

Apple at SXSW 2011

A project to capitalize on a successful product launch



Background



Project Goal

1. to help Apple understand how their presence at SXSW was received
2. to give Apple a tool to interpret public sentiment

Data

- content:  $\times 9,000$

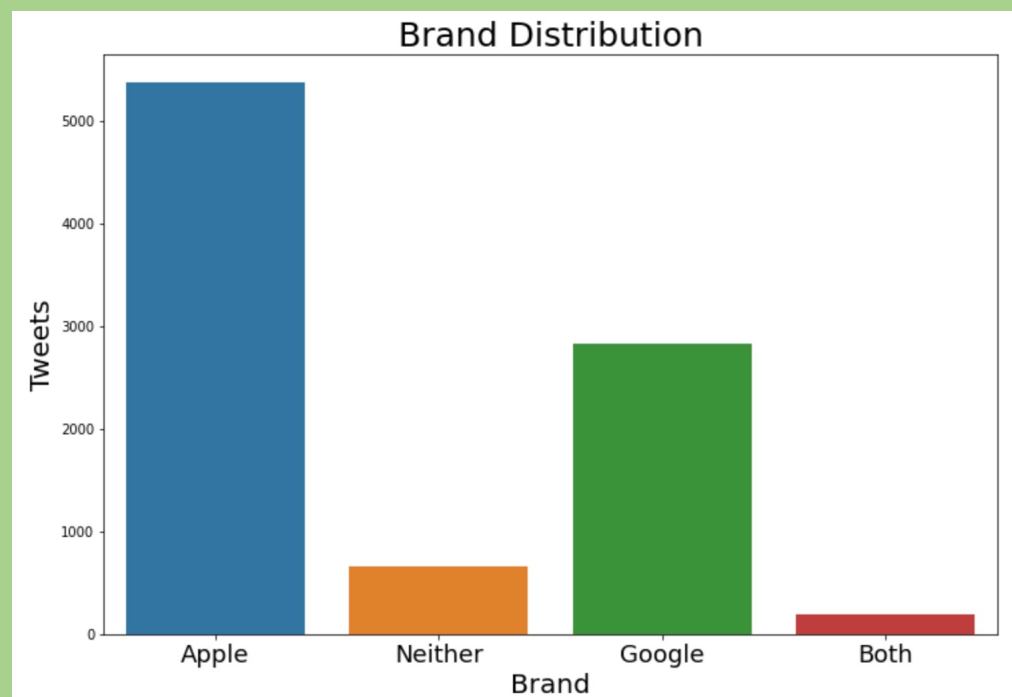
- sentiment:



- brand:

