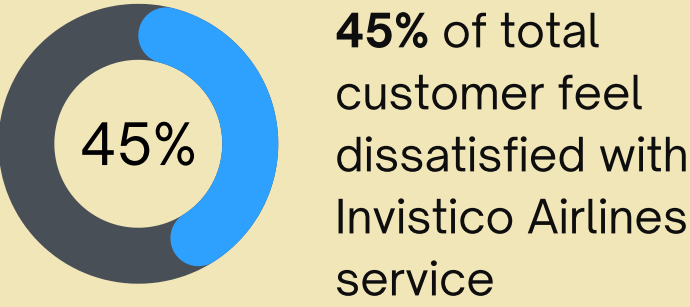


PREDICT CUSTOMER SATISFACTION OF INVISTICO AIRLINES

What service needs to be improved to increase the customer satisfaction rate of Invistico Airlines?

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PROBLEM ISSUES



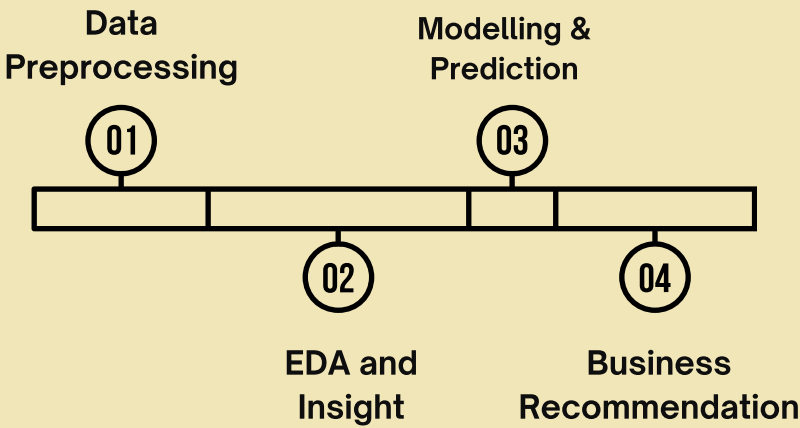
GOALS

Invistico Airlines customers will have a pleasant experience and the customer satisfaction rate will be increased.

