Deciphering the Public Opinion on Apple - SXSW Conference

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Why does public opinion matter?
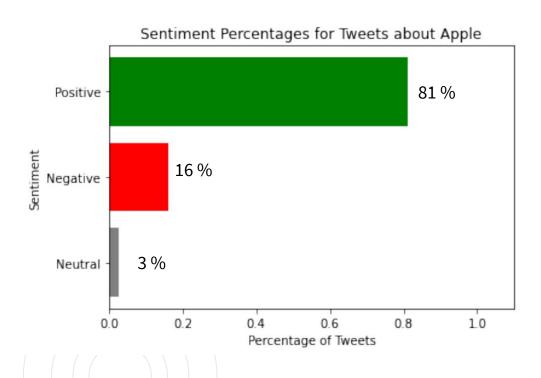
Objectives & Data Analysis

- **Objective:** Provide 5 recommendations for Apple to act on

- **Goal:** Maintain and increase competitiveness by listening to users
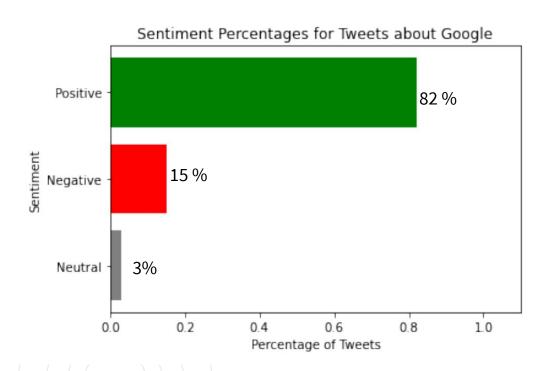
- Sample size of 9,092 tweets

- Data from 2011

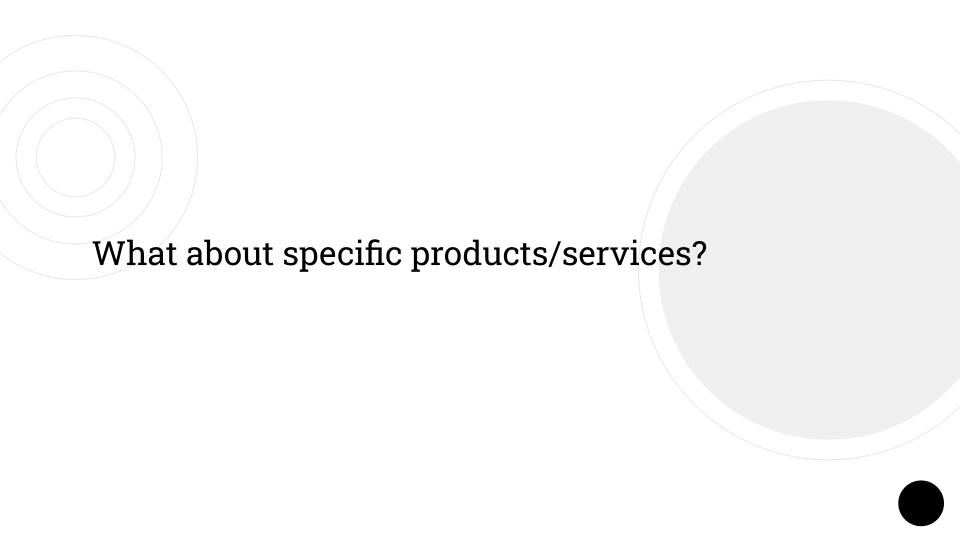# Percentage of Tweets by Sentiment - Apple

Sentiment Percentages for Tweets about Apple

- The view of everything Apple related during SXSW were mostly positive.

Percentage of Tweets by Sentiment - Google

Sentiment Percentages for Tweets about Google

- The sentiment towards Google and its products and services were also positive during the event.

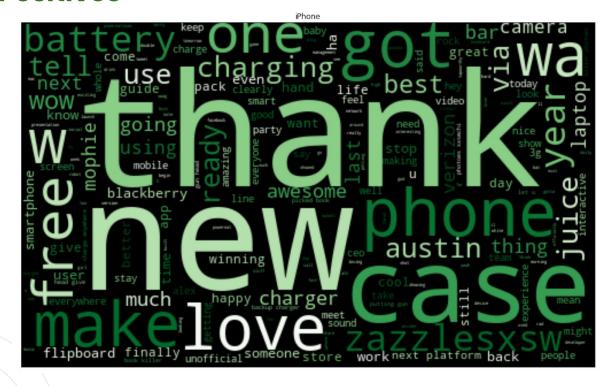What about specific products/services?

