Executive Summary

Project Title: Traveltide Customer Segmentation & Personalized Perk Assignment
Analyst: Robert Sesazi
Toolset: Tableau, Google Sheets

TravelTide Rewards Program Personalization

This project focused on building a personalized rewards program for TravelTide using behavioral data from 5,890 unique users, aggregated from over session-level records between January and July 2023. The goal was to increase customer retention by aligning user preferences with high-impact travel perks through advanced data modeling and segmentation.

Using engineered behavioral features such as hotel spend, booking lead time, and cancellation rates, a custom scoring system was developed for five key perks:
Free Hotel Meal, Free Hotel Night, Free Checked Bag, Free to Cancel, and Exclusive Discounts.

Each user was assigned their most relevant perk based on their dominant behavioral patterns. To ensure fairness and strategic value, VIP users (20% of the population) were prioritized using a 23-point loyalty boost, favoring them for premium perks like *Free Hotel Night* and *Free Hotel Meal*.

Exploratory data analysis in Tableau revealed that VIP users spent 2.2× more than Standard users, with longer lead times and more stable booking behavior. In contrast, users with high cancellation rates were more frequently aligned with perks like *Free to Cancel* and *Exclusive Discounts*.

To deepen customer understanding, K-Means clustering was used to segment users into three distinct personas:

- Premium Planners: early bookers, low cancellations, high spenders
- Price-Sensitive Explorers: high cancel rate, discount-focused
- Balanced Bookers: average engagement across KPIs

Final dashboards in Tableau visualized:

- 🎯 Perk distribution across the user base
- 👑 VIP breakdown and assignment trends
- 📊 Persona behavior vs. KPI performance

The result is a fully functional, data-driven reward assignment system that allows TravelTide to deliver personalized, cost-effective perks at scale—driving both customer satisfaction and business efficiency.