Analysing Factors Affecting Airline Passenger Satisfaction

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Research Topic Proposals

Our research will examine a survey dataset containing certain aspects of the airline flight experience and evaluate the dataset's suitability for a logistic regression model predicting passenger satisfaction. This could prove valuable for airlines looking to improve their customer's experiences relative to industry competitors.

Our model will leverage a survey dataset that includes certain passenger characteristics, flight details, and satisfaction ratings for select pre-flight / in-flight components. We will conduct exploratory data analysis to ensure modelling suitability, which will vary based on variable distributions/types.

SMART Question

1. To what extent do certain surveyed passenger characteristics and flight experience components impact the likelihood that a passenger will be satisfied – rather than neutral or dissatisfied – with their trip?

2. How can we model the likelihood of passenger satisfaction using surveyed passenger characteristics and flight experience components in a manner that minimizes predictive bias?

3. To what extent can we predict the likelihood that a flight passenger will be satisfied with their experience using multiple different variable levels?

Data Source

The [Airline Passenger Satisfaction](#) dataset for this research is sourced from Kaggle. The dataset contains information related to airline passenger satisfaction and has a shape of (103,904, 25) where there are 103,904 rows and 25 columns.

GitHub Repository

[Link to our team's GitHub repository](#)