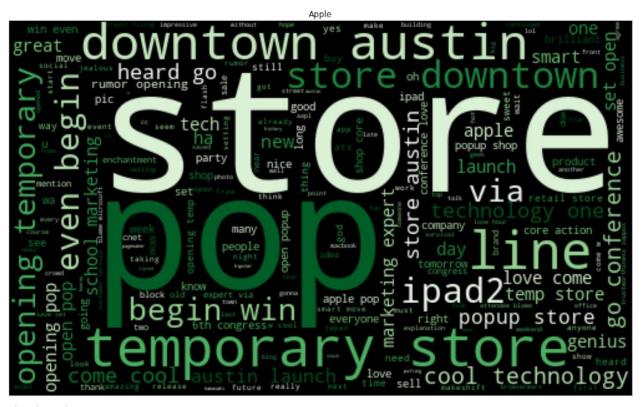# iPad – Positives

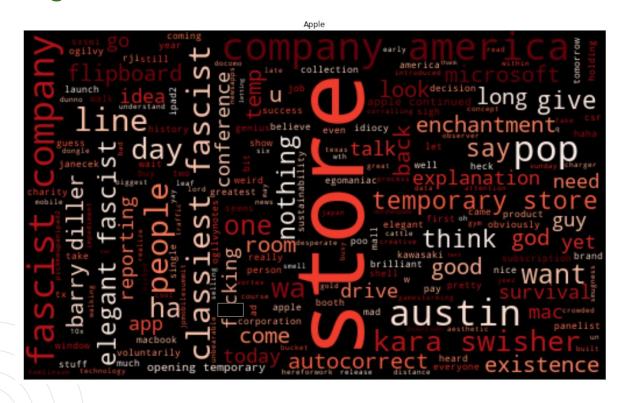# iPad - Negatives

iPhone - Positives
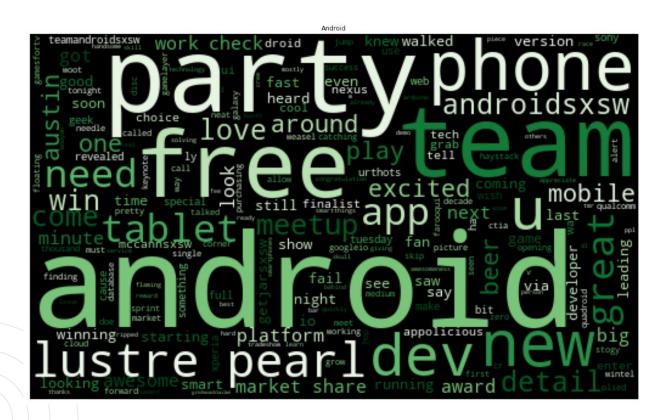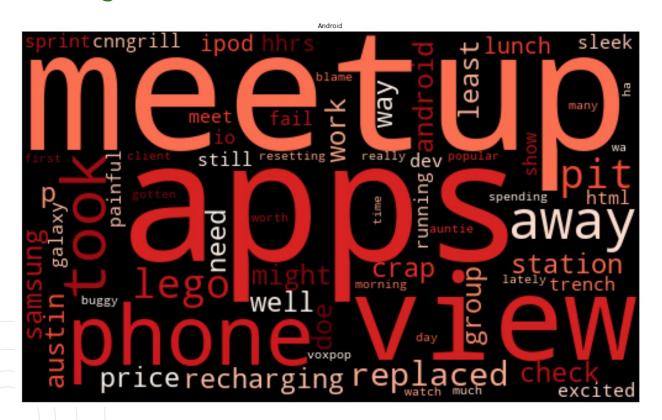
iPhone - Negatives

Apple - Positives

Apple - Negatives
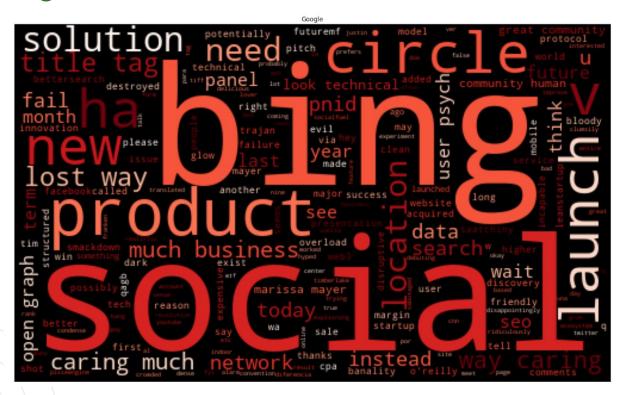
Android – Positives

Android – Negatives

Google – Positives

Google - Negatives

Machine Learning - Binary Classification

We developed 3 machine learning models

Multinomial Naive Bayes	**Logistic Regression**	Random Forest
- 86% correct predictions on positive tweets	**- 89% correct predictions on positive tweets**	- 81% correct predictions on positive tweets
- 71% correct predictions on negative tweets	**- 68% correct predictions on negative tweets**	- 63% correct predictions on negative tweets

