



Airline Twitter Sentiment Analysis



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Agenda

1 Business Goal

2 What is Sentiment Analysis?

3 Our Data

4 Model

5 Suggestions

6 Next Steps



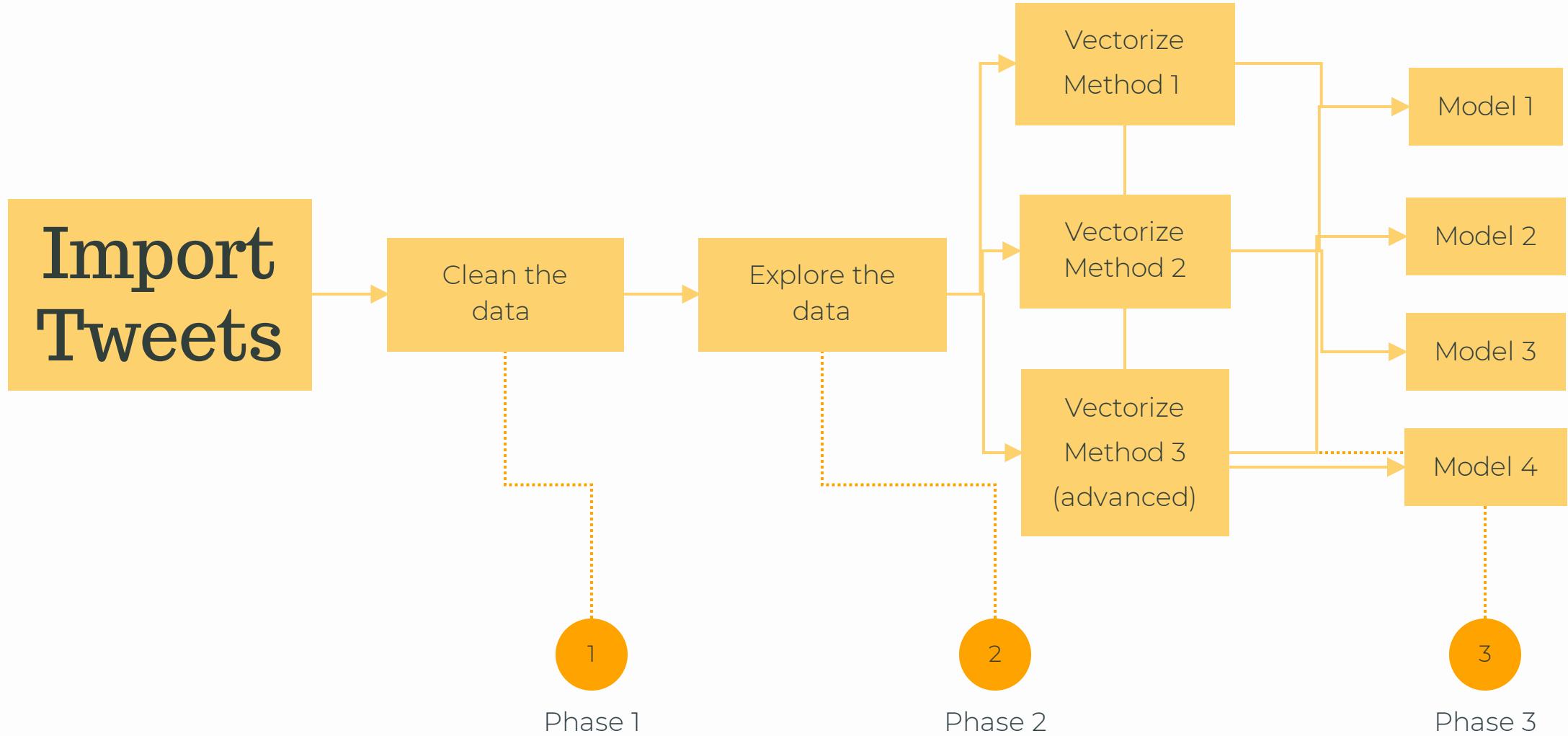
Business Goal

Our goal is to help US Airways and regulators **improve** the **customer experience** by identifying areas for improvement and providing data-driven **insights** and **strategic recommendations**.

