

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. Both are tilted at an angle.

Airline Review Sentiment Analysis

Ron Lodetti Jr.
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Overview



- Business Problem
- Data & Methods
- Modeling
- Evaluation
- Conclusions



Business Problem

Stakeholder:

Popular Airline Company

Challenge:

How can we improve
customer satisfaction and
brand loyalty?



Business Problem

Stakeholder:

Popular Airline Company

Context:

- **Predict sentiment** based on reviews
- **Focus** for Marketing Campaign



Summary

Source

AirlineEquality.com

Method

Multi-Layer Perceptions

Findings

Prediction:

- 92% of Reviews

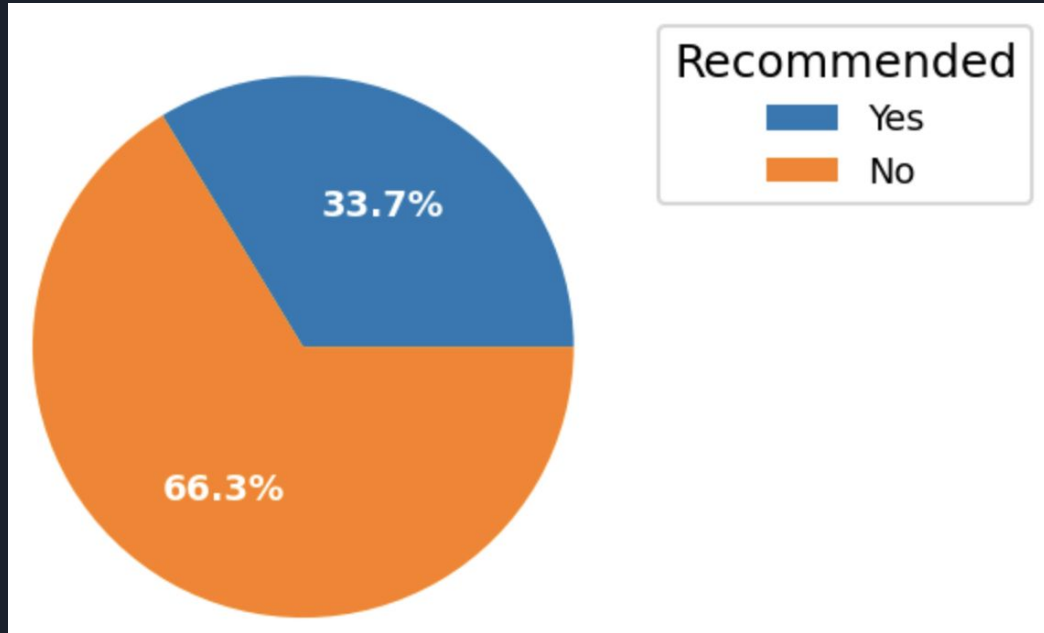
Factors

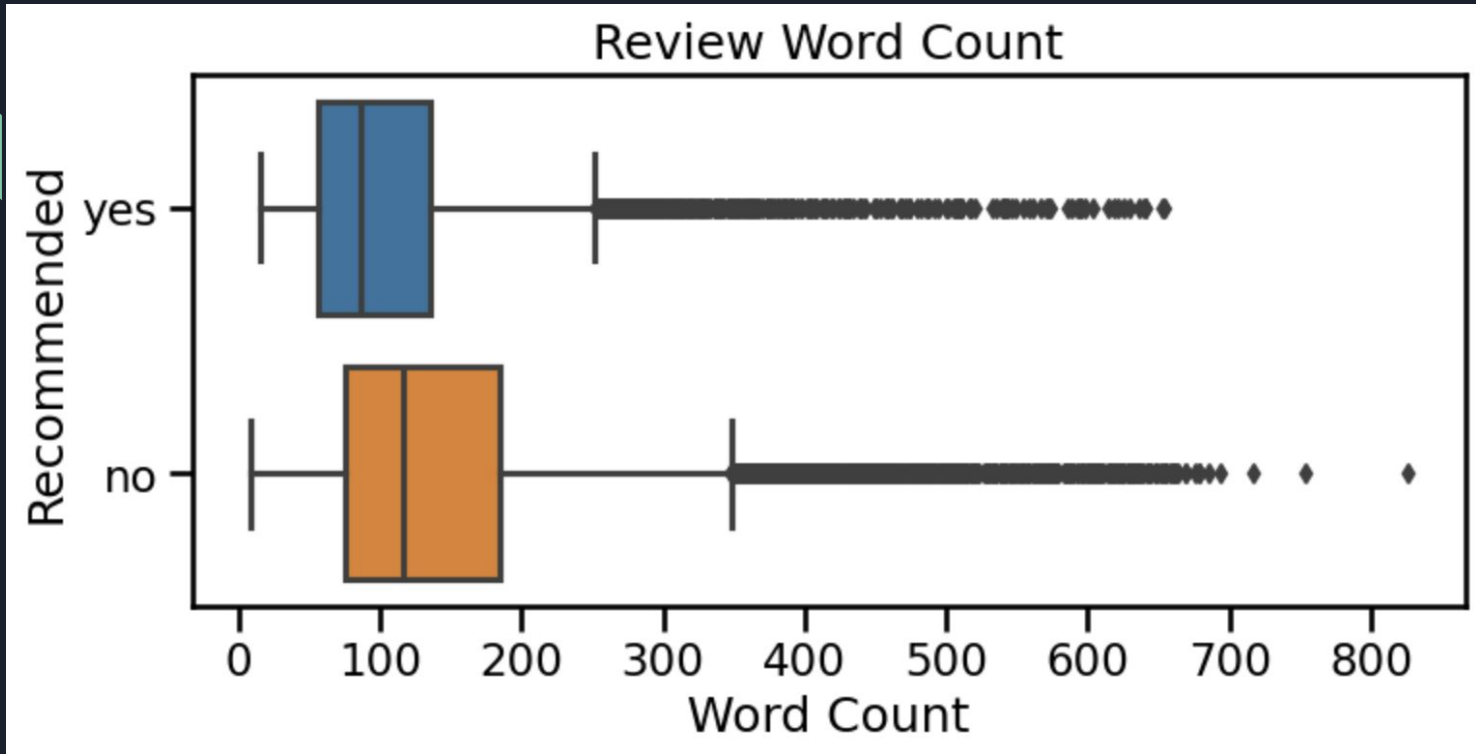
- Punctuality
- Customer Service

Data

Airline Reviews

- 23,171 Reviews
- From 2002 - 2023



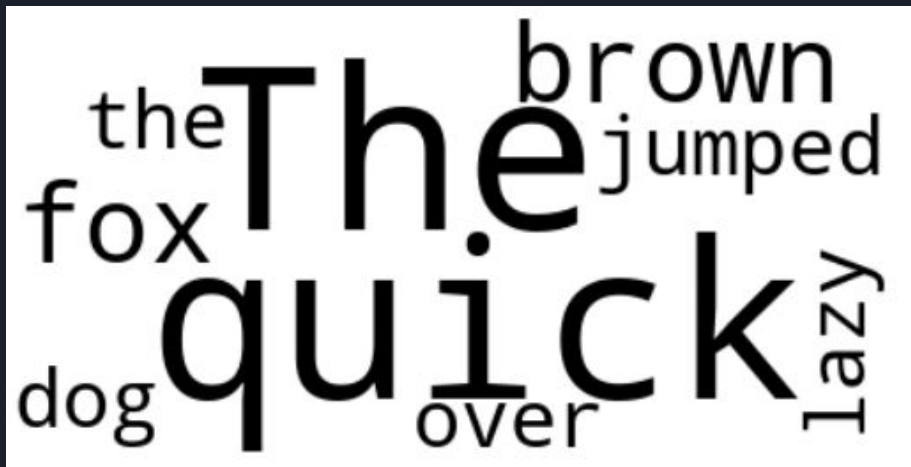


“No” Reviews are longer on average



Model Iteration

Bag of Words



The quick brown fox jumped over the lazy dog.

