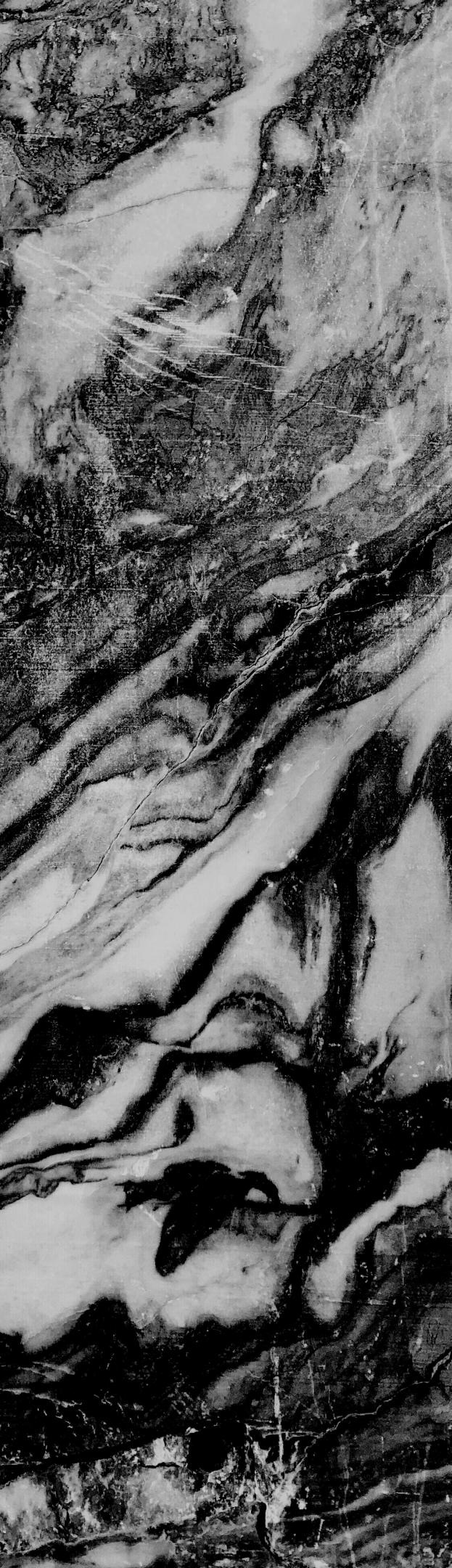




Apple

Product Launch Analysis

December 2020



Business Problem
Launch Timeline
The Data
Analysis
Model Insights
Next Steps
Contact Us