What is Sentiment Analysis?



The Process





Our Data

Source: Kaggle,

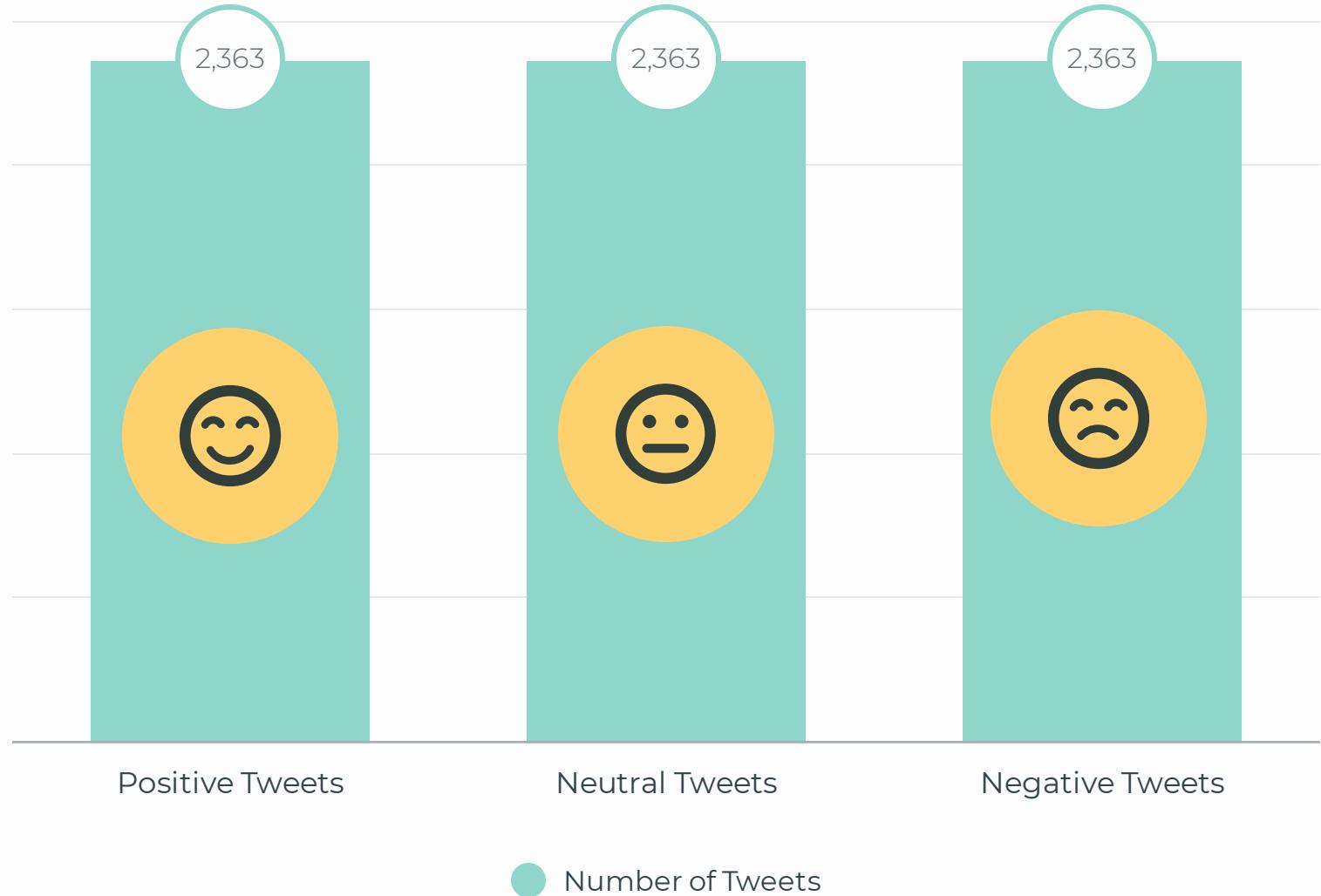
7,089 Tweets

Index	Sentiment	Tweet
Tweet 1	👍	"our flight attendant was super helpful in finding a bag we left on a flight today."
Tweet 2	👍	"amazing arrival hour early..."
