Airline customer satisfaction analysis

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OVERVIEW

- Why are customers unsatisfied?
- What features should the company change to improve satisfaction?
- Will these upgrades improve satisfaction among customers?
- Which type of customers should the company focus on satisfying?

Dataset

- 130000 surveyd customers
- 22 questions
- Answers: Rating system

What are customers in general most unsatisfied about?

Inflight entertainment

Ease of booking

Seat comfort

What can the company do to improve satisfaction?

Predict future customer satisfaction based on the type of customer

By upgrading some features/ services

Will these upgrades be enaugh to improve satisfaction?

First step: Which model performs better?

Classification Algorithms

01

Logistic Regression

02

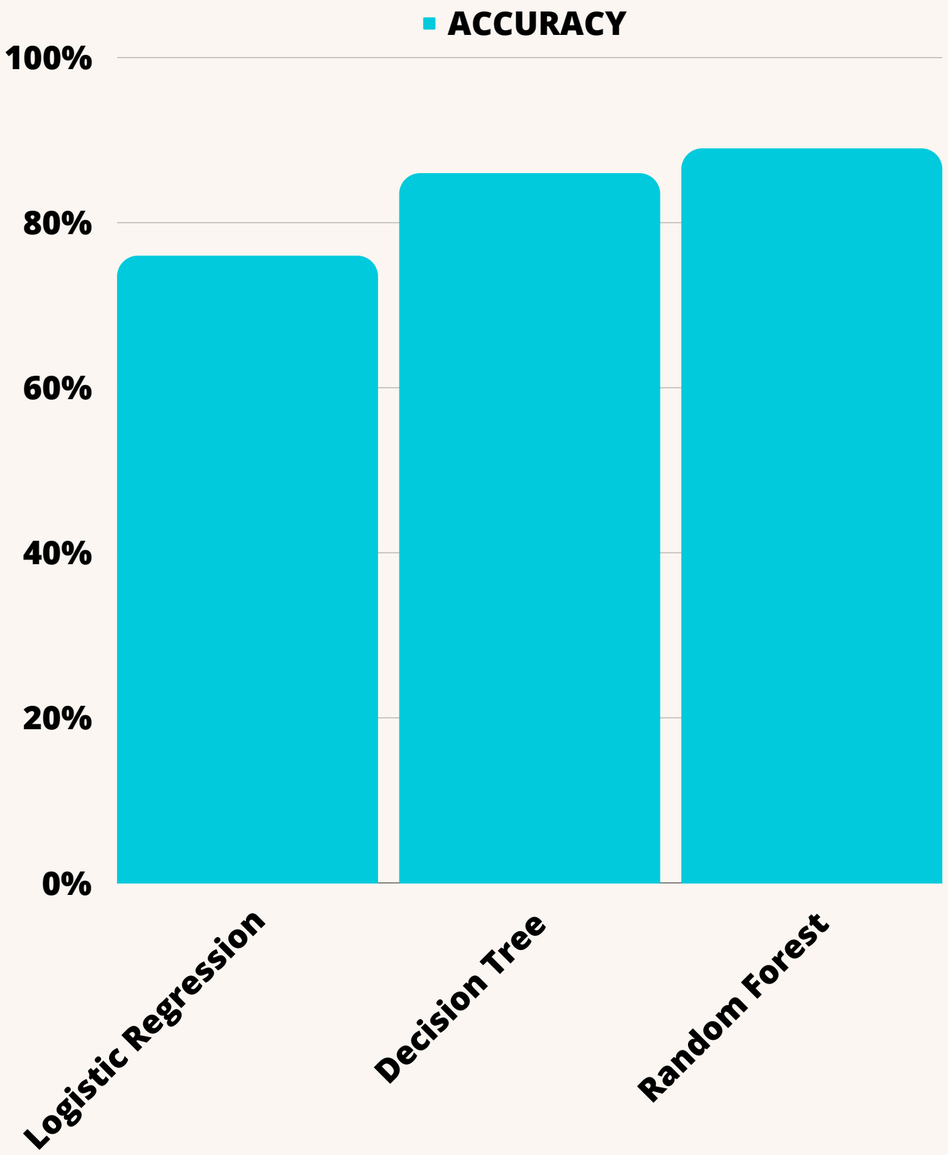
Decision Tree

03

Random Forest

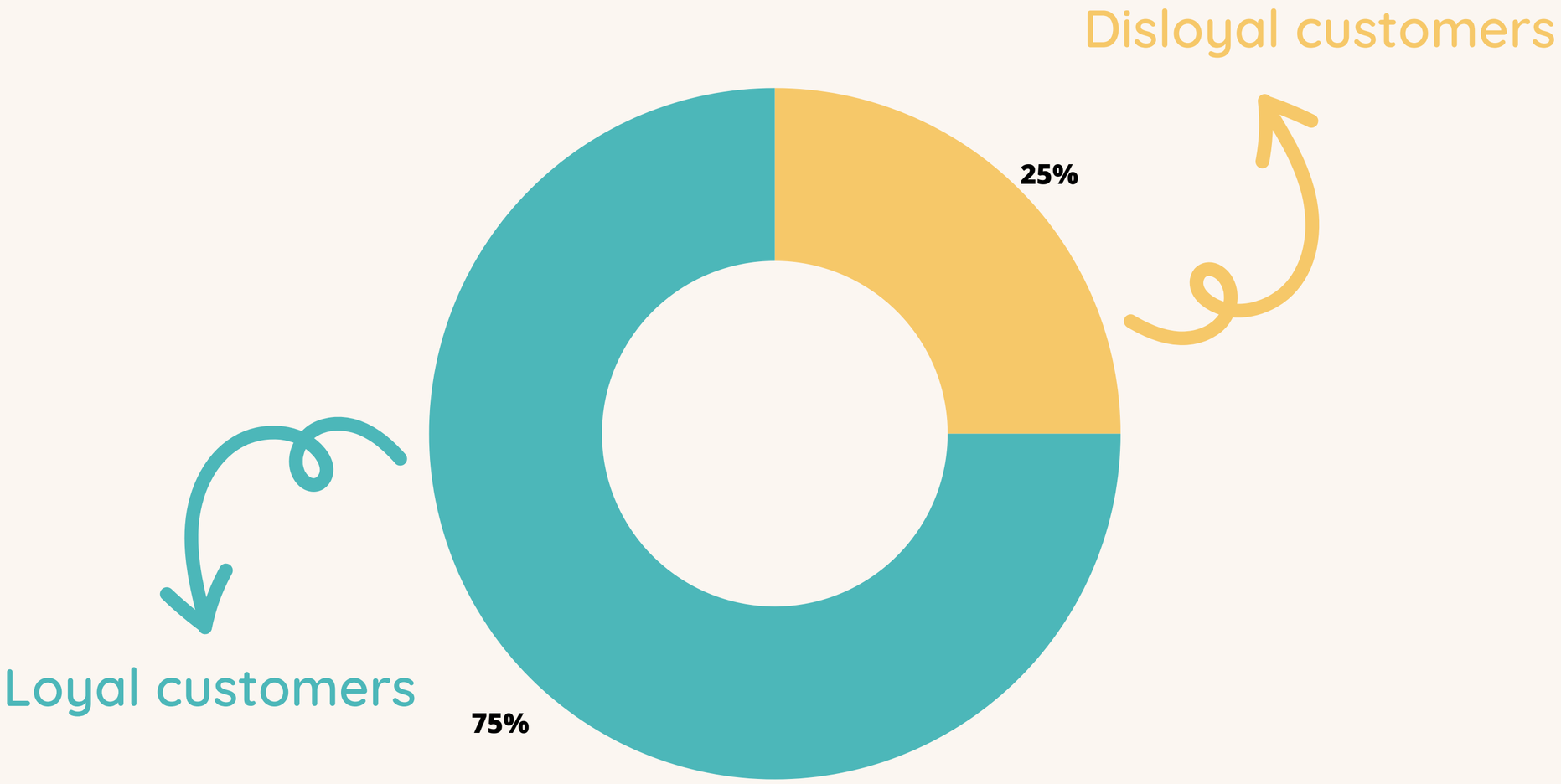
Which model brings the best accuracy?

