

LOYALTY PROGRAM OPTIMIZATION: ENHANCING CUSTOMER EXPERIENCE THROUGH DATA-DRIVEN CUSTOMER SEGMENTATION AND PERK ALLOCATION

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INTRODUCTION



Objective:

- Identify distinct traveler segment
- Optimize perk offerings
- Increase customer satisfaction and retention to enhance TravelTide loyalty program

Implement K-Means algorithm to identify and group user segments by their preferences, enhancing the ability to tailor offers and strategies to distinct customer profiles.

DATA SCOPE AND PERK STRATEGY:

- Users with 8 or more sessions.
- Sessions starting from January 4, 2023 till the last available date.

Perks:

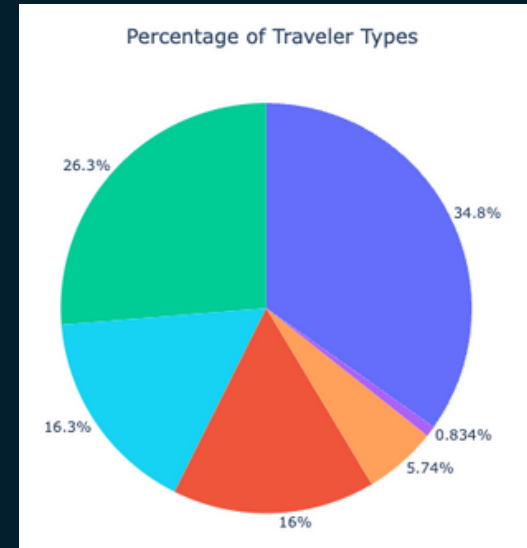
1. Free Hotel Meal (Free Breakfast)
2. Free Checked Bag
3. No Cancellation Fees
4. Exclusive Discounts
5. 1 Night Free Hotel with Flight
6. Additional perk



KEY FINDINGS



6 distinct clusters:
Frequent travelers, Youthful Savvy Travelers, Family Travelers, Luxury Travelers, Wanderers, Efficient travelers.



Distribution of Users Across Different Cluster (Traveler Type)



KEY CUSTOMERS CHARACTERISTIC

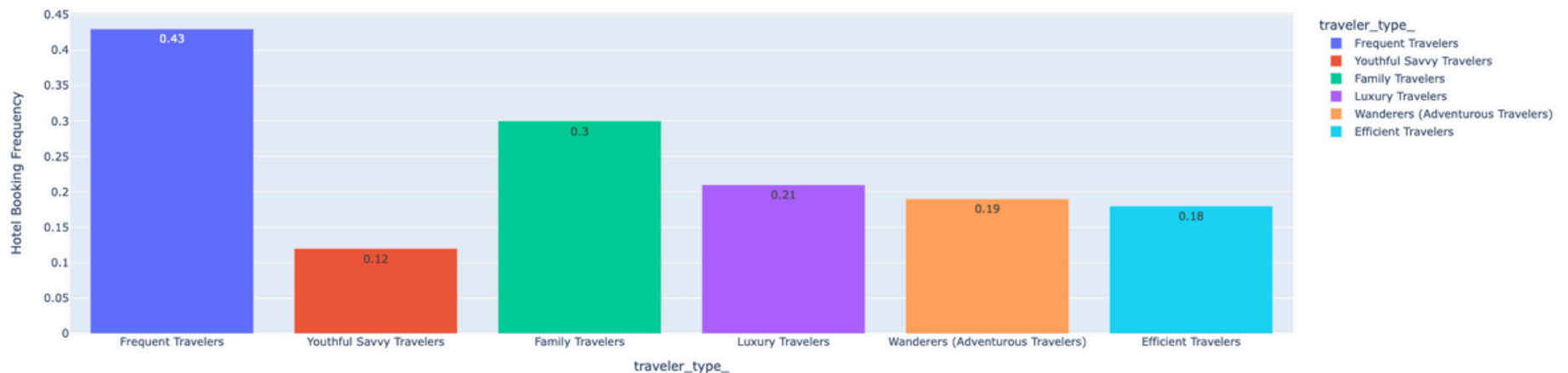


Identify distinct traveler types based on their spending and booking habits.