Tweet 3	👎	"Cancelled Flightled my direct flight Newark-Brussels last night, now 7 hours behind schedule."
Tweet 4	👎	"was told that it's been the case for weeks but is still not resolved."

Positive, Negative

Sentiment Break Down

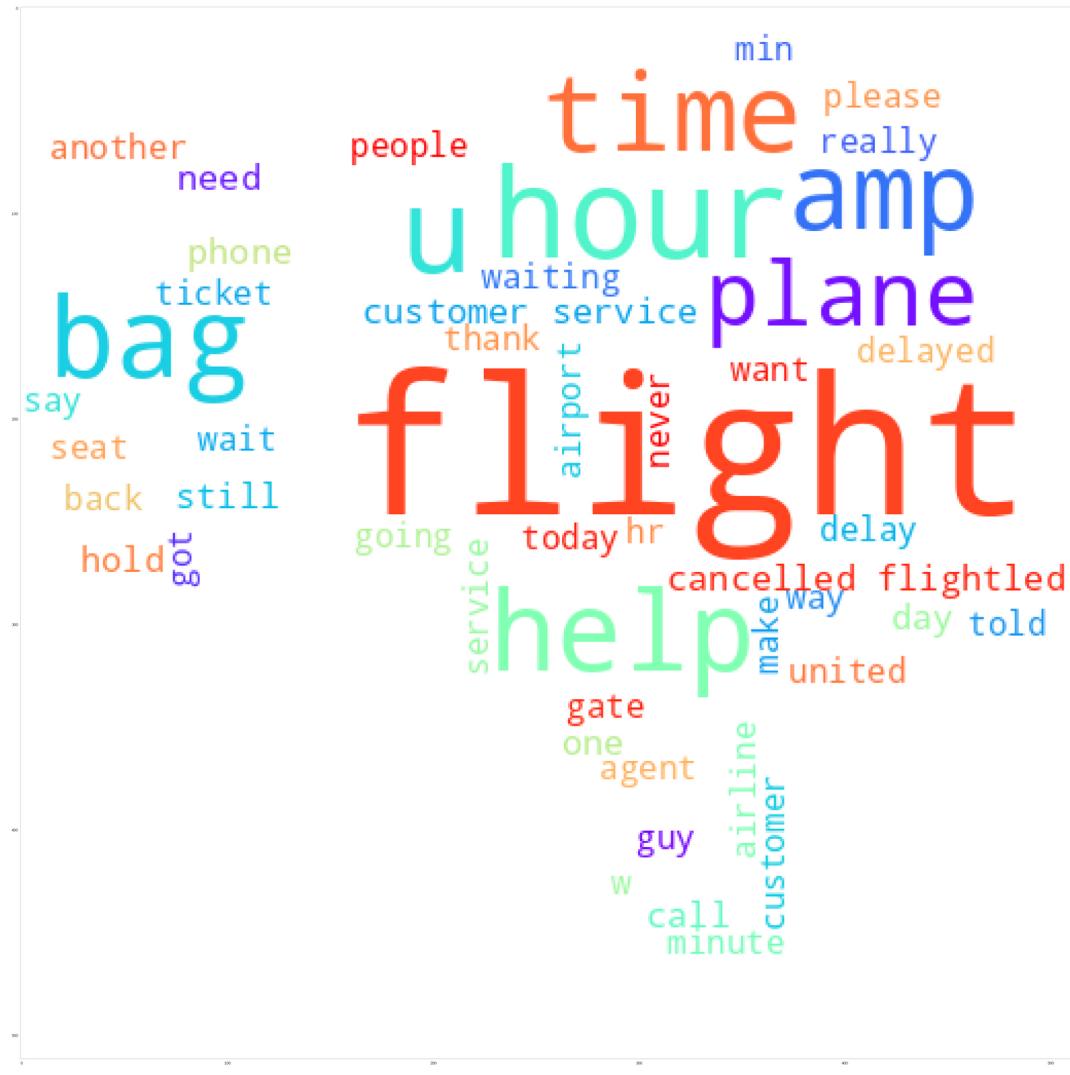
Data is evenly distributed.





Positive

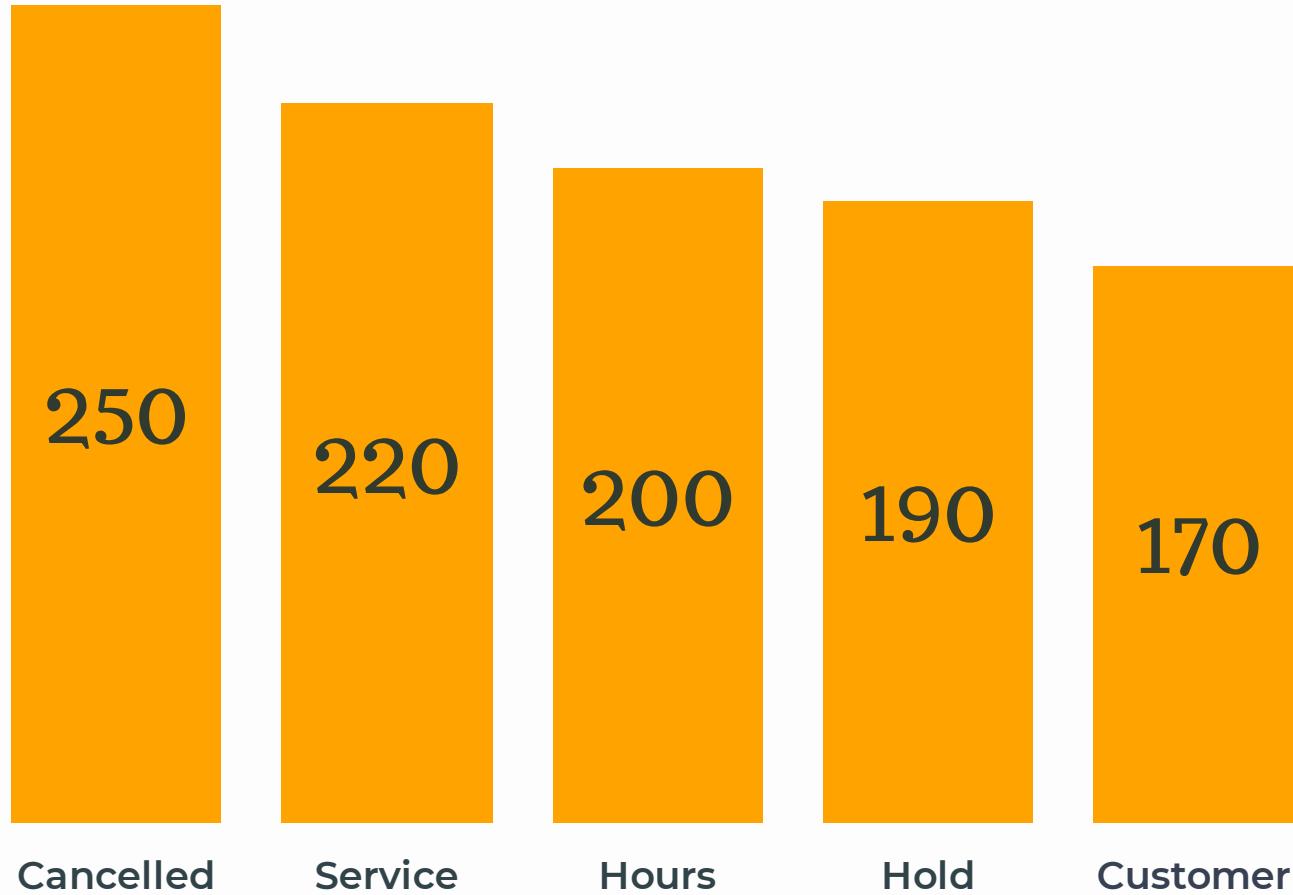
Focus on feelings
of appreciation
and certain
degree
satisfaction.