Machine Learning - Multiclass Classification

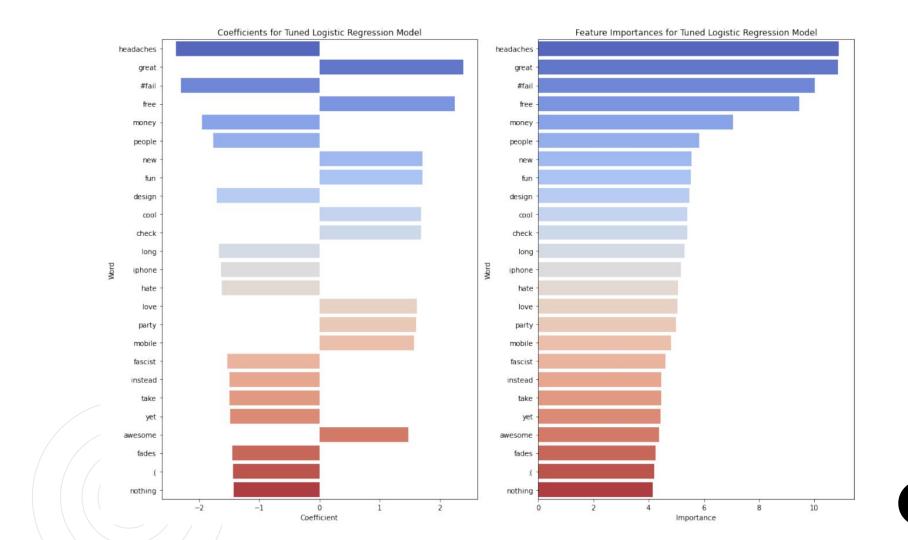We developed 2 machine learning models

Random Forest

- 59% correct predictions on positive tweets

- 32% correct predictions on negative tweets
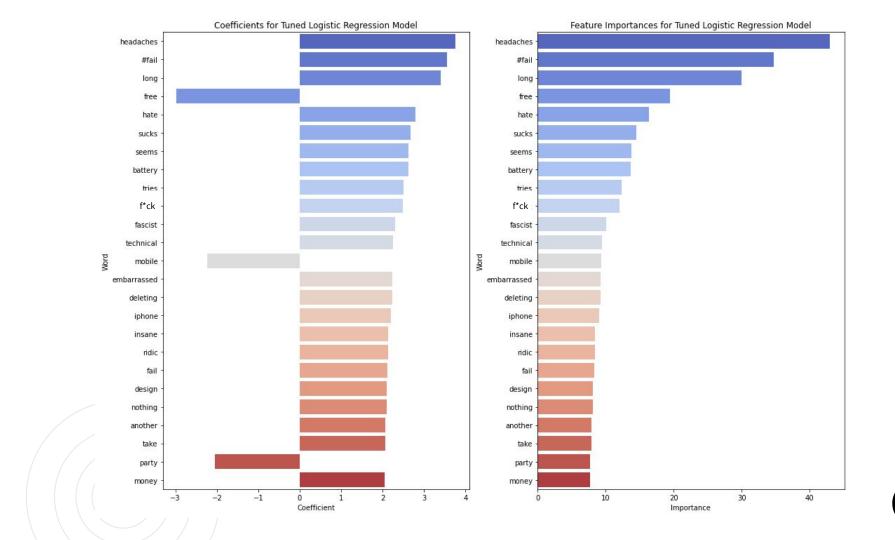
- 73% correct predictions on neutral tweets

Logistic Regression
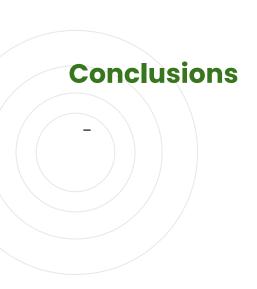
- **64% correct predictions on positive tweets**

- **57% correct predictions on negative tweets**

- **65% correct predictions on neutral tweets**

What were some of the most important words according to our binary classification model?

Coefficients for Tuned Logistic Regression Model — Feature Importances for Tuned Logistic Regression Model

What were some of the most important words according to our multiclass classification model?

Coefficients for Tuned Logistic Regression Model

Feature Importances for Tuned Logistic Regression Model

Conclusions

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Recommendations

Products:

- R&D on iPhone's battery performance

- User survey for iPad's design

- Issues with Android apps + making sure iOS has none of these issues = opportunity

Conferences:

- The marketing strategy for the pop-up stores can be employed in conjuction with other conferences or major events.

- It may be effective to throw a party during the next SXSW Conference to generate excitement.

Thank you!

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Images from: