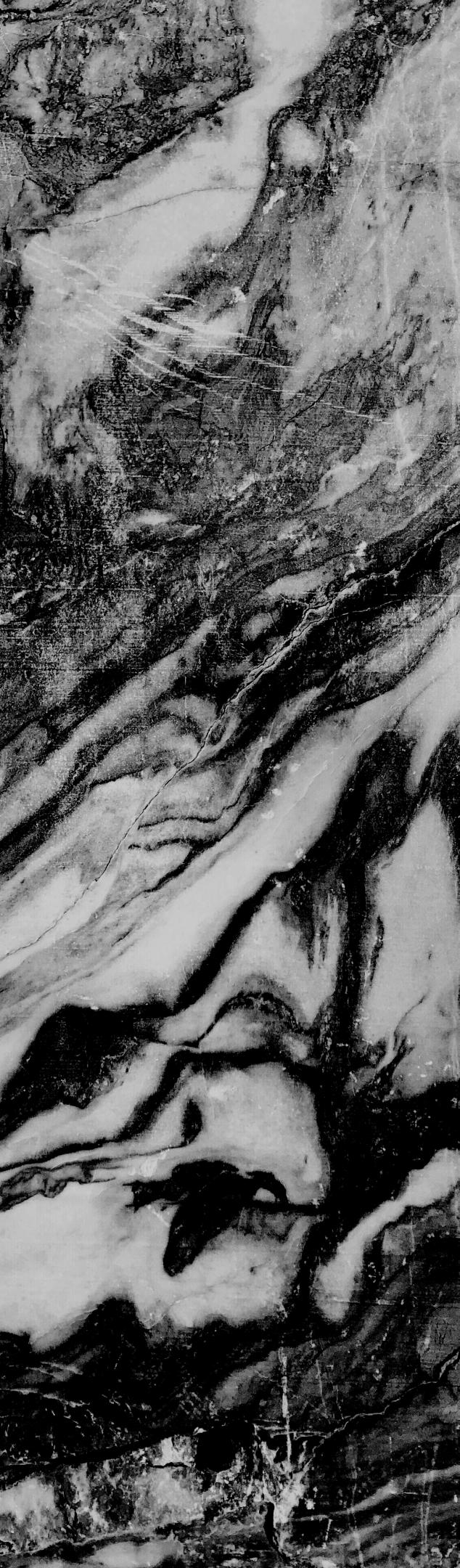




Apple

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

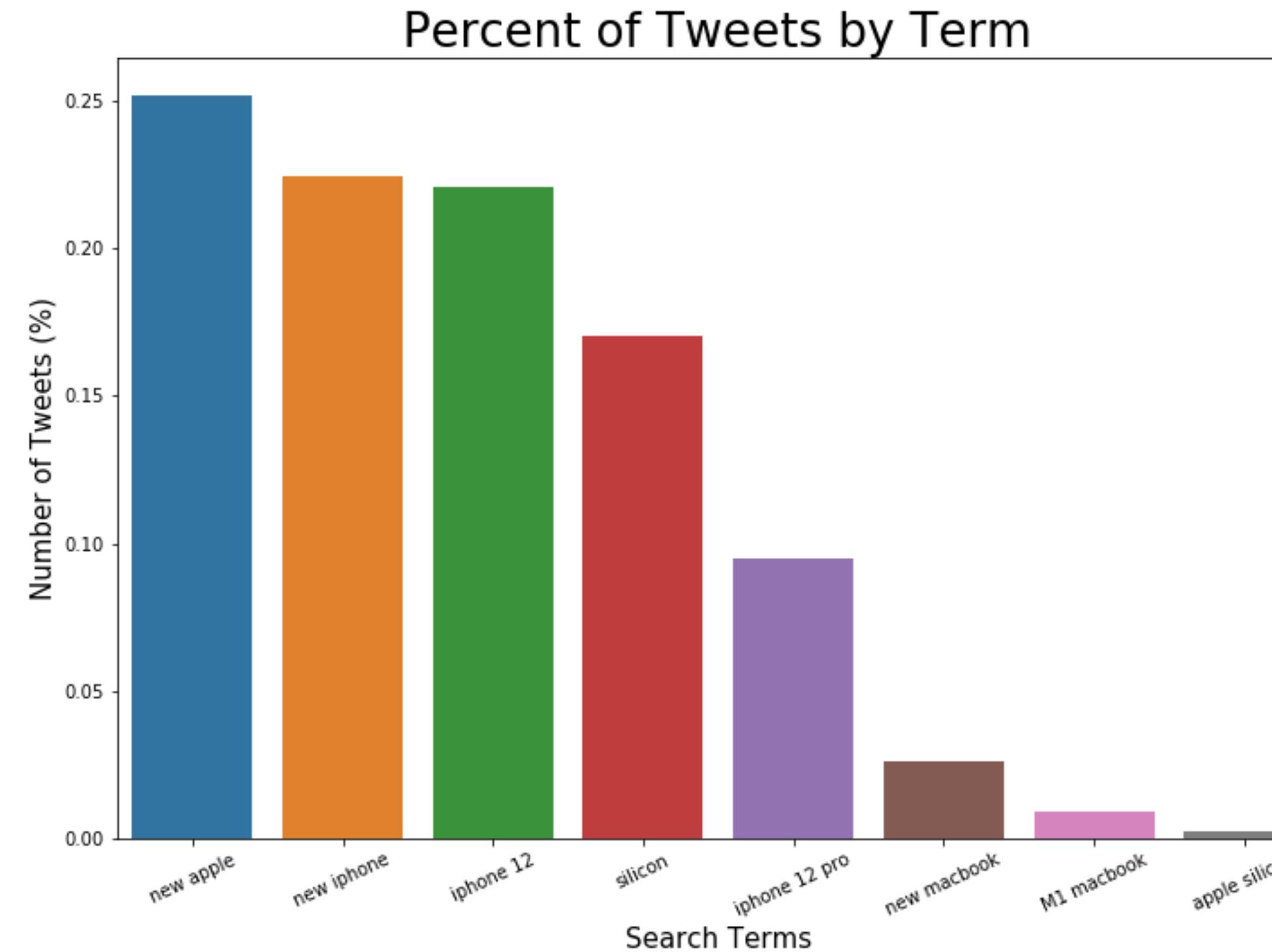


Over the past three months, Apple has had 3 major product launch events.