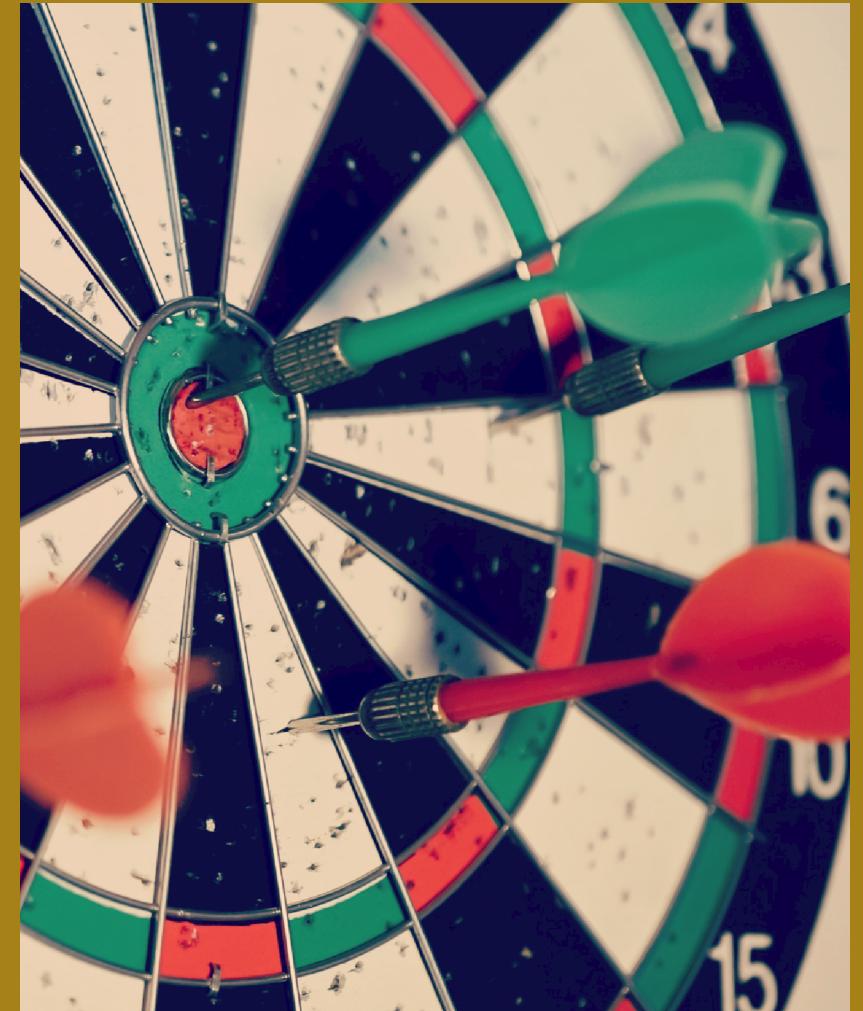
