

# Twitter Sentiment Analysis

Natural Language Processing



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## Problem Statement

Use language in tweets to assess negative sentiment toward any brand or product

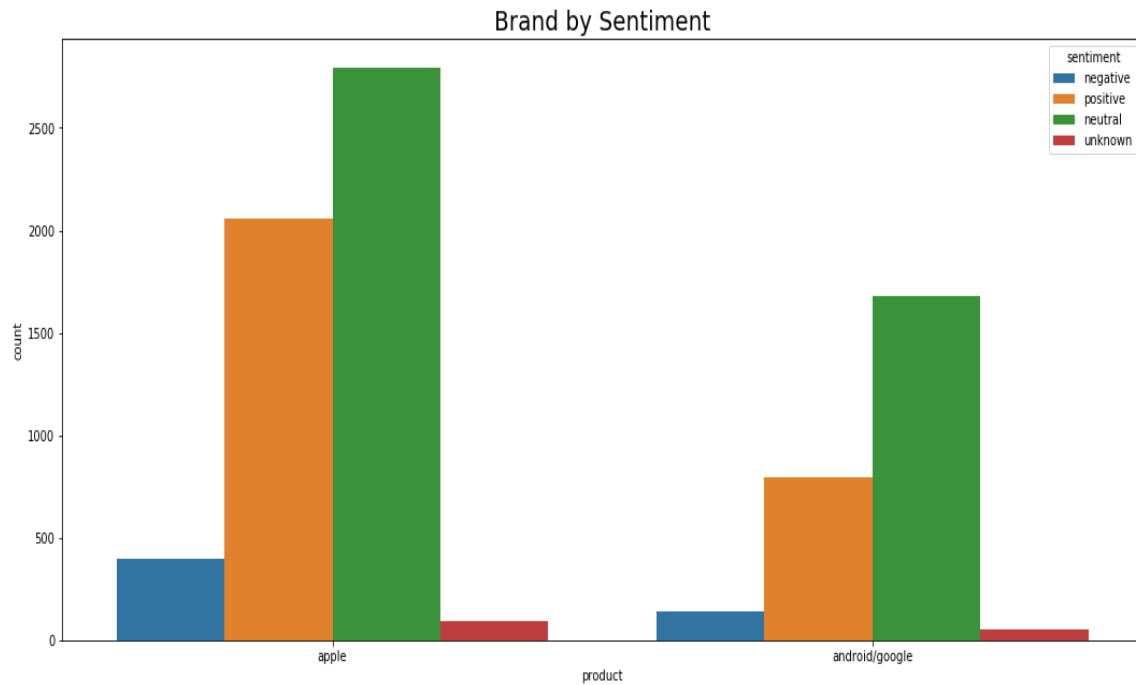




## Business Value

Use machine learning to assess  
negative sentiment conveyed through  
social media