Model testing



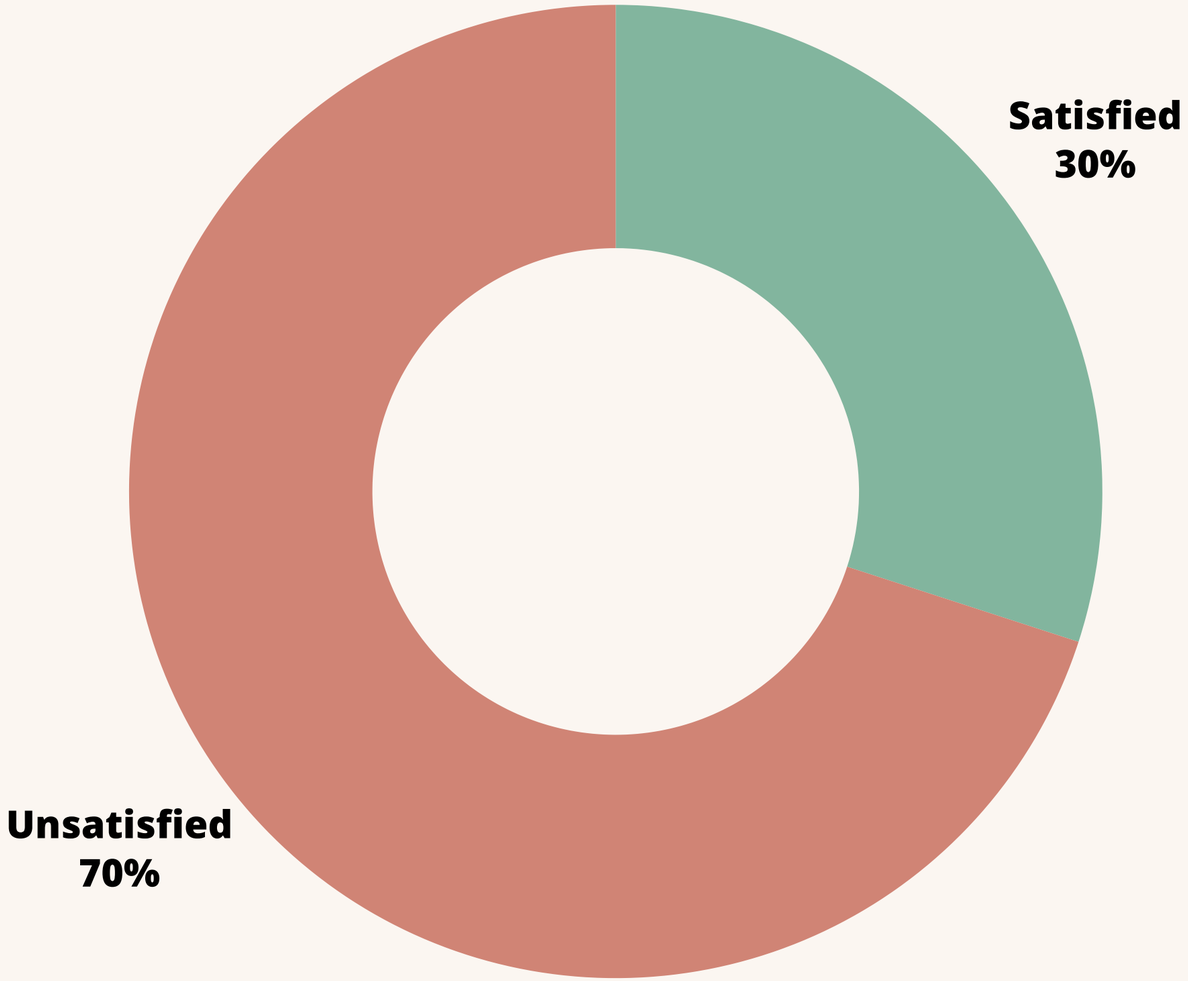
Second step: Predict future satisfaction based on customer loyalty

