

Executive Summary: Traveltide Project – Personalization and Engagement Strategy (Post Jan 2023)

Traveltide Project aims to increase user engagement and conversion rates through personalized perks tailored to user demographics, behavior, and spending patterns. By analyzing post-January 4th, 2023 user activity, a decision-tree-based segmentation framework was designed to strategically assign perks that resonate with user needs and travel habits.

Objective

To enhance engagement and boost booking conversions by targeting active and inactive users with contextual perks based on behavioral and transactional insights.

Segmentation Strategy

Users with more than 7 sessions were considered for analysis. Key segmentation dimensions included:

Trip Frequency
Age Group
Spending Behavior
Family Status (Children)
Cancellations

A rule-based decision tree was used to define personalized segments and perks.

Segment-Based Perks

****1. Inactive Users****

Criteria: num_trips = 0

Sub-segments:

No booking: 🟡 ****New Buddies****: 50% off first trip

With cancellations: 🟡 ****Last-minute cancelers****: Free Cancellations for 30 days

****2. Active Users****

Divided by age:

A. ****Younger Travelers**** (Age < 30)

With children:

High spenders: 🟡 ****Family High Spenders****: Free stay for child

Others: 🟡 ****Family Travelers****: Free child ticket

Without children:

3 Trips: 🟡 ****Adventurers****: 10% off each additional seat

≤3 Trips: 🟡 ****Occasional Travelers****: Complimentary drinks

B. Senior Travelers (Age > 60)

High spenders: 🟡 ****Elder Explorers****: Free Meals

Others: 🟡 ****Travel-averse seniors****: Support on Senior Services

C. Middle-Aged Travelers (30 ≤ Age ≤ 60)

3 Trips:

High spenders: 🟡 ****Premium Travelers****: 20% off + Free Checked Bag

Others: 🟡 ****Standard Travelers****: 15% Discount

≤3 Trips: 🟡 ****Unseasoned Travelers****: 50% off Premium Subscription

Key Metrics Computed

Demographics: Age, children, home city/country

Behavioral: Sessions, page clicks, cancellations

Transactional: Spend on hotels/flights, number of trips, avg. trip spend, travel distance (haversine metric)

SQL Logic Summary

A robust SQL pipeline was built to:

Filter relevant sessions (post-Jan 4, 2023, >7 sessions)

Compute user-level behavioral, booking, and financial metrics

Assign personalized perks via conditional logic

Produce a final user-perk dataset for downstream use

Strategic Value

High-value segments (e.g., Premium Travelers, Family High Spenders) were identified for loyalty and upselling initiatives.

Price-sensitive or new users receive targeted incentives to drive conversions.

Lifestyle-based perks for families and seniors improve personalization and relevance.

Recommendations:

Deploy perks in-app and via email immediately for better impact.

Monitor perk redemption rate and adjust thresholds quarterly.

Track performance via CTR and conversions.

Run A/B tests to validate impact.