02

Presentation Overview

December 2020

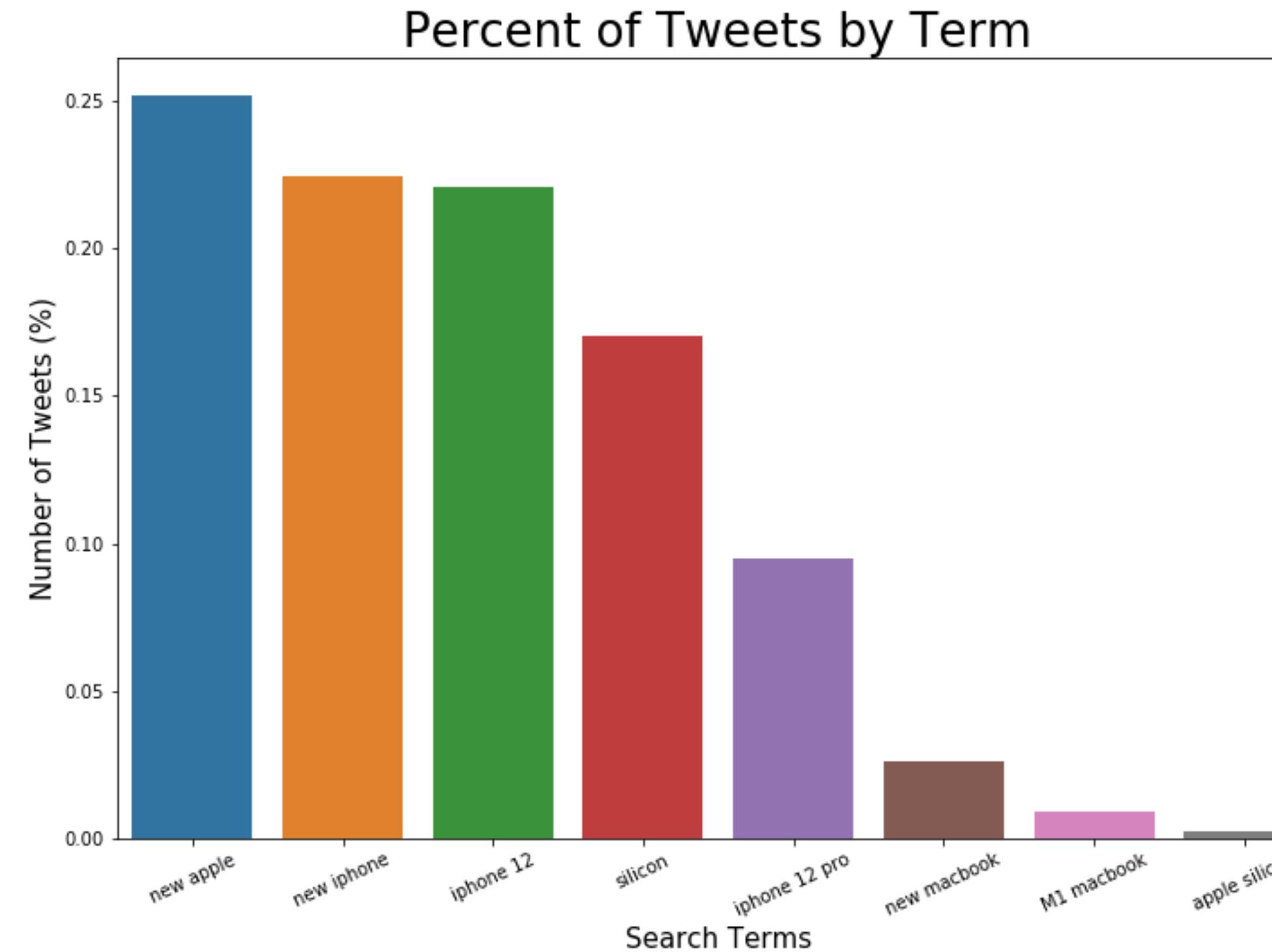
Launch Timeline



Over the past three months, Apple has had
3 major product launch events.