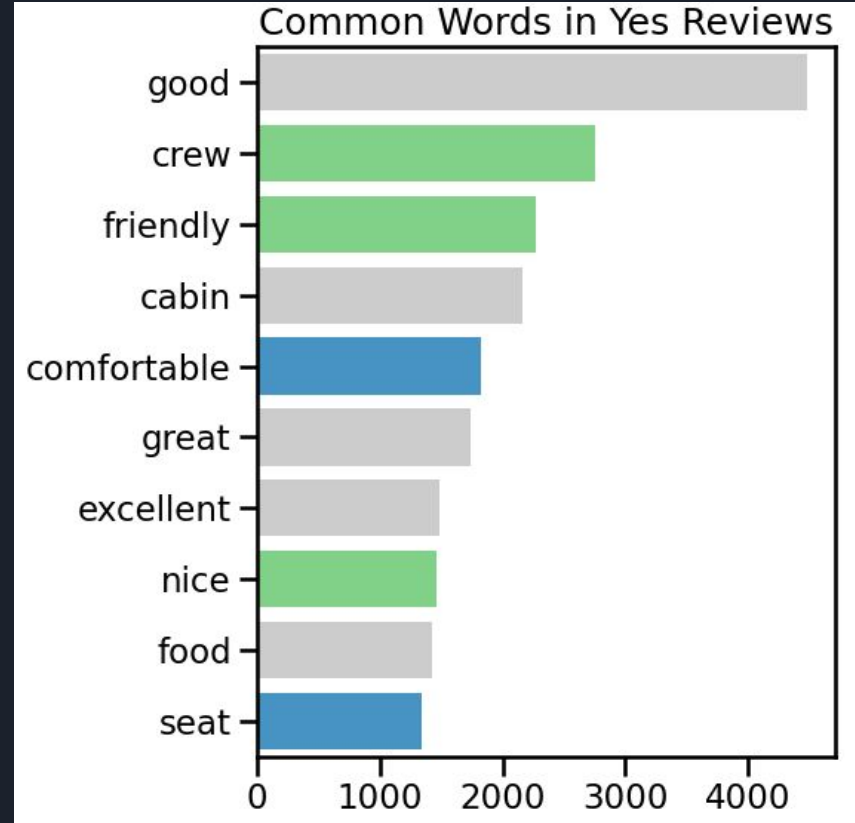
Sequential

The quick brown fox jumped over the lazy dog.

Feature Importance

Positive Influences

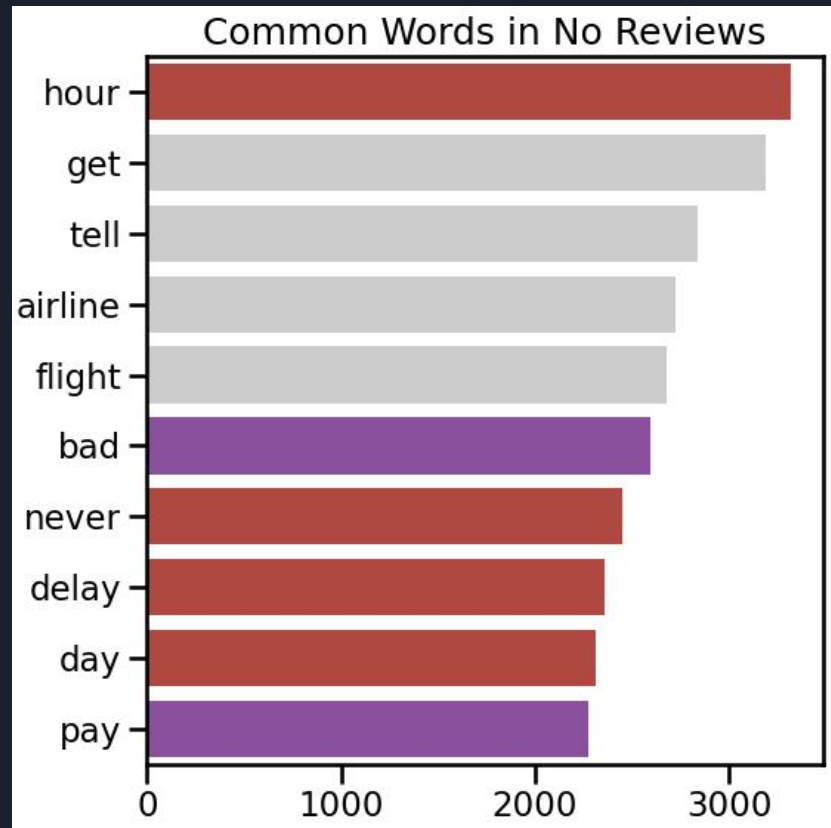
- Customer Service
- Comfort



Feature Importance

Negative Influences

- Punctuality
- Quality





Conclusion

Final model

- **Bag of Words** Model
- **92%** Accuracy

Recommendation:

- **Final Model** to classify future reviews
- **Marketing Focus:**
 - **Punctuality**
 - **customer service.**



Conclusion

Limitations

- Only used Title, Review, Recommended features.
- Representative Sample?



Next Steps

- **Include More Features**
 - Improve predictive model
 - Gain insights into customer satisfaction
- **Update** Airline survey

Thank you!

Email:

ron.lodetti@gmail.com

Github:

[@rlodetti](https://github.com/rlodetti)

Linkedin:

[@ronlodetti](https://www.linkedin.com/in/ronlodetti)

