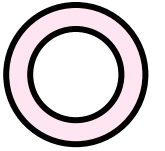




DATA ANALYSIS

FLIGHT BOOKING
RANDOM FOREST
MODEL





Analysis Summary

Analysis Summary:

- Final model includes 17 variables; key predictors are "Purchase Lead," "Length of Stay," and "Flight Hour."
- Significant impact observed from "Booking Origin in Australia," while "Day of Week" and "Extra Baggage" shows minimal influence.
- Low MSE (0.099) indicates accurate predictions, but R-squared (0.17) suggests limited explanatory power.

Strategies for Enhancement:

•Feature Engineering and Selection:

- Rigorous selection of impactful variables.
- Continuous exploration for new insights.

•Interaction Terms and Non-linear Relationships:

- Explore synergies among key predictors.
- Consider non-linear models (e.g., decision trees, random forests).

•Model Refinement Techniques:

- Apply regularization to improve generalization.
- Utilize ensemble methods for enhanced predictive accuracy.