December 2020

The Data



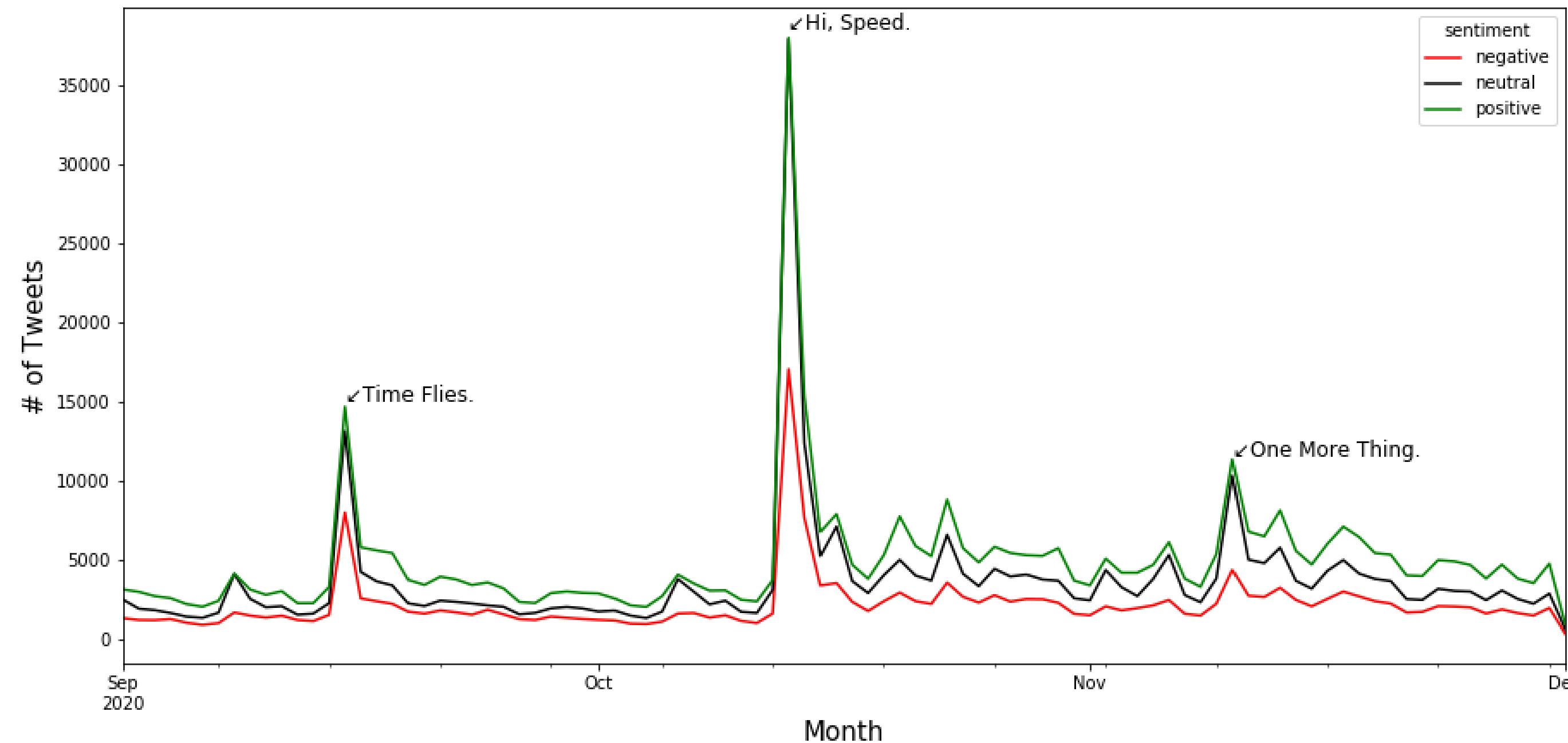
- o4
Scraped using Twint
- September 1, 2020 through December 2, 2020
- 8 Terms
- 981535 Tweets & 24 Features
- Tagged with VADERsentiment

