## **Executive Summary**

# By Biljana Jüngling

# Project Title: Enhancing Customer Engagement and Personalization through Data Analytics

#### Overview:

The objective of this project is to analyze user behavior, engagement, and spending patterns to help the marketing team at TravelTide create a more effective and personalized rewards program. By segmenting users based on engagement, spending, travel frequency, and perks utilization, the team can develop targeted marketing strategies that enhance customer retention and increase revenue.

## **Key Findings:**

- **User Engagement vs. Spending:** Highly engaged users (frequent sessions) do not always correlate with high spending. Personalized promotions can encourage users with high engagement but low spending to convert into paying customers.
- Perks Effectiveness: Certain perks are more attractive to specific traveler types. For instance, business travelers may be drawn to lounge access, while adventure travelers may prefer discounts on activities.
- Perk Distribution Analysis: There is a potential imbalance in the reward strategy. If too many discounts are distributed instead of high-value perks, adjustments may be needed to align with business goals.
- Travel Frequency & Distance Analysis: Most users fall into the occasional or rare traveler segment. To improve retention, the company can offer repeat booking discounts or loyalty incentives.

## Report

## 1. Objectives & Business Context

Elena, the head of marketing, aims to enhance TravelTide's personalized rewards program by leveraging customer insights. The marketing team requires a data-driven approach to:

- Identify user engagement trends.
- Optimize perks distribution.
- Improve customer segmentation to offer personalized rewards.
- Increase user retention through targeted promotions.

## 2. Data & Methodology

The analysis was conducted using SQL queries to extract insights from the TravelTide database. The key data points analyzed include:

- **User engagement:** Sessions per day, click rates, and visit frequency.
- Spending behavior: Amount spent on flights and hotels.
- **Travel behavior:** Frequency of trips, average travel distance, and unique destinations.
- Perks utilization: Percentage of users benefiting from specific perks.

A segmentation approach was applied to categorize users into engagement, spending, travel frequency, and perks-based groups. This was achieved through SQL queries that combined session data, user profiles, and transaction history.

## 3. Insights & Recommendations

## 3.1 User Engagement vs. Spending

- Users with high engagement but low spending should receive targeted promotions.
- The company can introduce exclusive offers for premium travelers to increase spending.

#### 3.2 Heatmap Analysis (Perks vs. Travel Type)

- Identified which perks resonate best with business vs. leisure travelers.
- Business travelers use perks designed for leisure, suggesting an opportunity to refine reward structures.

#### 3.3 Perk Distribution

- If too many users receive basic discounts instead of high-value perks, the strategy should be adjusted.
- Implement tier-based perks to encourage higher spending.

## 3.4 Travel Frequency & Distance Segmentation

- The majority of users are occasional or rare travelers.
- Introduce loyalty incentives, such as exclusive discounts for repeat bookings, to encourage frequent travel.

# 4. Implementation Strategy

- 1. **Personalized Targeting:** Use segmentation insights to send personalized offers.
- 2. **Optimized Rewards Strategy:** Ensure high-value customers receive exclusive perks.
- 3. **Data-Driven Adjustments:** Regularly monitor engagement, spending, and perks usage to refine marketing strategies.

#### 5. Conclusion

By leveraging data analytics, TravelTide can better understand customer behavior and optimize its marketing efforts. The segmentation and insights derived from SQL queries provide a roadmap for increasing engagement, improving perk allocation, and ultimately driving higher customer retention and spending.

This report aligns with the marketing team's objectives and provides actionable recommendations for enhancing the personalized rewards program at TravelTide.