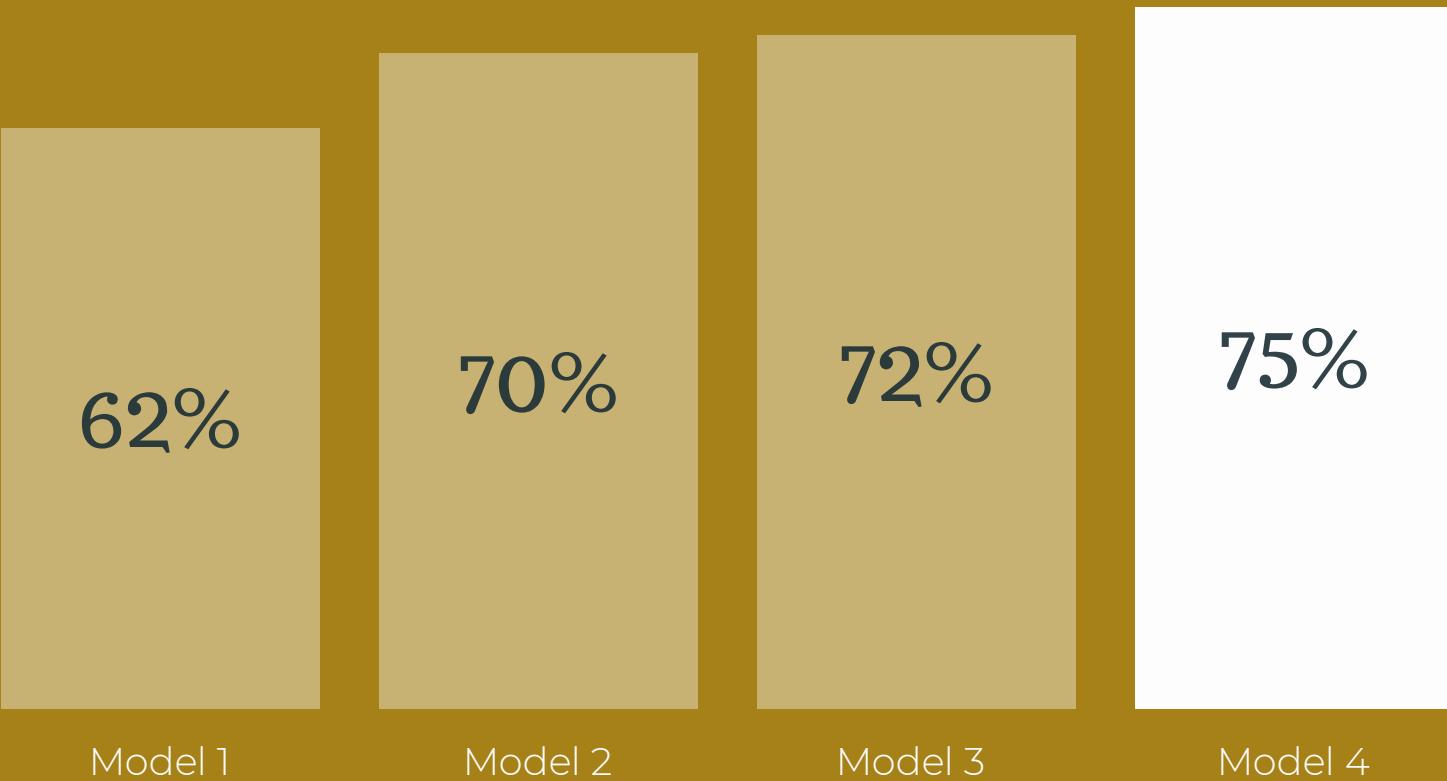
Negative