Tasked with gauging the sentiment over these recent launches.

December 2020

The Data



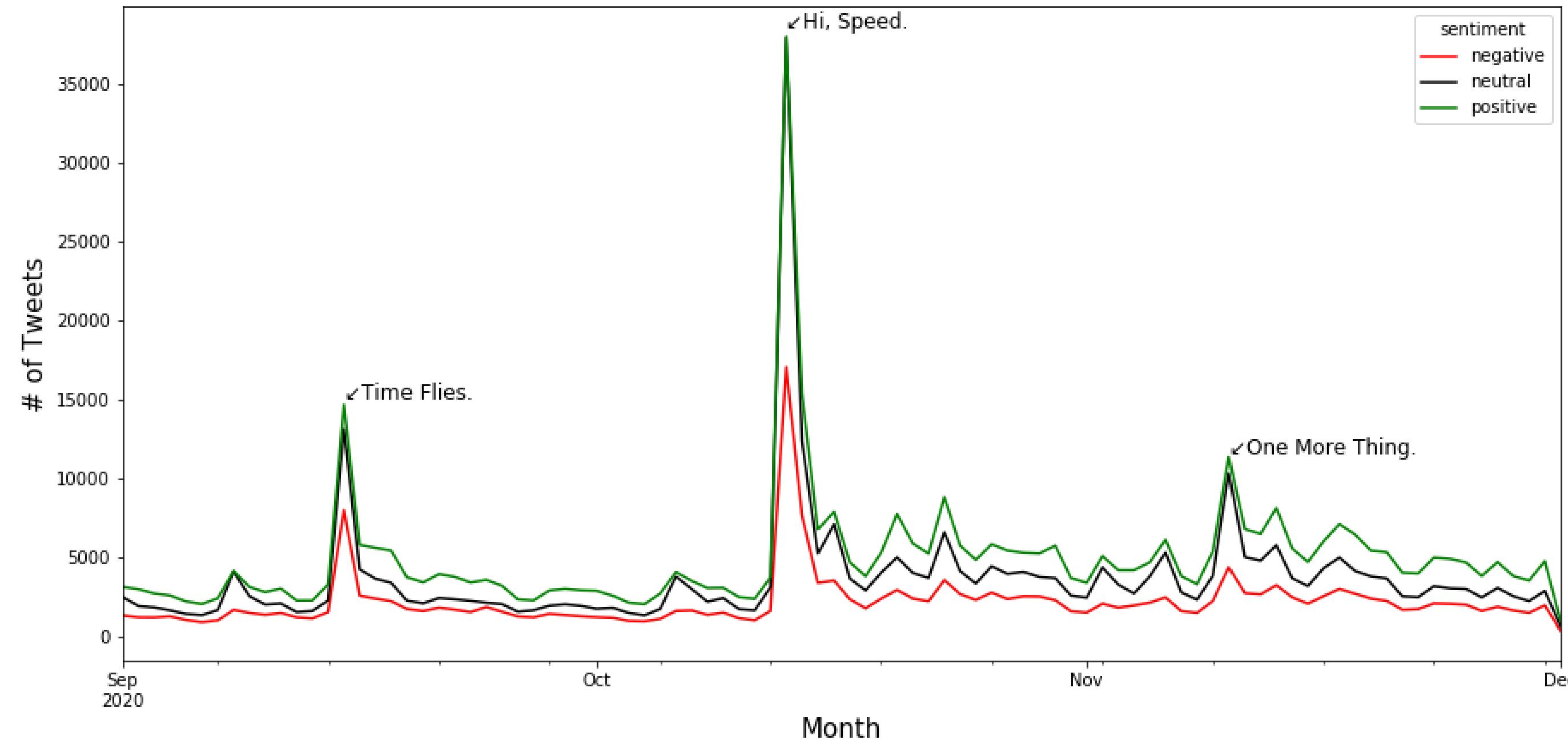
- o4
Scraped using Twint
- September 1, 2020 through December 2, 2020
- 8 Terms
- 981535 Tweets & 24 Features
- Tagged with VADERsentiment