December 2020

Analysis

05

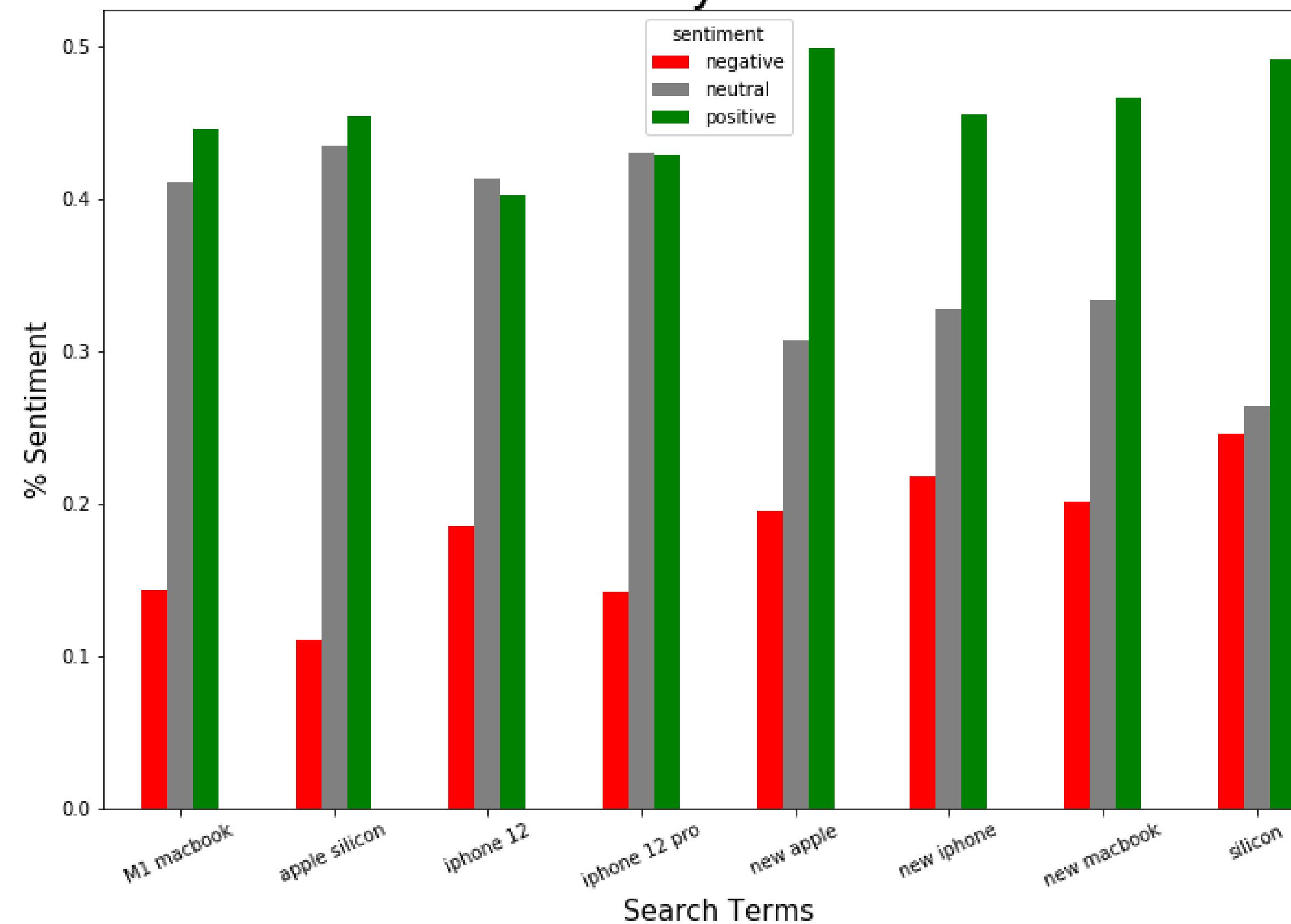
Twitter Sentiment: September - December, 2020