Split the main Dataset into two Datasets

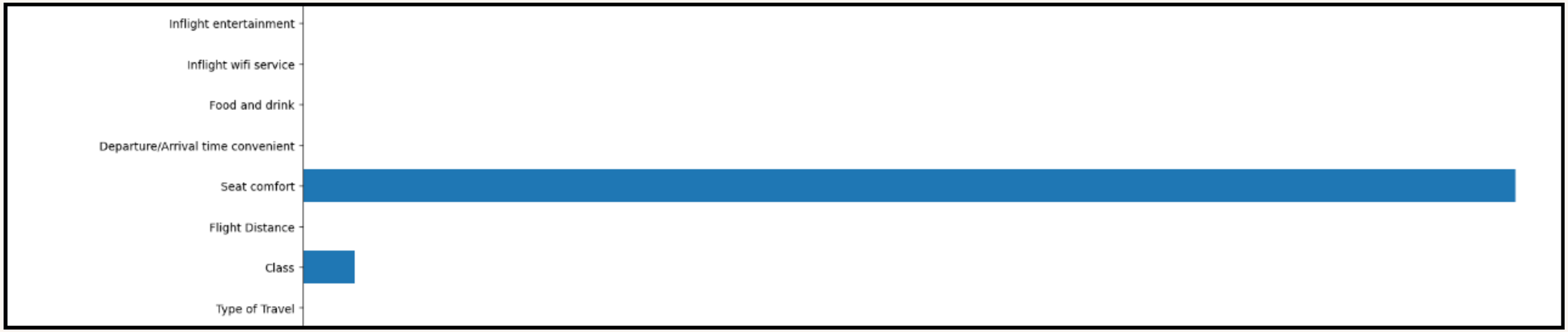


Disloyal customers (using Decision Tree)

Disloyal customers: First approach to Satisfaction prediction on y_pred

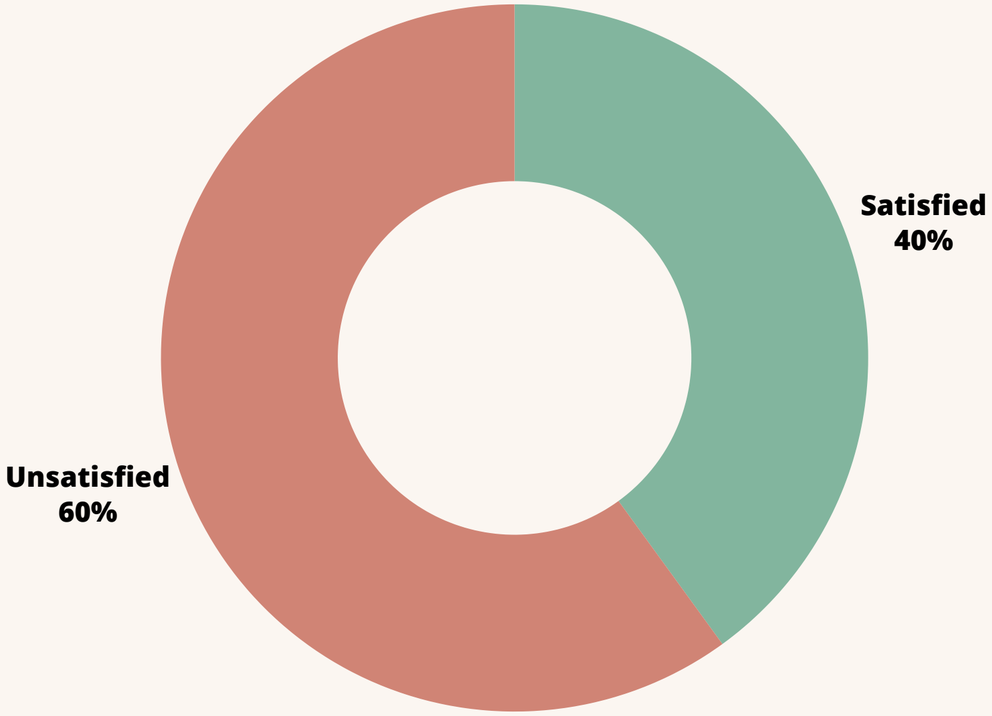


Which is the most important feature in disloyal customers towards predicting their satisfaction?



Let's improve the most important feature and feed the model with new ratings (4-5)...

