



Sentiment Analysis

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Brand Reputation



- Consumers will read on average 10 product reviews before making a purchase
- Increase brand loyalty
- Position as leader in the market



Manage Negative Feedback

Improve:

- Product
- Customer relationship management
- Manage potential customers brand impression

Identify Sentiment

- Natural Language Processing (NLP)
 - Test various models
 - Adjust data for imbalance
 - Optimize model parameters

Results



- Random Forrest Classifier
 - Under sampling
- Recall Metric - .80
 - Negative reviews identified out of all reviews

Example Tweets

- ".@wesley83 I have a 3G iPhone. After 3 hrs tweeting at #RISE_Austin, it was dead! I need to upgrade. Plugin stations at #SXSW."
- "@sxsw I hope this year's festival isn't as crashy as this year's iPhone app. #sxsw"
- "@mention - False Alarm: Google Circles Not Coming Now^{%00} and Probably Not Ever? - {link} #Google #Circles #Social #SXSW"

Recommendations

- Respond to customers addressing feedback
- Share sentiment with product managers
- Promote campaign with improvements made

Future Work

- Develop text generative bots to respond to customer feedback
- Optimize model to identify positive, neutral, and negative sentiments with high accuracy
- Apply models to other platforms