- Tweet text
- Sentiment
- Term frequency



Factors Assessed

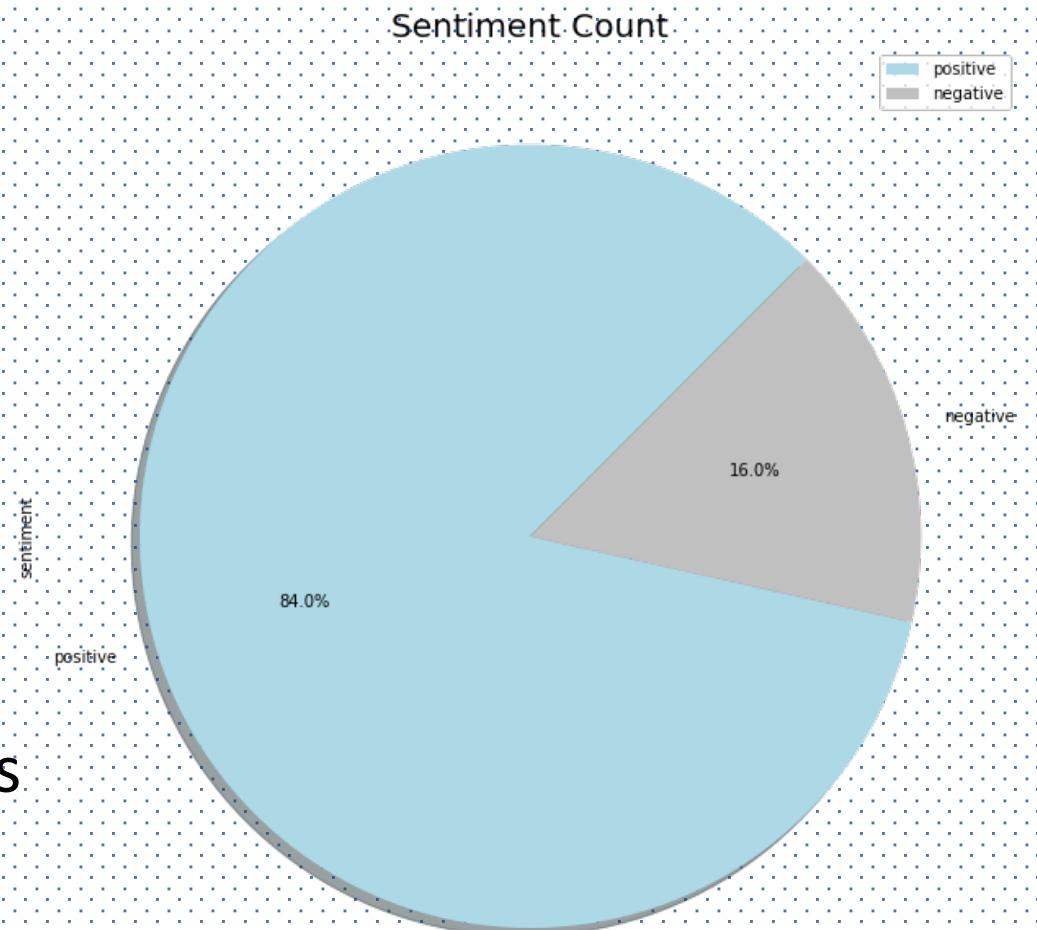
# Dataset Info

CrowdFlower from dataworld.com

3403 tweets

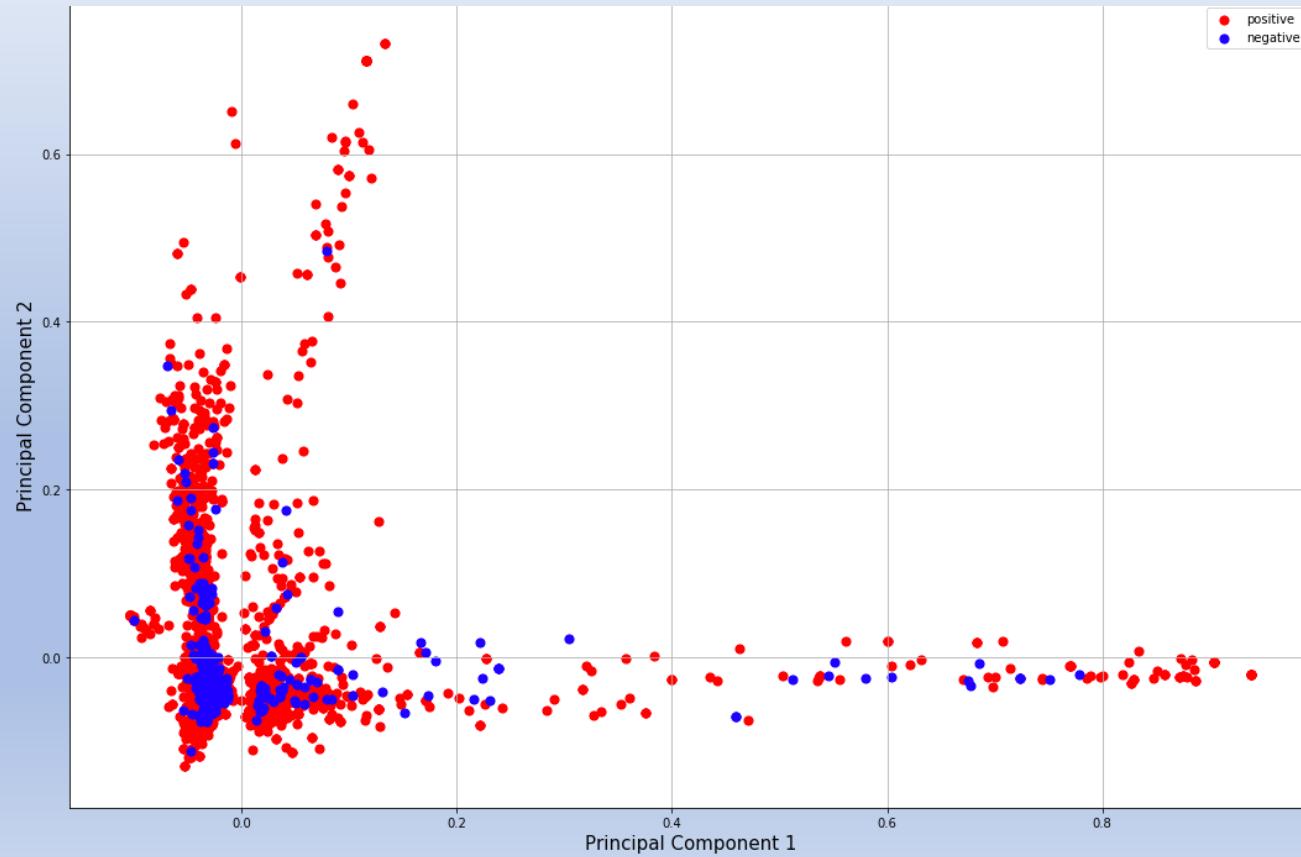
5070 unique words/tokens

positive  
negative



<https://data.world/crowdflower/brands-and-product-emotions>

# Dense Data Representation



A word cloud visualization showing negative terms from a dataset. The words are colored in various shades of blue, purple, and yellow, with larger words indicating higher frequency. Key words include 'go', 'day', 'social', 'network', 'store', 'need', 'circle', 'headache', 'fail', 'battery', 'people', 'today', 'phone', 'say', 'think', 'product', 'time', and 'look'.

