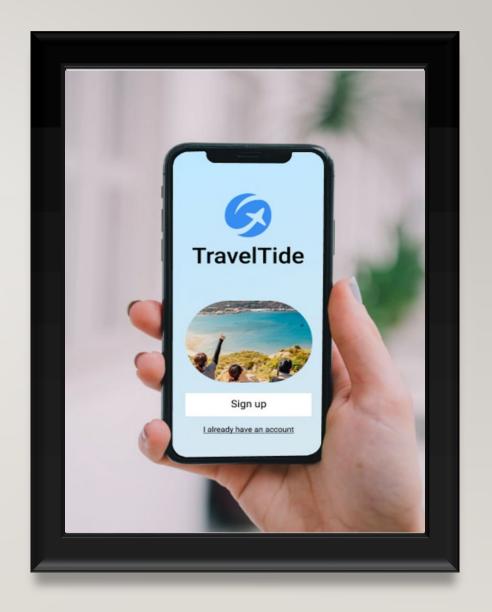
# TRAVEL TIDE CUSTOMER SEGMENTATION

Perks Analysis

**Enhancing Customer Experience** 

Analyst : Djamel Fitas



## Introduction

## I. Brief Overview of Perks Program

- > The Perks Program is a set of incentives and benefits offered to our customers to enhance their travel experience.
- > It includes a range of exclusive offers, discounts, and complimentary services designed to add value to their bookings.





## II. Objective of Analysis

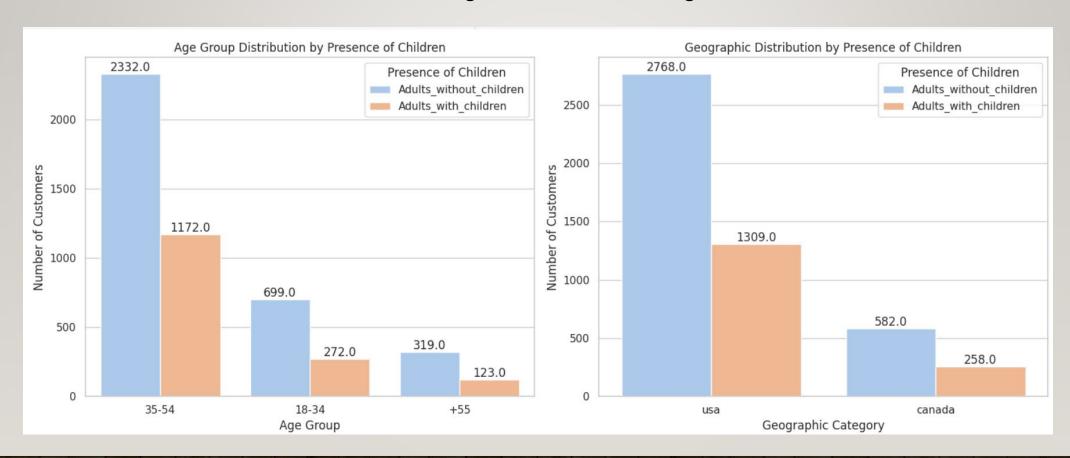
- Understanding customer preferences is crucial for tailoring perks to specific segments.
- > We'll utilize customer segmentation to align perks with distinct preferences, maximizing their appeal.
- > By analyzing data, we'll identify which perks resonate most with different customer groups, enabling targeted marketing strategies



# **Customer Segmentation Analysis**

## **Categorization Method:**

- > This method provides valuable insights into customer preferences based on demographic characteristics.
- > Below we see the outcomes of customer segmentation based on age and location.



