

Executive Report: TravelTide Customer Segmentation

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Project Overview

TravelTide's Rewards Program enhances customer engagement and loyalty through tailored rewards and perks. By analyzing customer behaviour and preferences, the project has successfully segmented customers into distinct clusters based on their affinity for specific perks within the program. This executive summary highlights key findings and provides recommendations for TravelTide's Rewards Program based on the data analysis.

Main Steps

Data Collection: Gather customer data, including behavioural metrics and demographic information, using SQL query.

Index Calculation: Calculating various indexes like Hotel Hunter Index, Average Bags Index, Cancellation Rate, Bargain Hunter Index, Combined Booking Index, and Session Intensity Index for each customer using SQL.

Ranking Customers: Ranking customers based on their index values in descending order using Python.

Defining Perks: Defining the most attractive perk for each customer based on their minimum rank in the indexes. And segment customers into groups based on their preferred perks using Python.

Demographic Analysis: Analyzing customer segments by demographic characteristics such as age, gender, marital status, and parental status using Tableau.

Visualization: Creating visualizations in Tableau to present the findings and insights from the analysis.

Key Findings

Segmentation Based on Behavior: Using calculated indexes, we have effectively segmented customers into five clusters based on their preferences for specific perks. Customers with matching perks displayed higher index indicators, validating the accuracy of our segmentation approach.

Cluster 0: This cluster has no leading position in the indexes. They perform well in Cancellation Rate (2nd place) and Bargain Hunter Index (3rd place), indicating an interest in perks such as 'No Cancellation Fees' or 'Exclusive Discounts.'

Cluster 1: Cluster 1 holds leading positions in multiple indexes, including Average Bags, Cancellation Rate, and Bargain Hunter Index. This suggests their interest lies in both flight discounts and accompanying services.

Cluster 2: Cluster 2 excels in the Hotel Hunter Index and ranks 2nd in Bargain Hunter Index, indicating a strong interest in hotel and flight discounts.

Cluster 3: This cluster ranks last in most indexes but holds the leading position in Session Activity, showing a keen interest in hunting for discounts.

Cluster 4: Cluster 5 leads in the Combined Booking Index, indicating a preference for perks related to combined bookings, such as '1 Free Night Hotel with Flight.'

In summary, we can label our clusters based on their interests in the following perks:

- Cluster 0: 'No Cancellation Fees'
- Cluster 1: 'Free Checked Bag'
- Cluster 2: 'Free Hotel Meal'
- Cluster 3: 'Exclusive Discount'
- Cluster 4: '1 Free Night Hotel with Flight'

Demographic Characteristics:

Age: It's evident that the most active users fall within two age groups: 35-44 and 45-54.

Gender: Our primary audience comprises females, accounting for almost 88% of all users. Among male users, there is a relatively higher rate of "Free hotel meal" and an increased

interest in “No cancellation fee”. Conversely, female users are more inclined towards combined bookings and a higher proportion of "Active Searcher" labels.

Marital Status: There are more single users in total than married users. In the cluster associated with free checked bags, the number of married customers is slightly higher than that of single customers. In contrast, most customers in other clusters are predominantly single. In the "no cancellation fee" cluster, 61% are single, and 39% are married. However, the distinction between married and single customers is relatively minimal in the remaining clusters.

Parental Status: All clusters show a similar distribution of users with and without children, with a higher proportion of users without children across all clusters.

Recommendations

A/B Testing: Conduct A/B testing to assess the effectiveness of different perks and promotional strategies before implementing them across the entire user base. This will help optimize the rewards program.

Continuous Monitoring: Regularly monitor user behaviour and preferences to adapt and refine the perks and promotions strategy over time. Stay responsive to changing customer needs.

Feedback Loop: Implement a feedback system to gather insights and opinions directly from users. This will enable TravelTide to enhance the perks and rewards program based on user feedback.

Engage "Active Searcher" Users: Develop a system to identify and engage potential "Active Searcher" customers early in their journey on the platform, even if they haven't made bookings yet or don't have enough sessions. This proactive approach will help capture their interest effectively.

In conclusion, TravelTide's Rewards Program has the potential to improve customer retention and engagement significantly. The program can be fine-tuned by understanding customer preferences and behaviour to provide personalized perks and recommendations. Implementing A/B testing, continuous monitoring, and engaging "Active Searcher" users are critical to ensuring the program's success and maximizing customer loyalty. The unique characteristics of each cluster provide valuable insights for crafting targeted rewards and promotions.