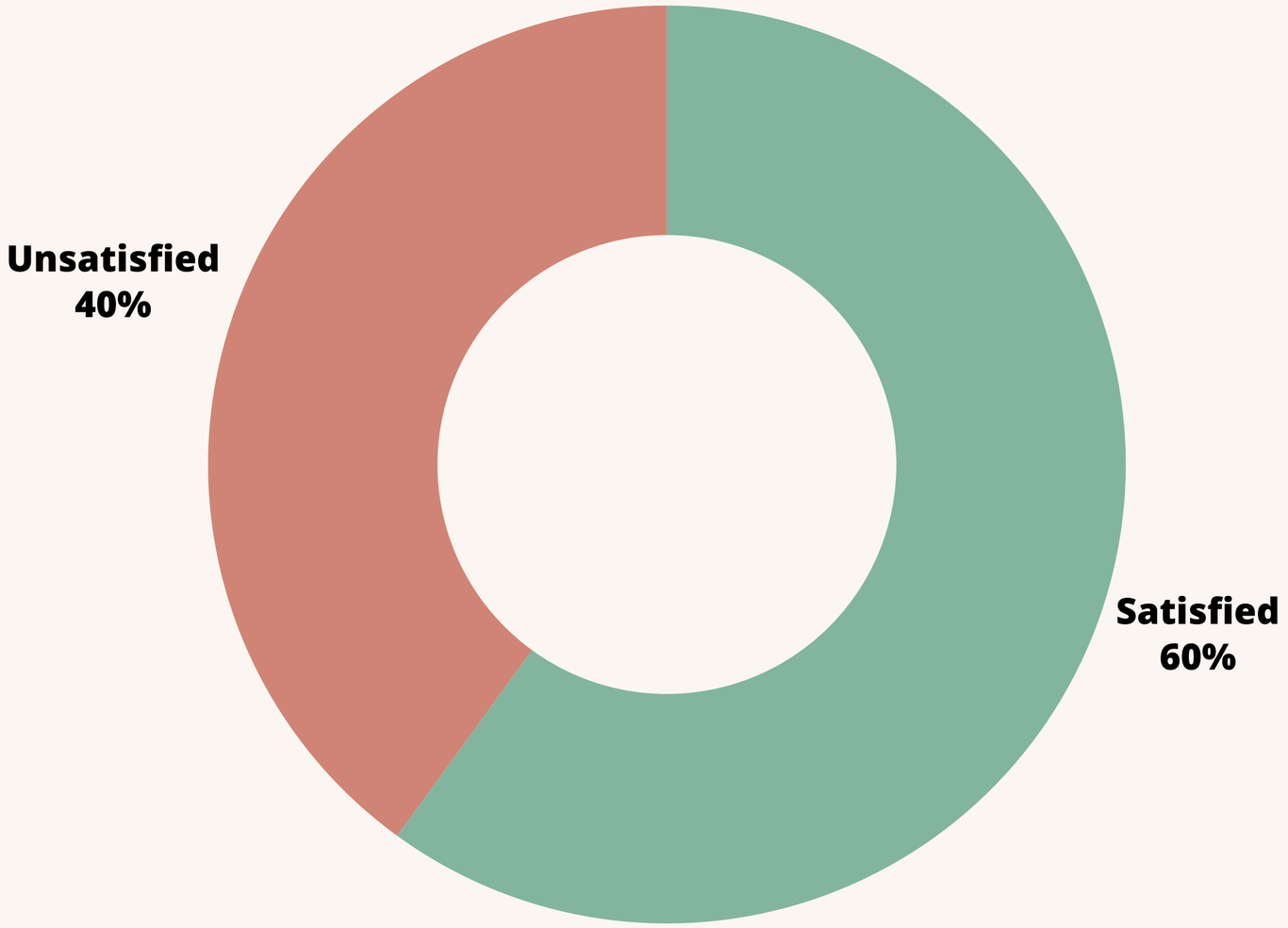
Disloyal customers Satisfaction prediction (with upgraded feature)