Negative terms



# Positive terms

# Methodology

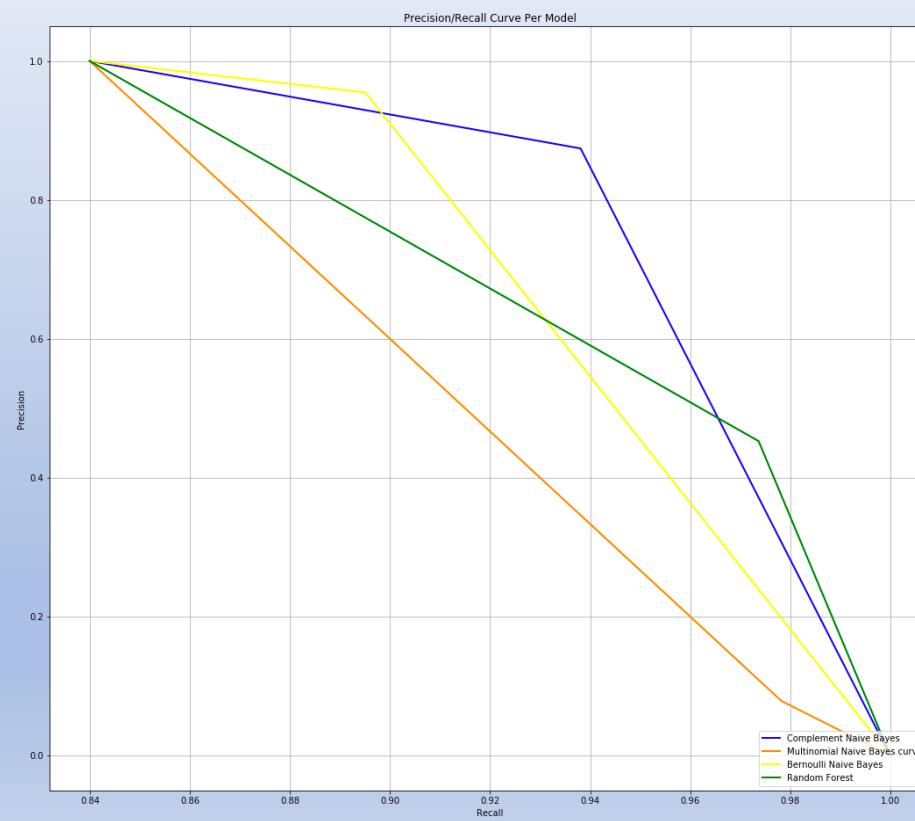
Statistical Analysis

Neural Network

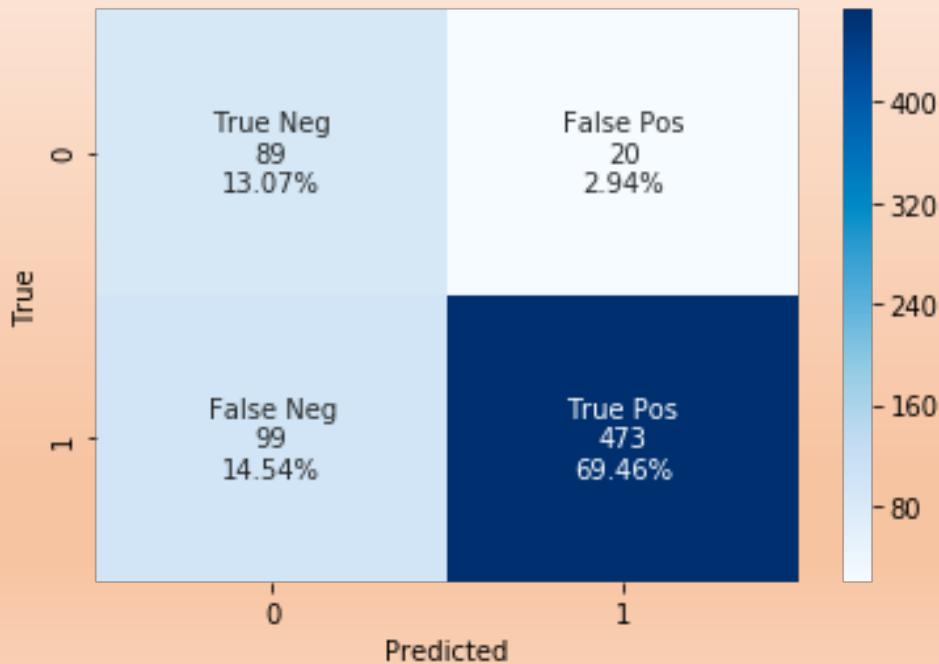
Model Precision



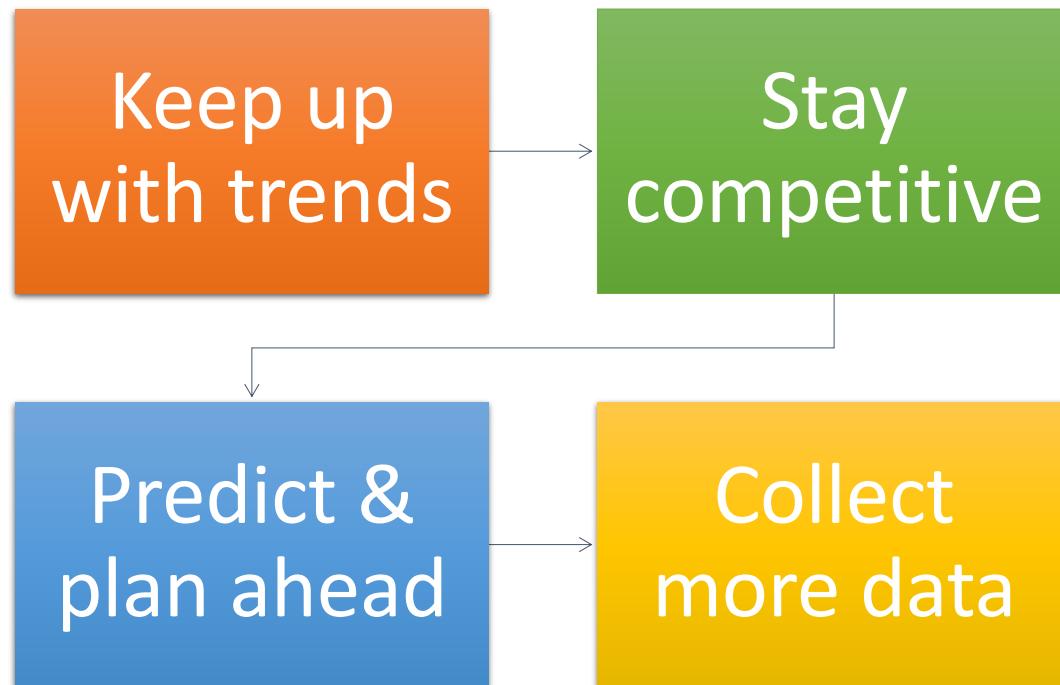
# Statistical Models Precision/Recall



# Model Results



# Business Recommendations



#Thankyou