December 2020

Analysis

05

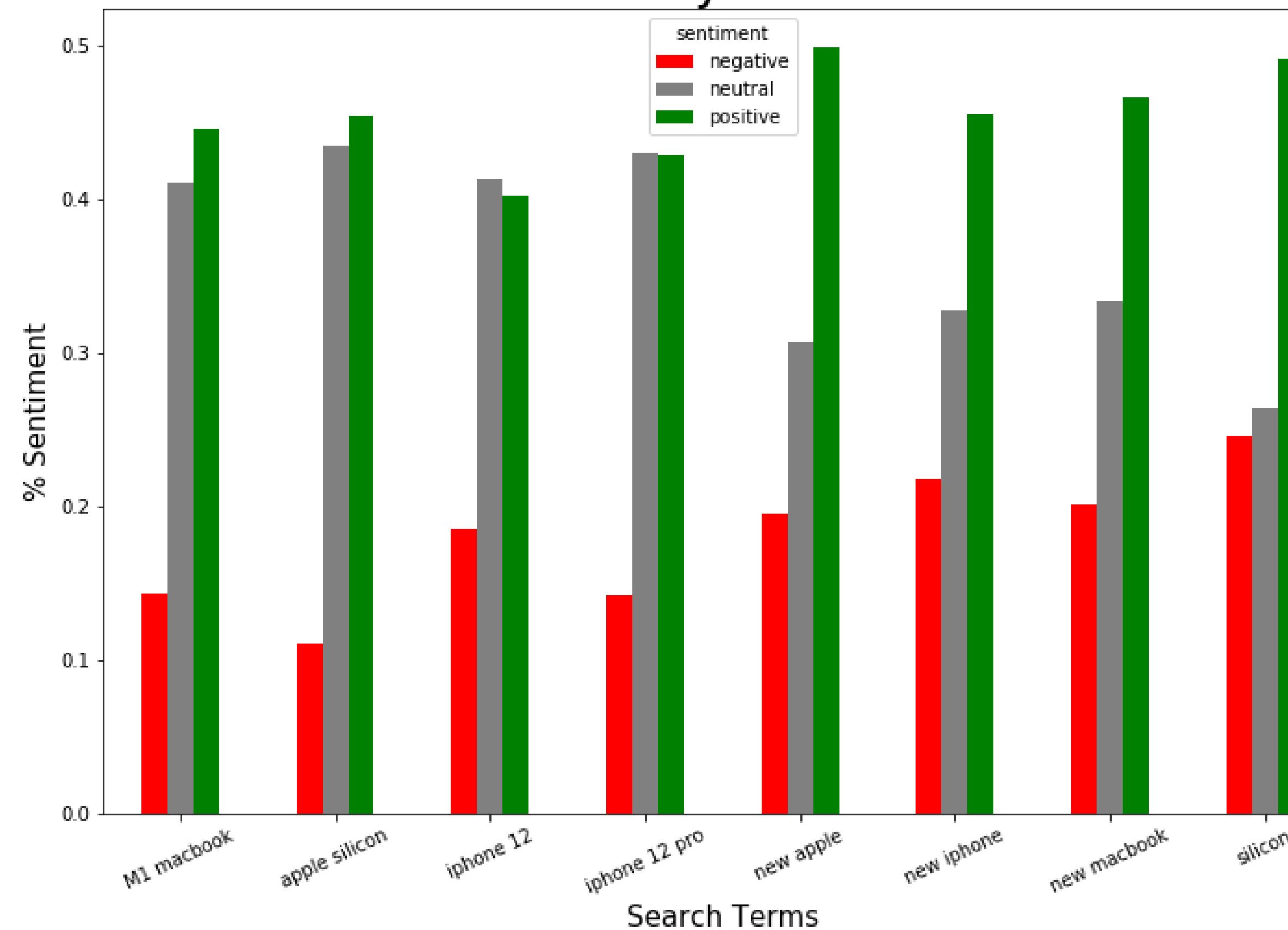
Twitter Sentiment: September - December, 2020