#### **Results Analysis:**

> Based on the preceding graph, we can designate the subsequent perks to each customer segment:

#### **Adults with Children**

- ✓ Free Hotel Meal (especially for family-friendly hotels)
- ✓ Free Checked Bags (for convenience while traveling with children)
- ✓ Free Cancellation Fee (for flexibility in case of family emergencies)
- ✓ Night Free Hotel with Flight (for family vacations)

#### **Adults without Children**

- ✓ Hotel Exclusive Discount (targeting adults looking for exclusive deals)
- ✓ Flight Exclusive Discount (targeting adults looking for exclusive deals)
- ✓ Free Cancellation Fee (for flexibility in travel plans)

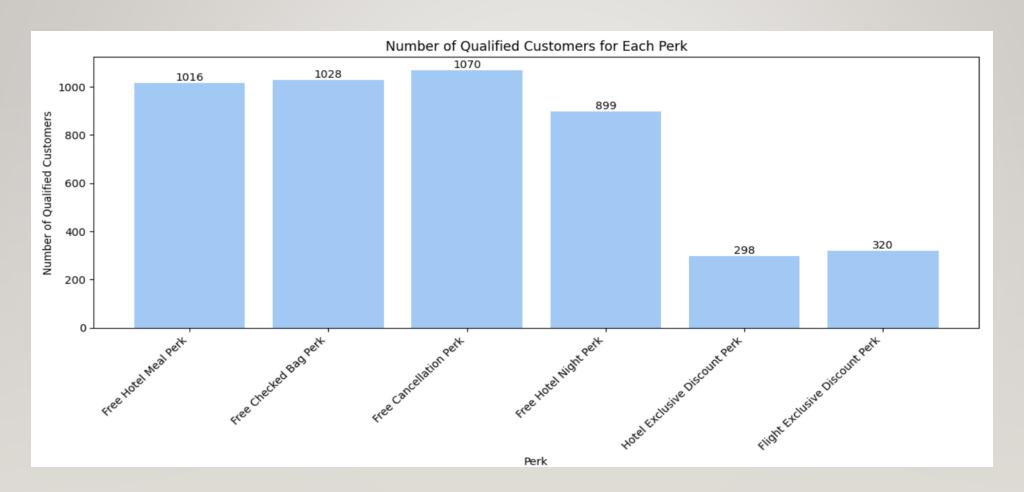
# **Metrics Considered for Segmentation**

For each perk we considered the following affinity metrics for both methods of segmentation (Thresholding-Fuzzy)

- Free Hotel Meal: This metric is derived from the product of the average amount spent on hotels, factored by the number of rooms and divided by the total number of nights spent.
- > Free Checked bags: This metric is a straightforward calculation based on the number of flight trips taken per customer
- Free Cancellation Fee: This metric is determined by the average number of page clicks per session.
- > One Night free hotel with flight: This metric is established by averaging the total amount spent on both hotels and flights, and then dividing it by the overall number of trips booked.
- > Exclusive Hotel discount: This metric is derived from the product of the average amount saved, in conjunction with the average hotel discount amount and the percentage of hotel discounts
- > Exclusive Flight Discount: This metric is calculated from the product of the average amount saved per kilometer, paired with the average flight discount amount and the percentage of flights discounts

## **I.Thresholding Method:**

> After establishing a 20% threshold for the highest-spending customers, we obtained the following results:



