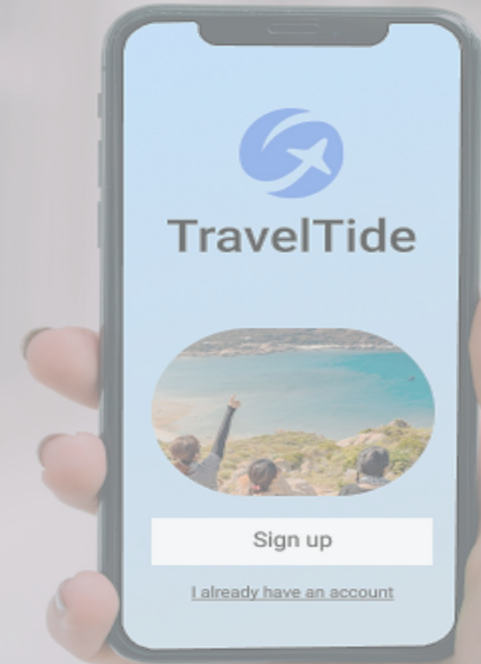TravelTide Platform

Customer Segmentation & Perks Assignment Project

Mohamed Shehata

# Executive Summary

Business Objective

Create a compelling rewards program that encourages customer loyalty and repeat business on the TravelTide platform.

Analysis Approach & Result

Five customers segments were identified based on spending, booking, and travel patterns, and each customer is assigned to one of five corresponding perks.
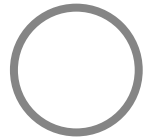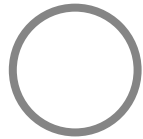
Feature Engineering Analysis
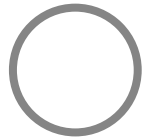
Demographic

- Gender
- Marital Status
- Age
- Having Children
- Home Country

Trip Frequency and Duration

- Total Number of Trips
- Time Between Flight Booking and Departure
- Time Between Hotel
- Booking and Departure
- Average Trip Duration.

Flight Information

- Number of Flights
- Total Money Spent on Flights
- Average Number of Bags per Trip
- Average Number of Seats per Trip
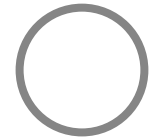- Average Kilometers Flown
- Average Flight Discount
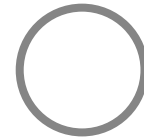
Hotel Information

- Number of Hotels
- Total Money Spent on Hotels
- Average Number of Nights per Trip
- Average Number of Rooms per Trip
- Average Hotel Discount

Online Behavior

- Clicks-to-Sessions Ratio.
- Clicks-to-Trips Ratio

Segments Characteristics

Frequent Travelers: These customers have a high frequency of flights and significant spending on air travel.

Family/Group Travelers: This segment is characterized by longer trips, multiple nights booked, and a higher number of seats, suggesting they often travel with family or in groups.

Long-Hotel-Stay Travelers: Customers in this group tend to book longer hotel stays, often requiring multiple rooms and incurring higher hotel expenses.

Couple Travelers: This segment typically consists of couples taking trips of moderate length. They often book two seats, check two bags, and stay in a single hotel room.

Solo/Business Travelers: These customers usually travel alone or on business trips. They have a single bag, require only one room and seat, and their trips are of medium duration.

Segmentation Criteria

Frequent Travelers: Customers are considered frequent flyers if they have 6 or more flights.

Family/Group Travelers: Customers are classified as "family or group" travelers if they have an average of more than 2 seats per trip or an average of at least 2 rooms per trip.

Long-Hotel-Stay Travelers: are defined as customers who have an average of at least 5 nights per trip and minimum of 3 hotel trips.

Couple Travelers: Couples are defined as customers who have an average of at least 3 nights per trip, 2 seats per trip, and no more than 1 room per trip.

Solo/Business Travelers: Customers are considered solo or business travelers if they have an average of 1 seat and 1 bag per trip.

Perks Distribution

The largest segment of customers (2224) receive Free Airport Transport, followed by Free Cancellation or Free checked baggage (1334).

Other perks include Free hotel Night (973), 10% Flight Discount (942), and 10% Hotel Discount (524).

Perk Distribution
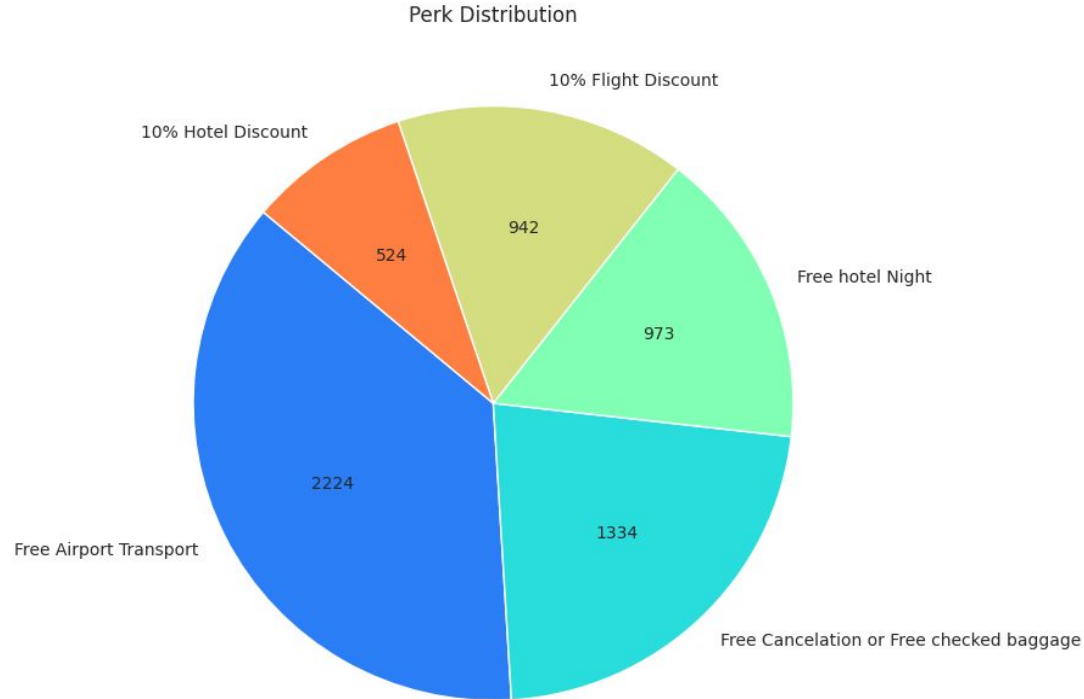
Recommendations

- **A/B Testing: Comparing the Impact of Targeted Perks vs. Random Perks**
  Compare the effectiveness of perks specifically tailored to customer segments (targeted perks) against a control group receiving randomly selected perks.

- **Customer Feedback**
  Collect customer feedback after a beta implementation of the loyalty program and do further analysis considering the retrieved data.

- **Female-Centric Appeal**
  Analyze the factors contributing to the predominance of female users in our dataset.

- **Tailoring Marketing Campaigns for U.S. Users**
  Given the significant number of U.S. users in our database, creating targeted marketing campaigns specifically designed for this demographic could yield substantial benefits.