Average Total Spending per Traveler Type



Average Hotel Booking Frequency per Traveler Type



LUXURY TRAVELERS PERSONA

Affluent professionals, executives, or entrepreneurs who most likely travel with their families. value high-end and are willing to pay a premium for luxury and comfort.

user 513869

Female, 41 years old

Not married, has children

Home city: newark, USA

User since: 2023-01-06

Weekday traveler

Books trips well in advance (7 months or more)

Book more hotels than flights

Takes two trips within a seven-month period

Travel long distance

Frequently cancels bookings

Spends significantly on travel

Takes advantage of discounts & saves a substantial amount of money

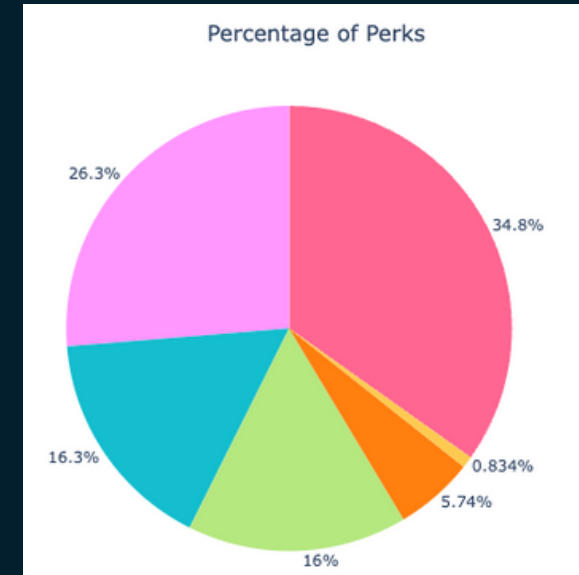


PERK ALLOCATION

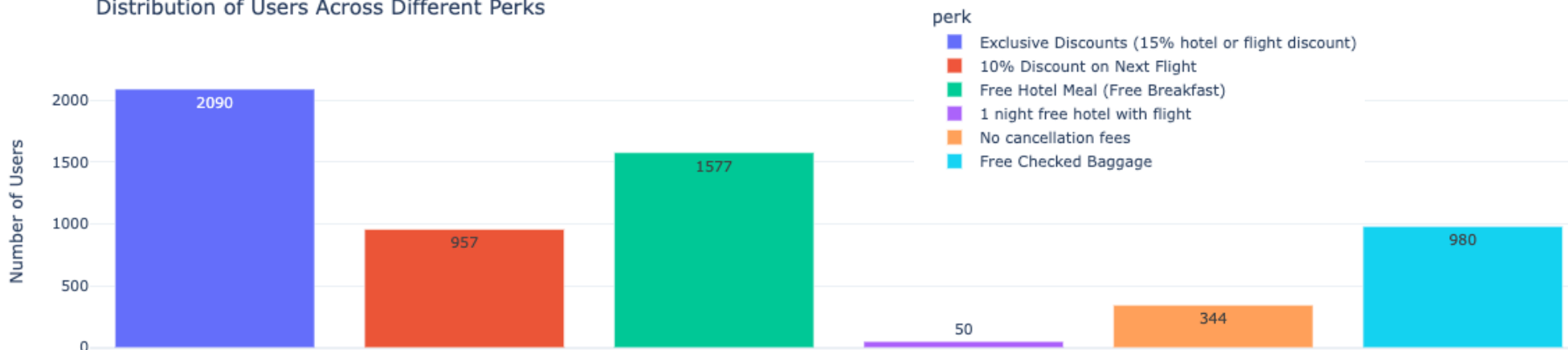


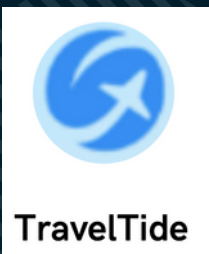
Traveler Segments and Tailored Perks:

Wanderers	>> No cancellation fees
Efficient Travelers	>> Free Checked Baggage
Frequent Travelers	>> Exclusive Discounts (15% hotel or flight discount)
Family Travelers	>> Free Hotel Meal (Free Breakfast)
Luxury Travelers	>> 1 night free hotel with flight
Youthful Savvy Trvlrs	>> 10% Discount on Next Flight



Distribution of Users Across Different Perks





RECOMMENDATIONS



- Expanding Data Collection

Gathering additional data such as occupation, income level, travel purpose, cancellation reason, etc.

- Merge Small Clusters with Similar Characteristics

In this case: luxury travelers and wanderers, and give them a premium perk: 1 night free hotel with flight.

- Implement Advanced Analytics

Employ A/B testing and predictive analytics to refine strategies and make data-driven adjustments.

- Implement a Multi-level Reward Program

Offers tiered benefits tailored to different traveler segments

- Personalize Marketing Campaigns

Develop personalized email marketing, social media ads, and promotional content aligned with each cluster's preferences and behaviors.

- Develop Strategic Partnerships

For example, partner with high-end hotels for "Luxury Travelers" and budget airlines for "Youthful Savvy Travelers".