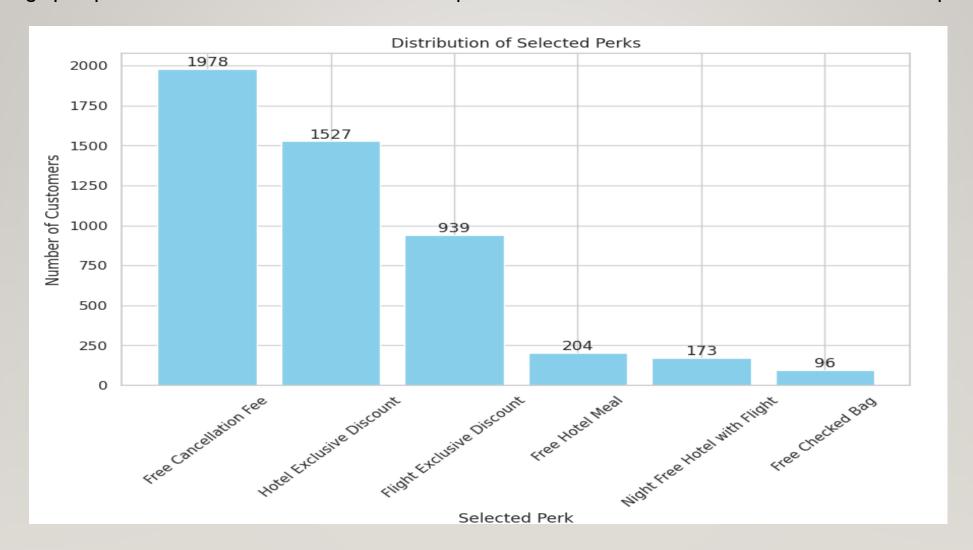
### **Results Analysis:**

The analysis indicates that perks related to complimentary services (free hotel meal and checked bag) and travel flexibility (free cancellation) are highly popular among qualified customers. Additionally, combined flight and hotel deals (night free hotel with flight) are also attractive. The flight and hotel exclusive discounts may cater to more specific customer segments and require targeted promotions.

## **II. Fuzzy Segmentation Method**:

Implementing this method enables us to rank customers based on the perk they most resonate with based on behavioral patterns, preferences, and transaction history.

The graphic presented below illustrates the results acquired on the distribution of customers across different perks.



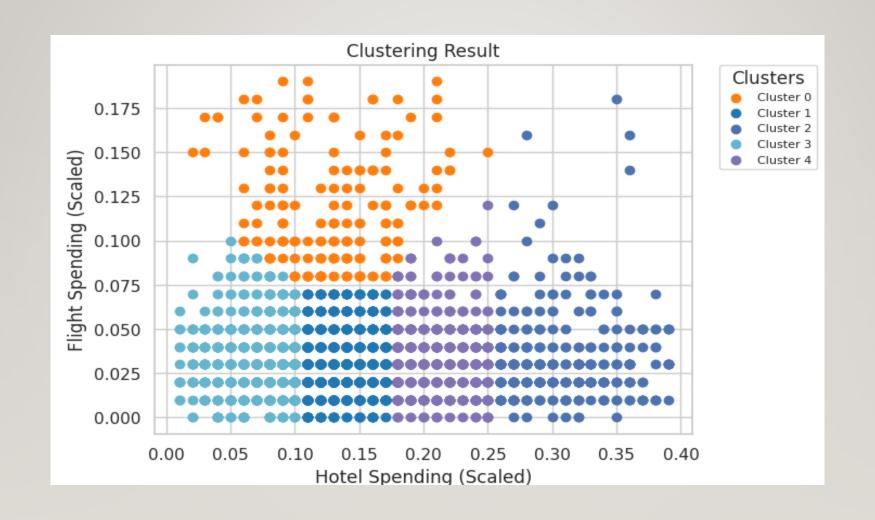
## **Results Analysis:**

The results of our analysis highlight intriguing patterns in customer preferences for various perks. It's evident that the 'Free Cancellation Fee' perk stands out prominently, garnering a substantial interest from 1978 customers, indicating a strong desire for flexibility in travel plans. Additionally, 'Hotel Exclusive Discount' and 'Flight Exclusive Discount' perks have proven to be particularly popular, appealing to 1527 and 939 customers respectively. Conversely, 'Free Checked Bag' and 'Night Free Hotel with Flight' perks have received relatively fewer takers, with 96 and 173 interested customers respectively.

#### III. K-Means Method:

Using K-Means clustering allows us to group customers based on their flights and hotels trips spending behavior and creating distinct segments.

The graph displays K-means results and five consumer segments based on their spending patterns.



# Result Analysis:

Cluster	0	I	2	3	4
Hotel	Low	Low	High	Low	Moderate
Flight	High	Low	Low	Moderate	Moderate
Potential Perk	Free Checked bags Free Cancellation	Hotel Exclusive Discount Free Hotel Meal	Hotel Exclusive Discount Free hotel Night with Flight	Free Checked bag Free Cancellation fee	Flight Exclusive Discount Free Checked bag

## Recommendation

Based on our comprehensive customer segmentation analysis, it is evident that the assumed perks align remarkably well with the preferences and behaviors of our customer base. The perks, including free hotel meals, free cancellation fees, free checked bags, one free night at a hotel with a flight, and exclusive discounts, have resonated significantly with various segments. Specifically, free hotel meals and free cancellation fees have emerged as standout options, garnering substantial interest across multiple segmentation methods. This validates our initial hypothesis that these perks hold significant appeal for our customers. Therefore, we highly recommend including these perks in our perks program to enhance customer satisfaction and loyalty.