An Executive Summery for E-booking Travel Platform

**TravelTide**

**Introduction**

By offering tailored incentives, TravelTide aims to address its underdeveloped customer experience aspects, building a strong foundation for increased customer loyalty and repeat business under the leadership of Elena Tarrant, the new Head of Marketing. This initiative reflects TravelTide's commitment to adding value to its existing customer base and solidifying its position in the competitive e-booking industry.

**Objectives**

By aligning perks with user behavior and needs, TravelTide aims to optimize the effectiveness of its marketing strategy and enhance overall customer satisfaction, leading to sustainable growth in a competitive market.

**Methodology**

In this comprehensive analysis, a multifaceted approach was employed to optimize customer perks at TravelTide. By utilizing SQL, data exploration and feature engineering were performed to derive behavioral matrices. Python, along with libraries like pandas and matplotlib, facilitated data manipulation and visualization, aiding in the identification of meaningful patterns. The utilization of Jupyter Notebook provided an interactive environment to seamlessly combine code and insights. Tableau used to explore demographic matrices by providing a dashboard. K-means clustering was employed to segment the dataset, allowing the application of tailored perks based on distinct user behavior clusters.

**Some Key Findings + Visual**

[1] According to cohort definition there were 49211 sessions and 5998 unique customers.

[2] Only 60 customers spend more than $500.0 on hotel. 5460 customers spend less than $100.0 on hotel.

[3] Among the 5998 customers, only 710 customers booked trips more than 4 times.

[4] According to K-means clustering, the highest number of 2074 customers got ‘Free Checked Bag’ perks. The lowest 310 customers got ‘No cancellation Fees’ perks.

**Recommendations**

I would say, I tried my best to validate customer segments hypothesized by Marketing different user behavioral and categorization matrices using K-means. Here are some recommendations.

[1] As only 60 customers spend more than $500 on hotels, TravelTide could target this segment with exclusive promotions, discounts, or special packages to encourage higher spending and possibly expand the high-spending customer base.

A graph of a hotel

Description automatically generated

A diagram of a box

Description automatically generated

[2] Since only 710 customers booked trips more than 4 times, TravelTide could introduce a loyalty program that offers additional perks or rewards for frequent bookers to encourage repeat bookings and enhance customer retention.

[3] For the segment receiving the lowest number of " No cancellation Fees’" perks, TravelTide could evaluate the potential factors contributing to this and consider adjustments to perk allocation, ensuring a fair distribution of attractive offers among all segments.

[4] Utilize the insights from the segmentation and spending behavior to develop personalized promotional campaigns that target specific customer segments with relevant perks and offers.