December 2020

o6

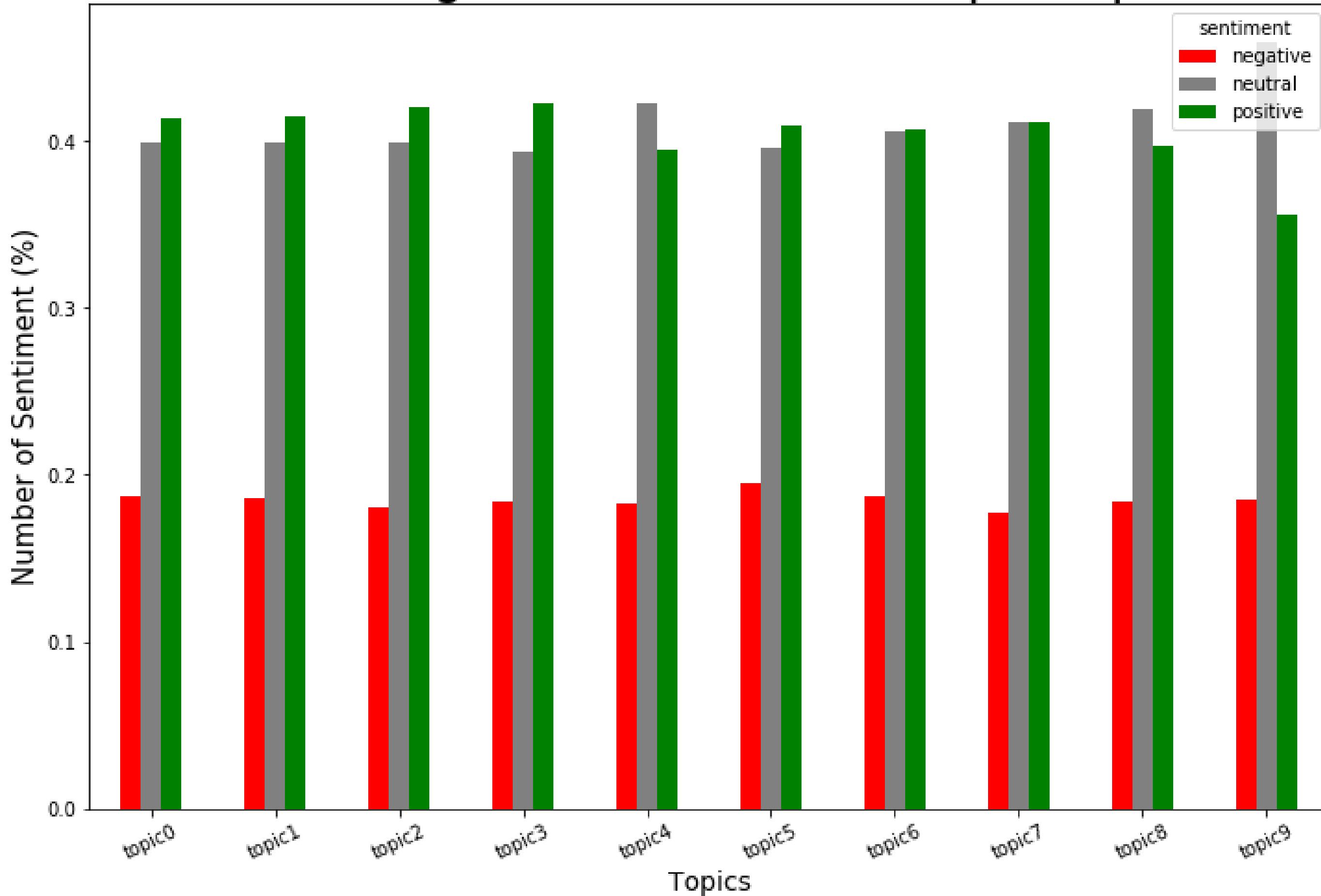
Sentiment by Search Term



December 2020

Percentage of each Sentiment per topic

07



Topic 5:

Words:

"charger", "charging",
"usb", "headphone",
"come", "box", "cable",
"samsung", "camera",
"prosser"

December 2020

Modeling

08

Baseline

Random Forest Classifier :
Accuracy = 0.46

TfidfVectorization

Random Forest Classifier :
Accuracy = 0.729

Final Model

9

GridSearchCV for Random Forest Classifier

Accuracy: 0.733

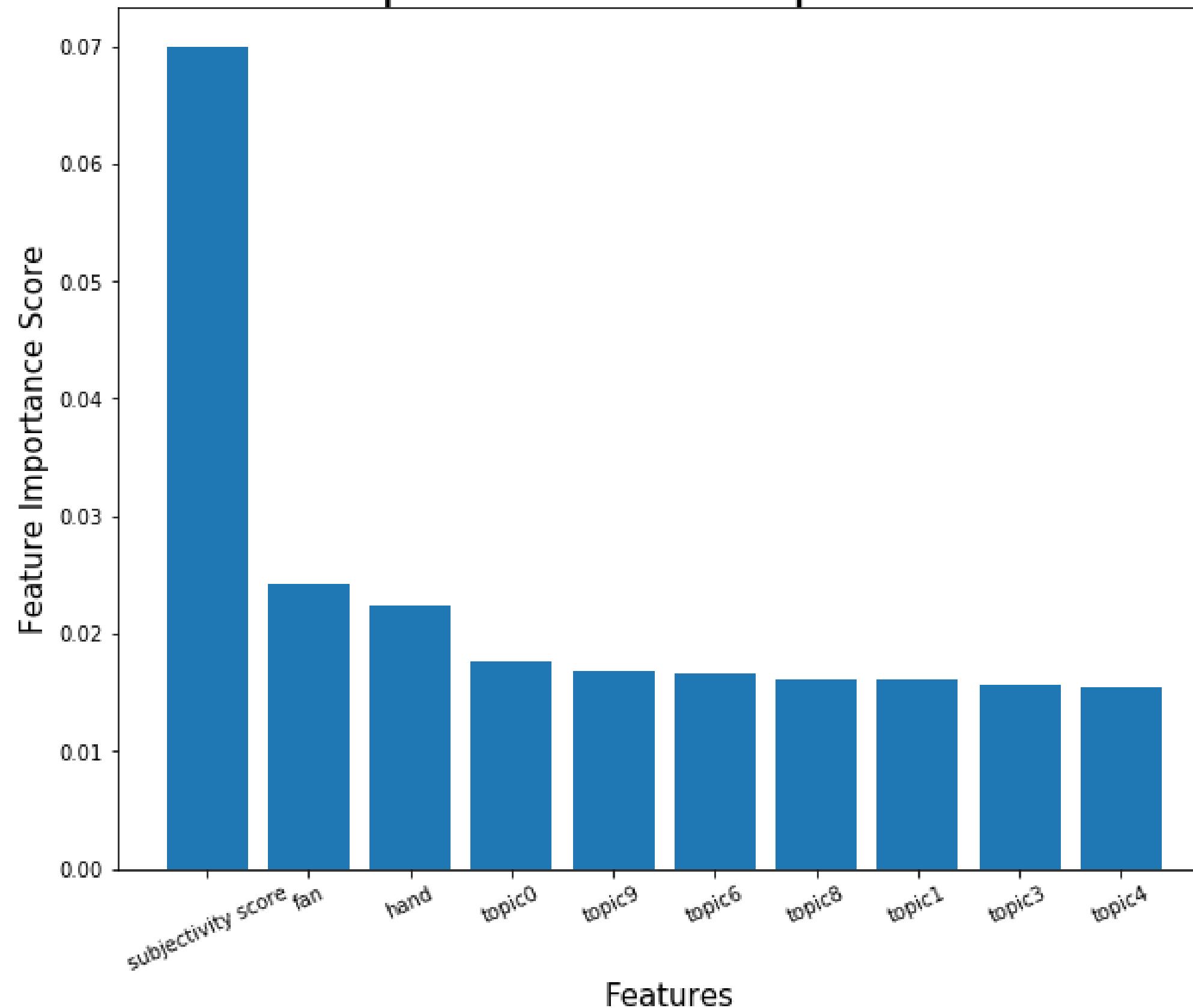
Best Parameters

```
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.

Thank you!

Please reach out to us with
inquiries or concerns.

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