News Article Headlines Sentiment Analysis

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Purpose

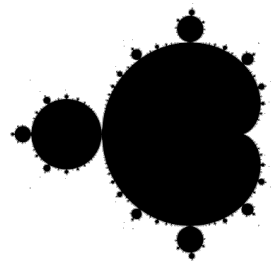
- Elevate transparency of public opinion
- Home in on which topics are influencing your brand in a positive or negative direction
- Track how opinion is changing over time and course correct if necessary

Business Case

- Understand how the media perceives your brand
- Make informed decisions on which campaigns are resonating the most with customers
- In an era where public image needs to be pristine, ensure visibility to gain insights

The Model Used to Extract Sentiment

- Achieved 60% accuracy on a multiclass label problem using a rules-based approach
- Combination of unsupervised machine learning models: VADER & TextBlob
  - VADER: Trained on social and returns a polarity and subjectivity score
  - TextBlob: Trained on IMDB movie review corpus



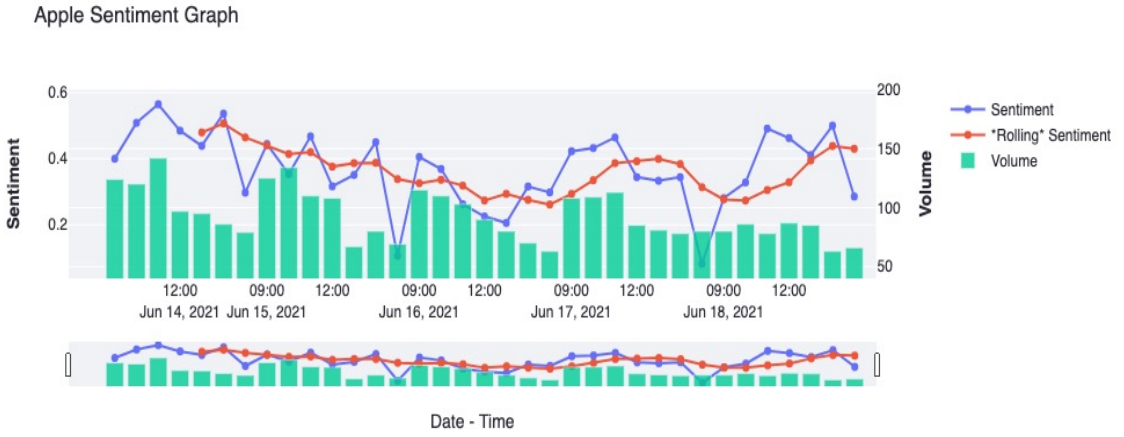
TextBlob

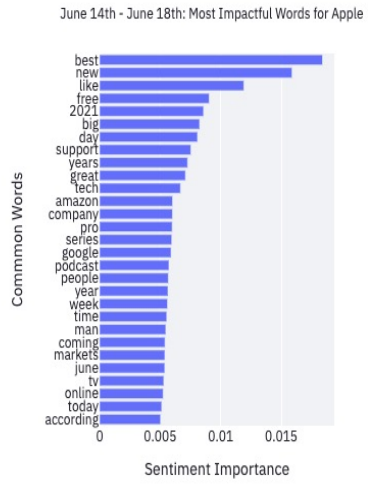
What Can We Learn From This?

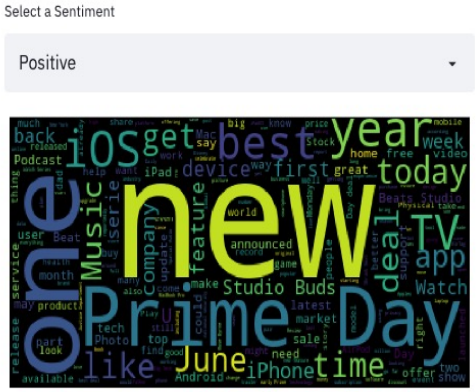
- ❑How customers are feeling towards the brand
- ❑When sentiment is changing
- ❑What are the most polarizing articles that may need to be addressed

Dashboard Capabilities

- ❑ Track changes over time
- ❑ Analyze which words have the most impact on sentiment
- ❑ Filter between positive, neutral, and negative news articles and see which words are appearing most often







Conclusion

- Sentiment Analysis is still nascent because computers are only recently becoming adept at handling unstructured data
- Massive amounts of unstructured data that can be harnessed to produce actional insights
- Brand integrity needs to be at an all time high

Further Work

- Topic Modeling with Latent Dirichlet Allocation
- Livestream news articles using a different API
- Integrate social media listening

Are there any further questions or comments?

Thank you for listening