# **Executive Summary**

**TravelTide Customer Segmentation & Personalized Rewards**

TravelTide aims to increase customer loyalty and engagement by delivering personalized perks tailored to individual customer preferences. This project applies advanced data science techniques to segment customers using demographic, behavioral, and transactional data, uncovering distinct groups with unique travel patterns.

### **Key Objectives**

* Understand different customer segments based on their travel behavior and profiles.
* Assign personalized perks to each segment to maximize reward program sign-ups and retention.
* Enable TravelTide’s marketing team to deliver targeted campaigns with higher conversion potential.

### **Approach**

* **Separate clustering** was performed on demographic, behavioral, and transactional customer data using KMeans, supported by dimensionality reduction and cluster validation techniques.
* The resulting clusters were combined into unified segments representing multi-dimensional customer profiles.
* Perks such as free hotel meals, exclusive discounts, and travel insurance were mapped to these segments based on their unique preferences and behaviors.

### **Results & Benefits**

* Rich, actionable customer personas were developed, enabling precise targeting.
* Personalized perks aligned with customer needs, increasing likelihood of reward program participation and loyalty.
* The approach lays a strong foundation for data-driven marketing and ongoing customer insights.