Poor customer service, issues with baggage handling, and cancellations.

Top Words in Negative Tweets: Understanding Customer Pain Points



Comparing Models





Model Evaluation

Model 4

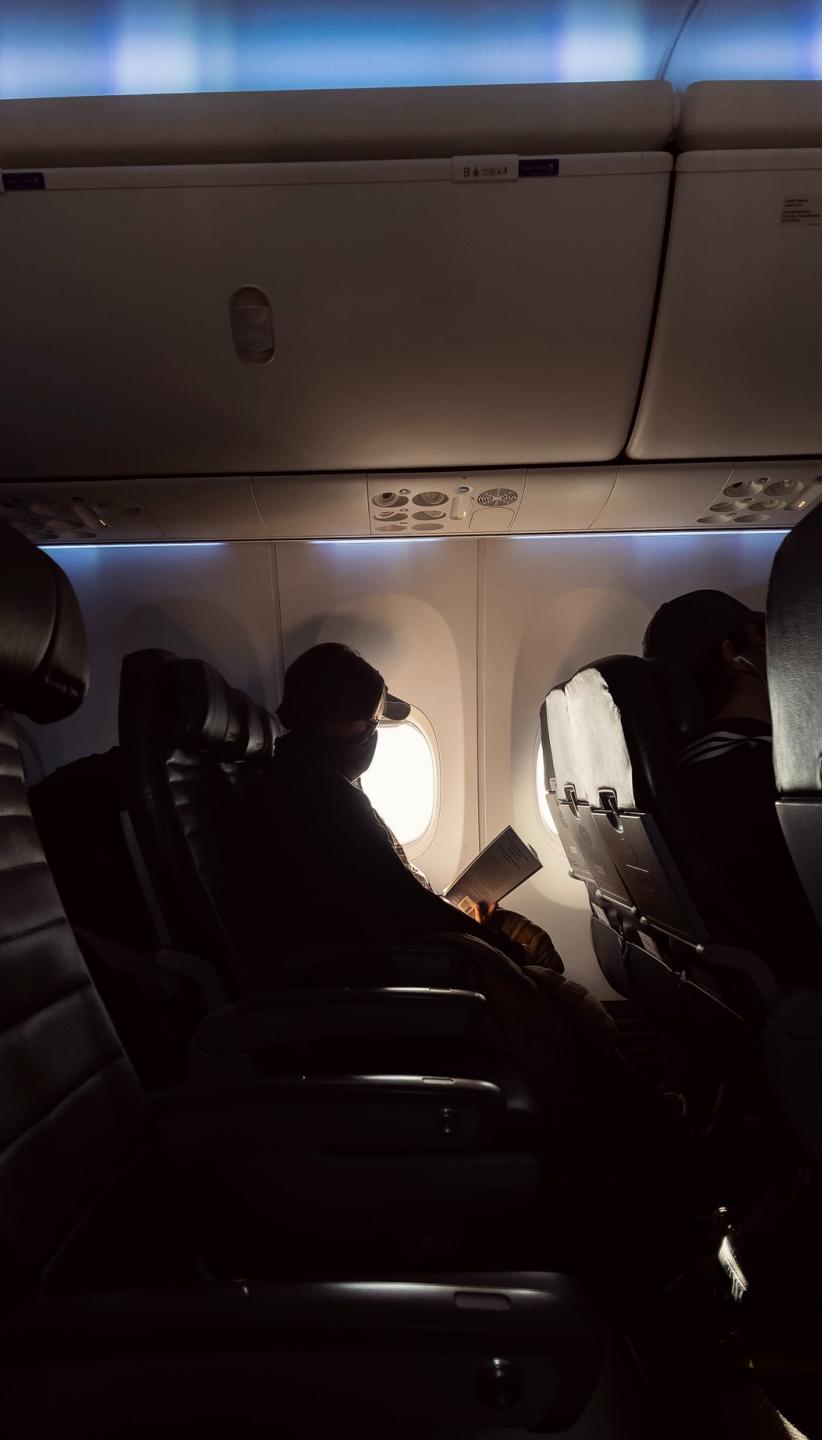
75%

Our model was able to predict 75% of the time whether a tweet was positive or negative.



Exploring Positive Sentiment Analysis with Our Model





Key Topics Discussed by Customers



Suggestions based on feedback



Invest in customer
service



Improve flight
delays



Positive Flight
Experiences



Next Steps

Expand the analysis
to a larger dataset

Further refine
the model with
the new dataset

Compare data
with competitors
feedback

Thank
you!

