



Apple Sentiment Twitter Analysis



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Team Members







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Presentation Lead



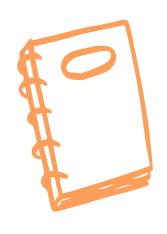
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GitHub Lead



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Agenda



- 1 Business Situation
- 2 Data Overview
- 3 Data Analysis
- 4 Modeling
- 5 Recommendations and Next Steps

Bottom Line

Improving consumer relations through targeted marketing and excellent product design is key to continuing Apple's market share growth & industry dominance.





Business Overview

- Hyper competitive marketplace
- Apple became market share leader 2022
- Innovation driven consumer base
- Targeted marketing improves sales





Data Overview



Data Overview



2,846 Tweets from South by Southwest (SXSW) 2013



Filtered for Apple products & consumer sentiment



Imbalanced and messy data



Metrics: F1 Score

Why is this important?



50%

Of people aged 16-24 use Twitter for brand research 76%

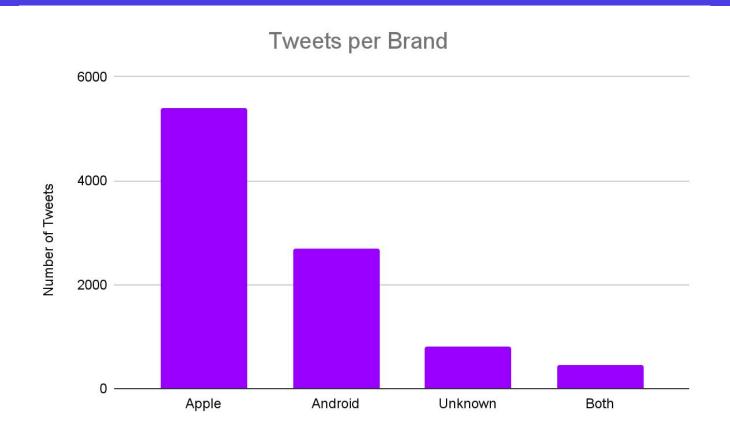
Of users say they've bought something based on Twitter conversations 545 million

Potential viewers of advertisements

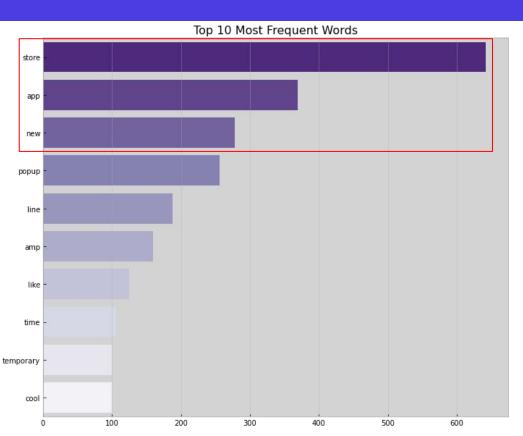
Data Analysis



Apple = More Engagement

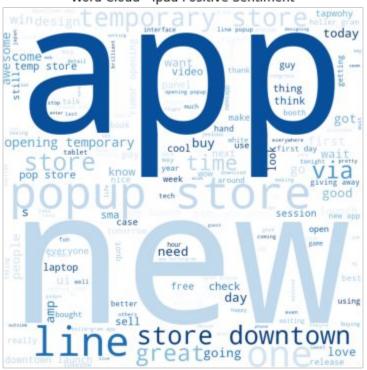


Word Frequency



People Enjoy New Things

Word Cloud - Ipad Positive Sentiment



Word Cloud - Ipad Negative Sentiment



Apps are the Key

Word Cloud - Iphone Positive Sentiment



Word Cloud - Iphone Negative Sentiment



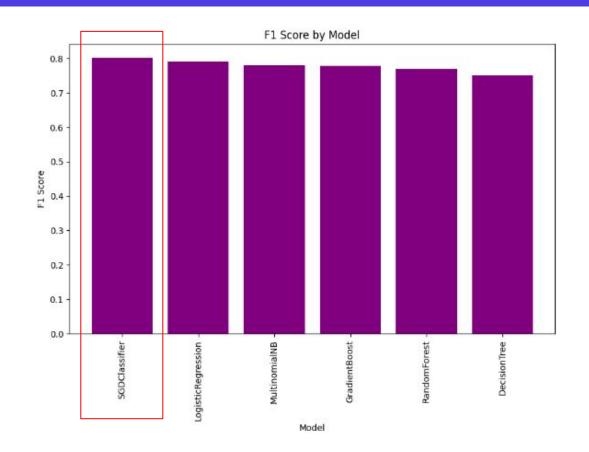
Modeling



Model

F1 score of 80%

 Shows a strong performance in recognizing positive tweets while minimizing false positives and false negatives.



Recommendations

Focus on app functionality

Improve battery life

 Ensure design is appealing to customers



Next Steps

Acquire recent data from Twitter

 Look into alternate ways of dealing with the imbalanced data

 Use deep learning models to capture complex patterns in the data



Questions?







Rajesh Reddy
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Thank you!



