Background

The TravelTide project aims to improve user segmentation and personalize travel offers to maximize company profits through targeted advertising. By analyzing user behavior, we seek to identify segments that will benefit from customized promotional offers.

Objectives

The primary goal of this analysis is to segment the user base effectively and identify targeted offers that will increase conversion rates and customer satisfaction. The insights generated will enable better marketing decisions and enhance customer engagement.

Methodology

We utilized machine learning clustering techniques to identify distinct user segments based on their travel behaviors and preferences.

Key Findings

- **Finding 1:** We identified 6 distinct customer segments based on behavior, including frequent travelers, budget-conscious families, and those with high engagement but low spending.
- **Finding 2:** Users who frequently book both flights and hotels tend to respond positively to offers with added value (e.g., discounts on next trips, free meal vouchers).
- **Finding 3:** Certain segments, such as those with high travel distances and frequent bookings, are more likely to benefit from loyalty programs like "10% off next trip."

Recommendations

- **Recommendation 1:** Tailor promotional offers like "10% off next trip" for users who have high travel frequency and engagement, while offering "meal vouchers" for budget-conscious families.
- **Recommendation 2:** Continue to refine segmentation using more granular features like booking times and seasonal patterns to further personalize offers and increase customer retention.