December 2020

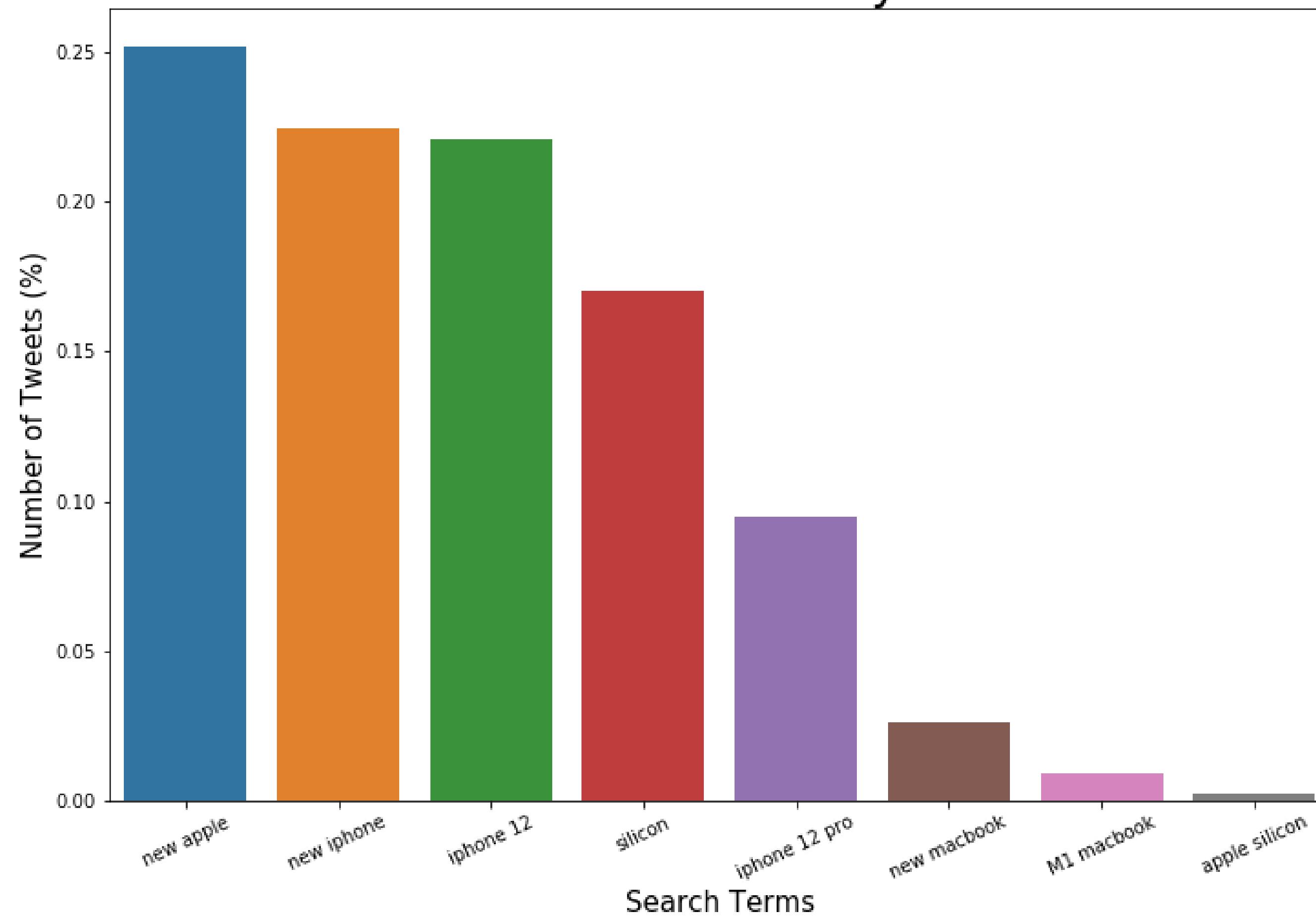
o6

Sentiment by Search Term



December 2020

Percent of Tweets by Term



December 2020

Modeling

08

Baseline WITHOUT
TfidfVectorization

Random Forest Classifier :
Accuracy = 0.46

Baseline WITH
TfidfVectorization

Random Forest Classifier :
Accuracy = 0.729

Final Model

09

GridSearchCV for Random Forest Classifier

Accuracy: 0.733

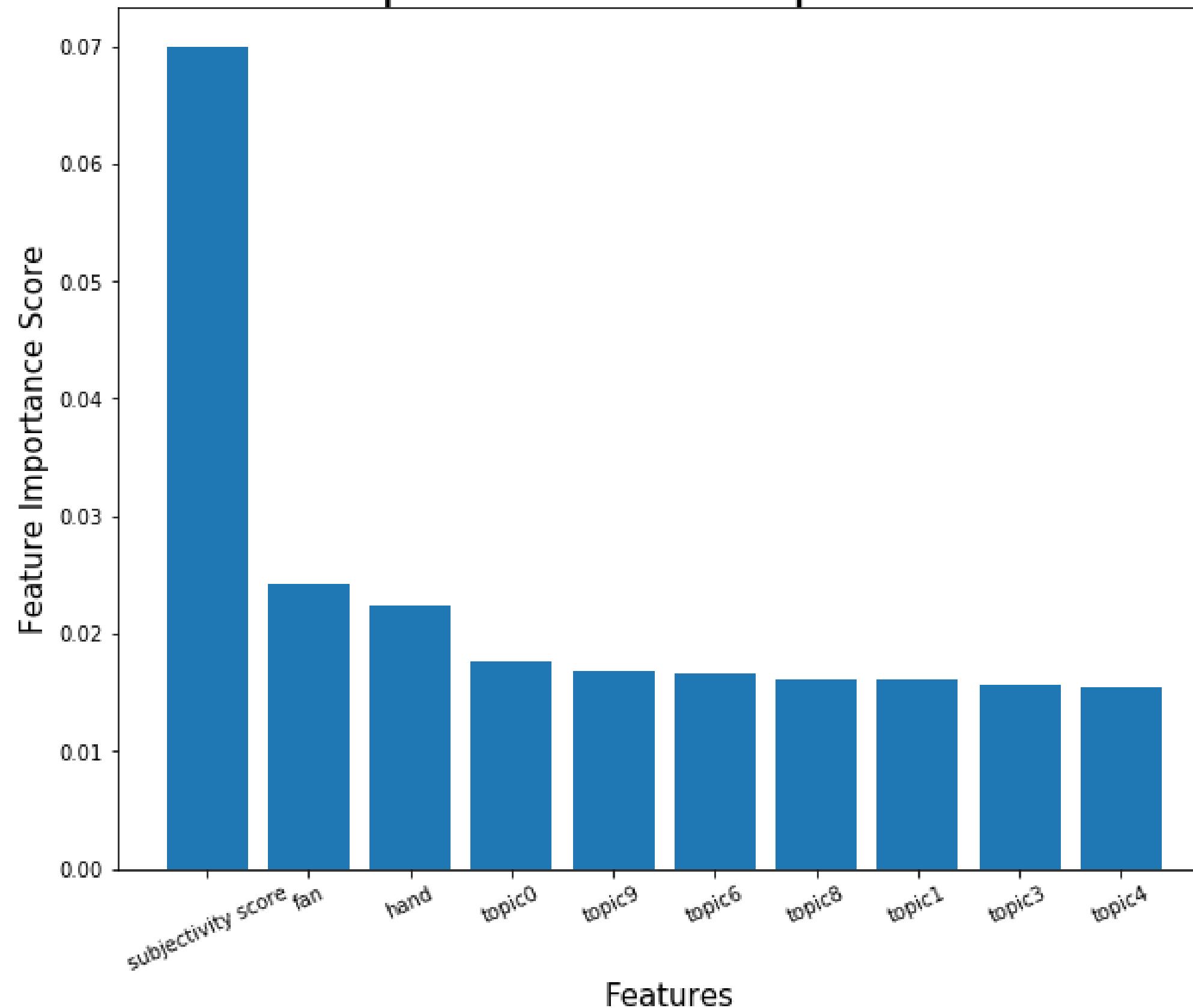
Best Parameters

```
RandomForestClassifier(n_estimators = 200, criterion = "entropy",
                      random_state = 0, class_weight = "balanced",
                      verbose=1, n_jobs=-1, max_depth=200, min_leaf_samples=1)
```

Findings

10

Top 10 Feature Importance



Subjectivity score generated via
Textblob

Topics generated via Latent
Dirichlet Allocation (LDA) model

December 2020

Next Steps



Improve model performance when classifying positive tweets that use negative words.



Broaden number of search terms and time window.



Repeat analysis as more people adopt the new products, and for future product launches.

BRENDAN FERRIS

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Thank you!

Please reach out to us with
inquiries or concerns.

DORJEY SHERPA

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