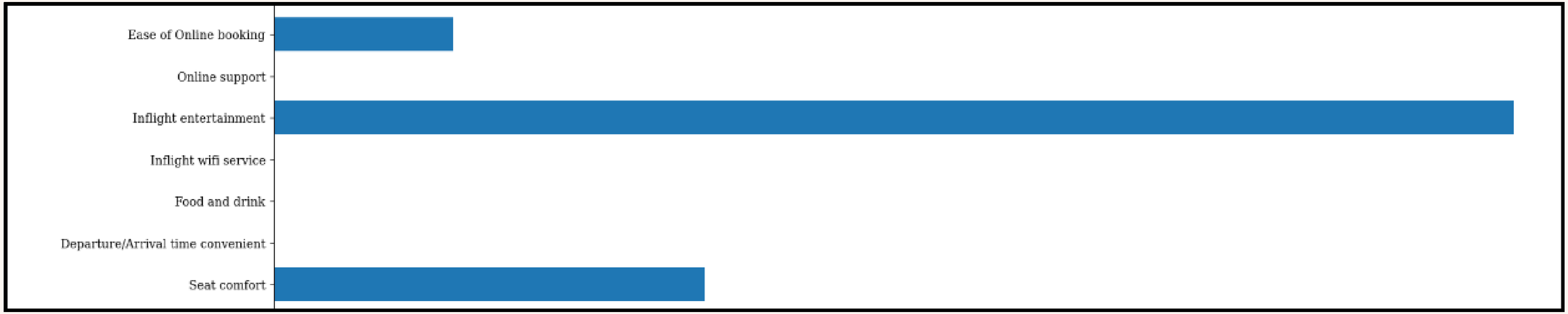
Even if the company upgrades the seat comfort feature for disloyal customers, more than half will potentially be unsatisfied.

Loyal customers (using Decision Tree)

Loyal customers: First approach to Satisfaction prediction on y_pred

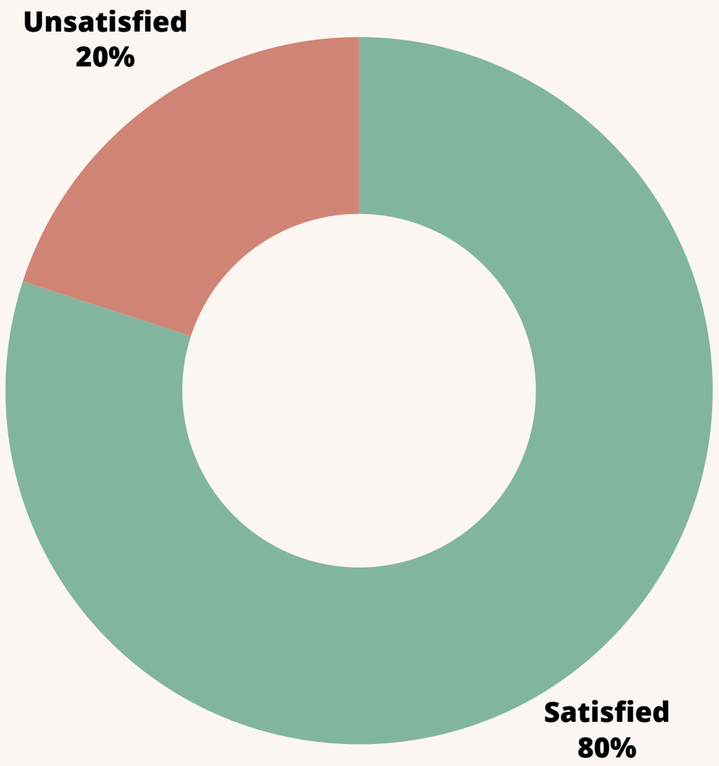


Which is the most important feature in loyal customers towards predicting their satisfaction?



Let's improve the most important feature and feed the model with new ratings (4-5)...

Loyal customers Satisfaction prediction (with upgraded service)



If the company upgrades the inflight entertainment feature for loyal customers, most of them will potentially be satisfied.

Every airline aims to increase revenue by improving satisfaction, so for future hypothetical campaigns they should stick to satisfying loyal customers.

STREAMLIT

Airport feedback forms

1. Rate the cleanliness

4

0 5

2. Rate the seat comfort

1

0 5

3. Ease of booking

3

0 5

4. Inflight entertainement

2

0 5

5. How satisfied are you with the facilities?

5

0 5

Submit forms

Thank you very much!