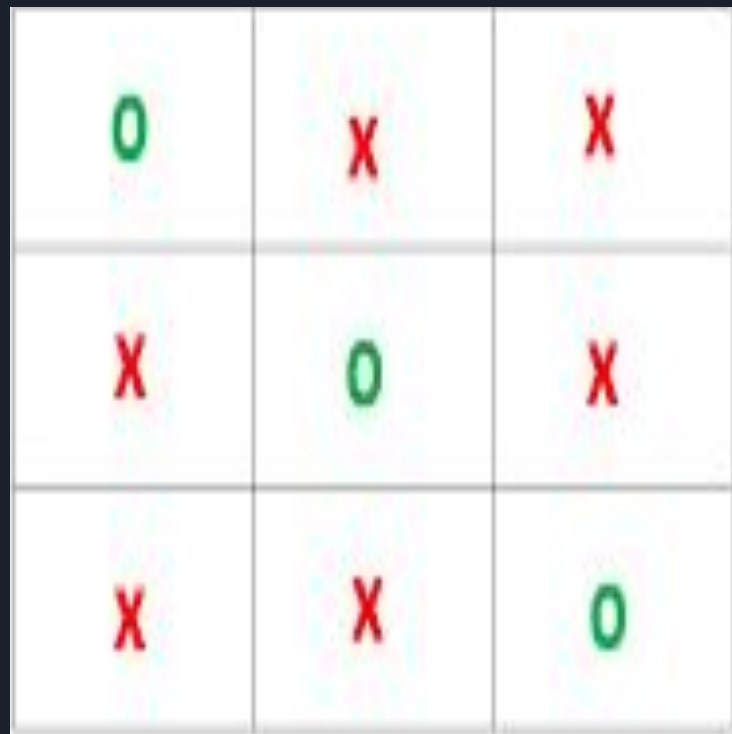
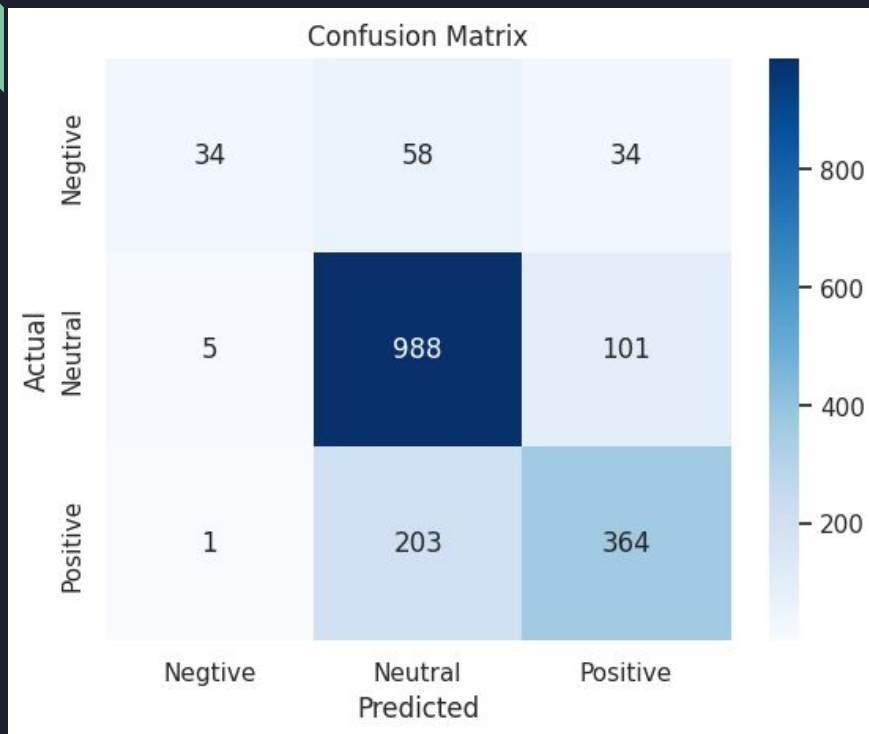
Top 10 bigrams for negative tweets about apple







Results: Best Model 78% Accuracy





Recommendations: Apple

- product improvement:
iphone battery, ipad design
- Marketing:
more pop-ups, promote app store



Recommendations: Google

- product improvement:
Google circle (social network)
- Marketing:
promote google maps , more parties



Whats next?

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



Thank You!

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