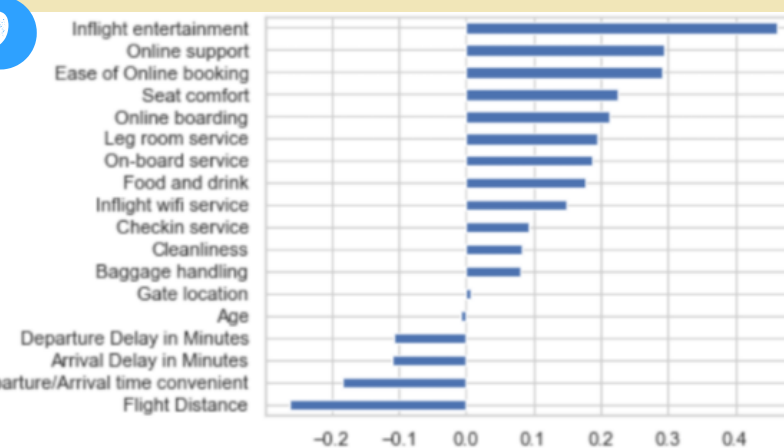
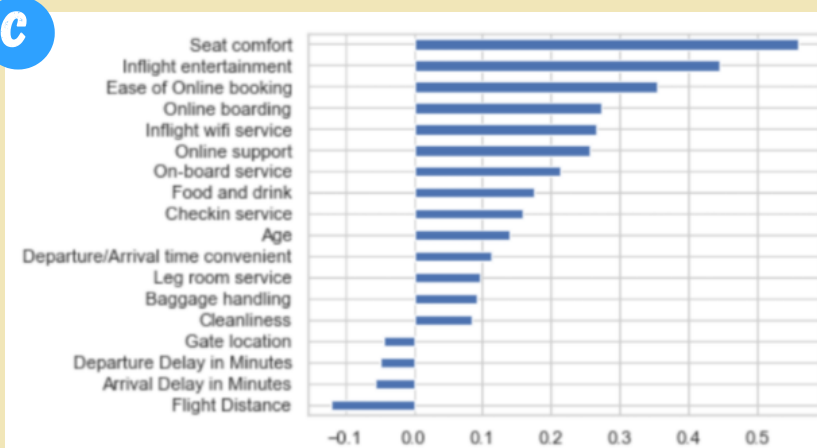
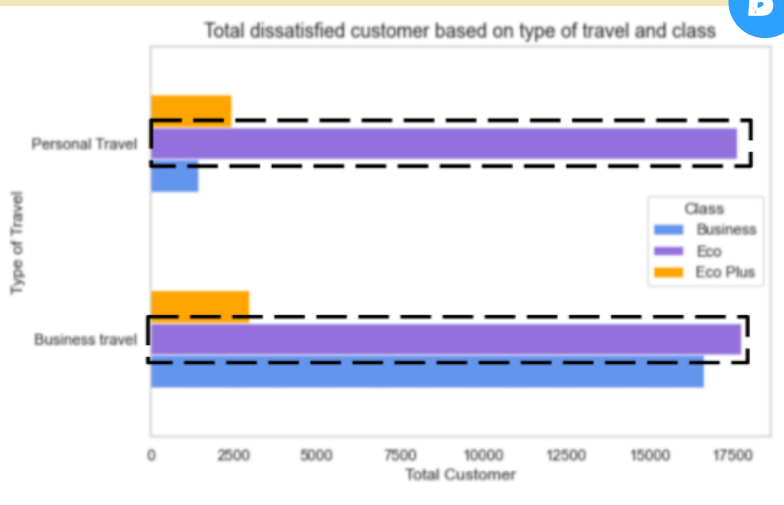
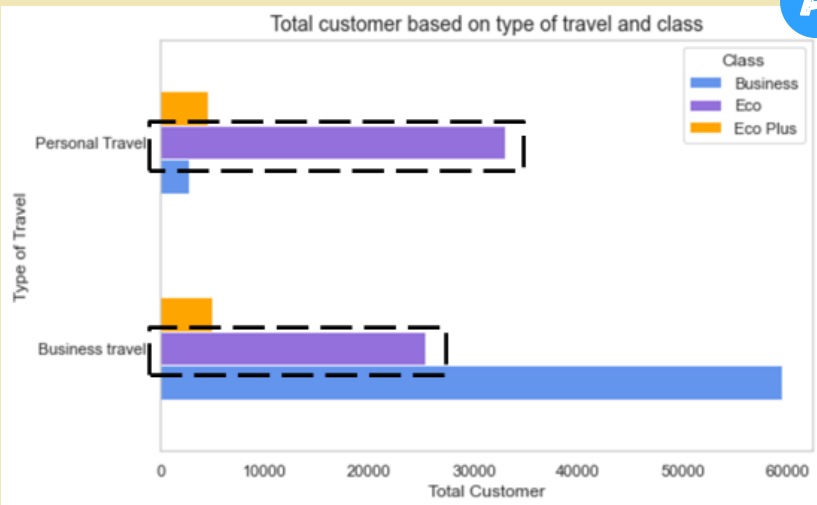
OBJECTIVE

Create a machine learning model to predict what service needs improvement to increase the customer satisfaction rate

METHODOLOGY



INSIGHT



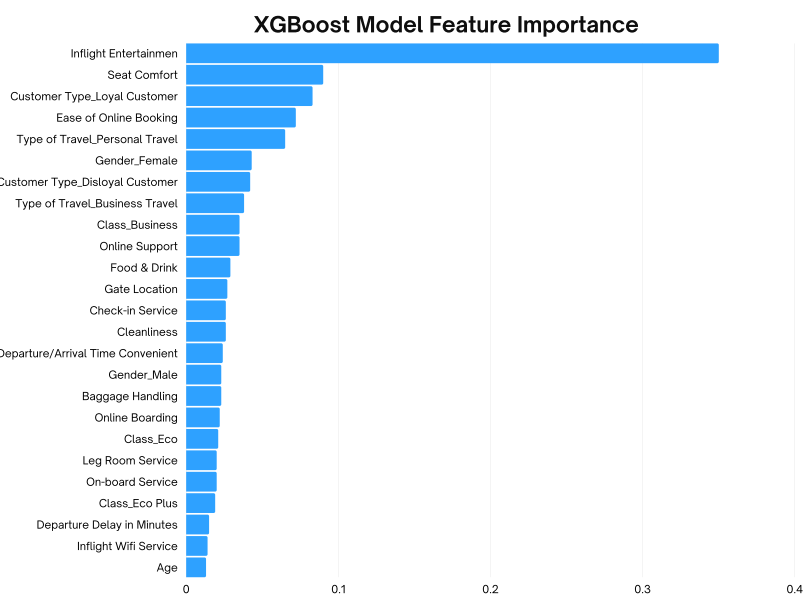
- The A-B graphs show that Business Travel - Eco Class and Personal Travel - Eco Class are two segments which have dissatisfied customers. Hence, we will focus on those two segments in improving our services.
- The C-D graphs show that Seat Comfort is the most influential service in Business Travel-Eco Class. Moreover, Inflight Entertainment is the most influential service for Personal Travel-Eco Class customer.



MODELLING

- XGBoost model is the best model in predicting data with an accuracy rate of 96% and a precision of 97%.
- Inflight Entertainment is the most influential feature in the data modeling. Seat comfort feature is in the second place.

Eval Model	Random Forest	XGBoost
Accuracy	0.96	0.96
Precision	0.96	0.97
Recall	0.95	0.96
F1 Score	0.96	0.96
AUC	0.96	0.96

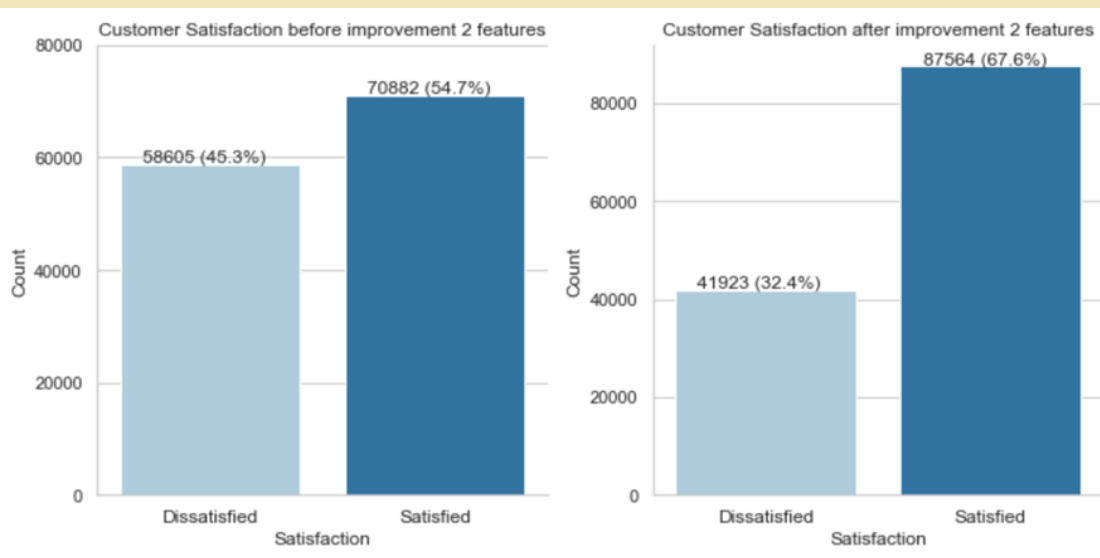


BUSINESS RECOMMENDATION

Inflight Entertainment & Seat Comfort

1. Tablet PC
2. Netflix
3. Spotify
4. Games & Apps
5. Renew seat cushion with full foam

Total Cost estimation to increase the Customer Satisfaction rate is **Rp 193.518.311.580**



The customer satisfaction rate before 2 services improvement (Inflight Entertainment & Seat Comfort) is **45,3% (Dissatisfied)** and **54,7% (Satisfied)**. After the service improvements, the customer satisfaction rate is **32,4% (Dissatisfied)** and **67,6% (Satisfied)**