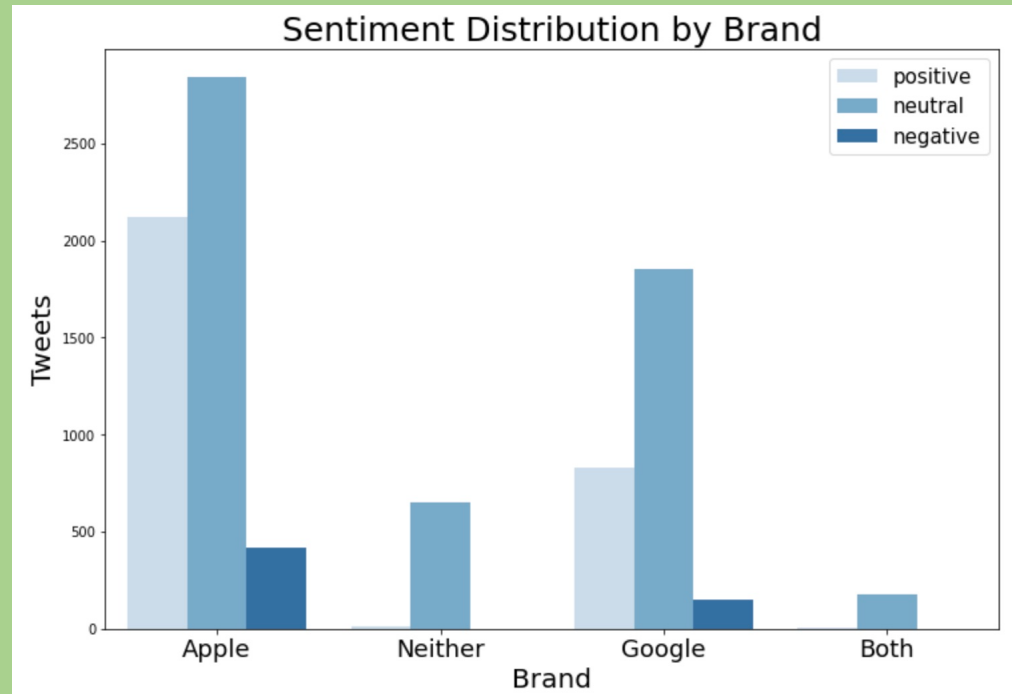


Data



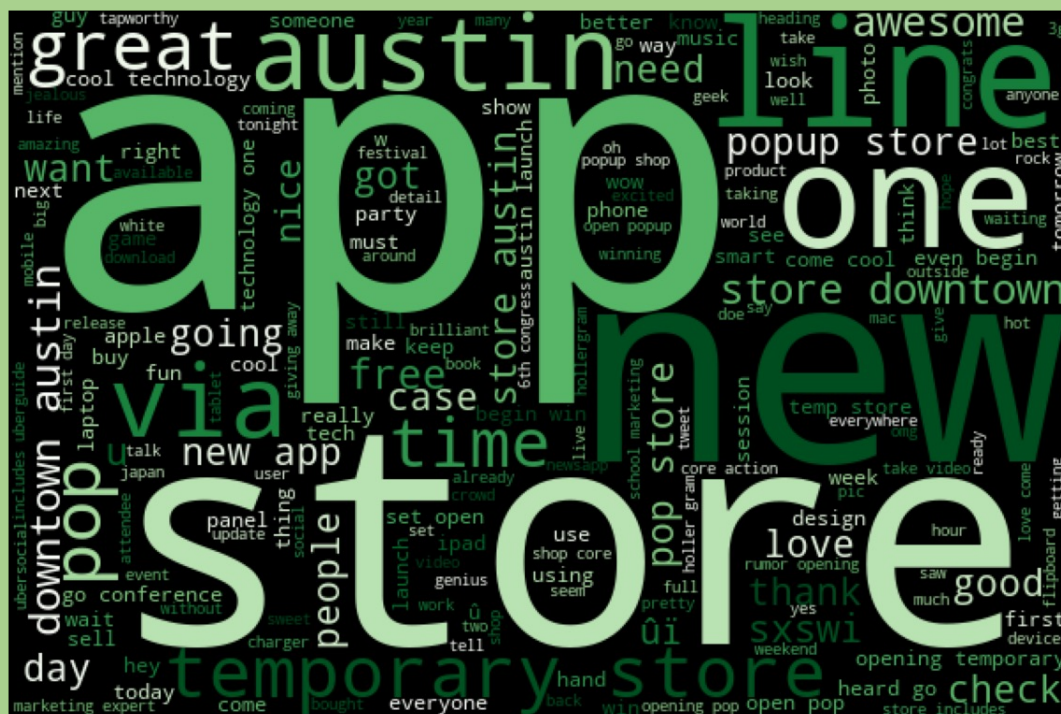
more tweets about Apple than Google by 2 : 1

Data

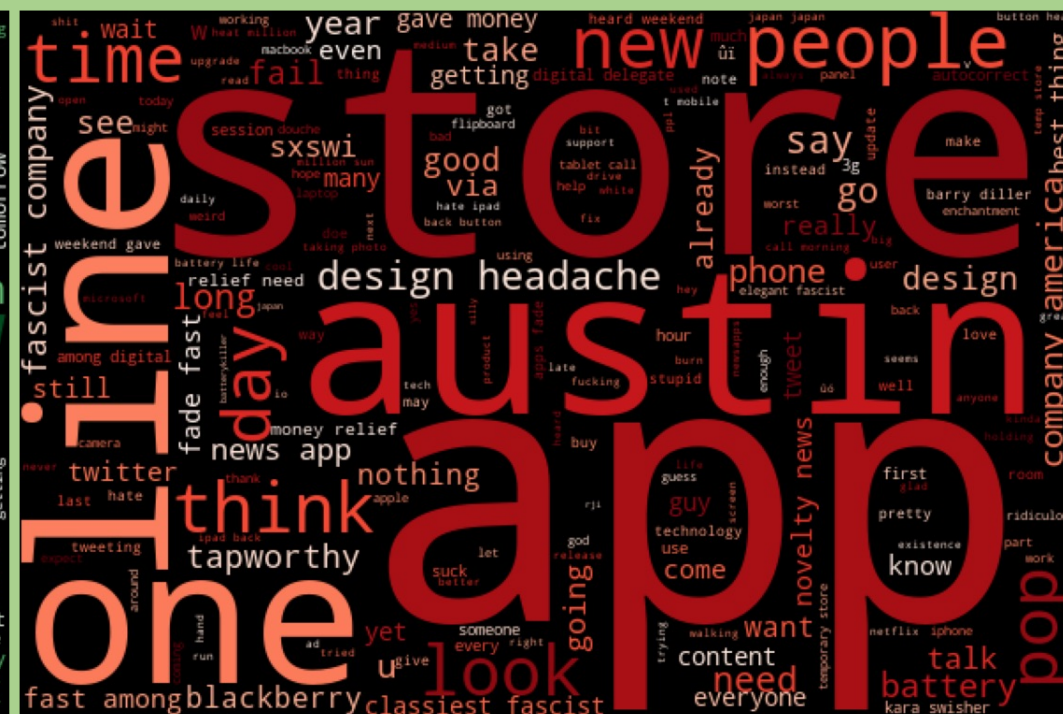


both Apple and Google had (+) : (−) ratio of about 5 : 1

Apple Overview



(+): “*temporary store*”, “*popup store*”, “*downtown Austin*”



(-): “*battery*”, “*design headache*”,
“*fascist company*”

Google Overview



(+): “party”, “maps”

(-): “circles”, “Bing”, “launching”

Methods

- tokenize + remove common words + vectorize tweets
- binary classification: positive / NON-positive
- ML classifiers: Naïve Bayes, Random Forest, Gradient Boost*
* final model
- metric: accuracy

Results

model	training score	test score
Naïve Bayes (BASELINE)	79.4%	71.5%
... with hyperparameter tuning	89.0%	72.2%
... with over sampling	86.7%	68.0%
Random Forest	96.5%	73.2%
... with hyperparameter tuning	86.4%	72.5%
Gradient Boost (FINAL)	74.9%	72.3%

Recommendations

- pop-up store + event synergy = great idea
- throw a party
- address battery life and design issues

Further Inquiry

- analyze all three sentiments
- incorporate more features to the model (e.g. tweet length)
- get to the bottom of overfitting issues

Thank you



Aaron Galbraith • 2023

www.linkedin.com/in/aarongalbraith