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

Examples

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‰ÛÒand 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