



Customer Segmentation & Perk Assignment for Personalized Reward Program

Introduction

Analyzing 5,782 customers based on Elena's definition of *active users* with more than 7 sessions after January 4th, 2023 customers revealed seven distinct customer groups.

These groups differ in demographics, browsing and travel behavior, and booking preferences. Understanding these groups enables precise targeting and stronger loyalty-building with the TravelTide Rewards Program.



Approach to Customer Segmentation

After cleaning and structuring the session-based data I aggregated both totals and averages at the user level. The user-based table highlighted distinct browsing, travel and spending behaviors using percentile-based logic.

To generate segment scores, feature columns (such as average cost, number of flights, and baggage count) were normalized, ensuring comparability across different dimensions.

Some users displayed characteristics of multiple segments (for example, seniors who were also highly price-sensitive). To resolve this, I established a clear hierarchy of segment assignment. The process began by classifying users who had never completed a booking into the *Browser* segment. From there, remaining users were assigned in order of *Business, Family, Bargain Hunter, Frequent Flyer, New Customer*, and finally *Senior*.



This manual ranking ensures that browsing or transactional behavior take precedence when they strongly define a segment, rather than being overshadowed by demographic traits. As a result, the perks assigned are more likely to meet customer needs and interests. For example, a 67-year-old price-sensitive customer is better served by being classified as a Bargain Hunter, since this increases their likelihood of engaging with rewards programs and discount-driven offers.

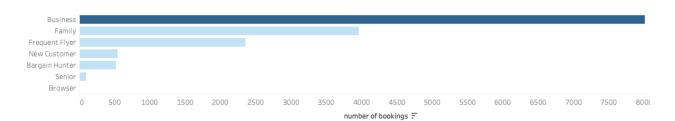
Segment Profiles

To categorize customers for each perk it's important to determine specific characteristics that users target.

1. Business Travelers (47% of customers)

Business travelers travel mainly for work. They usually do not extend their stay if not necessary and appreciate comfort during routine trips.

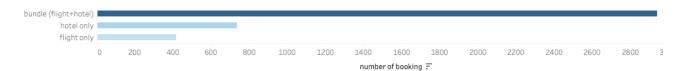
Characteristics: in working age, <u>book regularly</u>, short sessions with few clicks, travel mainly solo on short weekday trips



Perk: A *free hotel meal* can be a pleasant perk to add value, convenience and comfort during business travels.

2. Family Travelers (25% of customers)

Family travelers always travel in a group of 3+. They usually book seasonal, <u>value bundles</u>, and child-friendly services.



Characteristics: short sessions with few clicks, have children and is married, book multi-seat

trips with checked bags

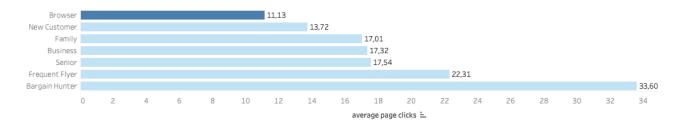
Perk: Planning a family vacation, especially many months in advance, always

carries the risk of having to cancel or postpone the trip for various reasons. To *eliminate the cancellation fee* provides flexibility and security of not

losing the payment.

3. Browsers (8% of customers)

With an average of <u>11 page clicks</u> Browser represent untapped potential that requires conversion tactics as they explore flights and hotels but did not book so far.



Characteristics: did not book

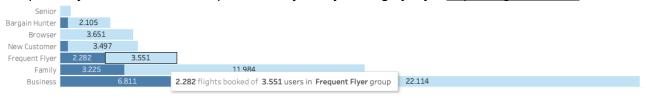
Perk: Browser need a push into a first purchase. A tangible reward like a free

upgrade on their first hotel room booking might reduce the barrier to

break browsing inertia with immediate value.

4. Frequent Flyers (7% of customers)

Frequent Flyers book often and spend heavily. They are highly loyal Top10 flight bookers.



Characteristics: book frequently, short sessions, strong spend

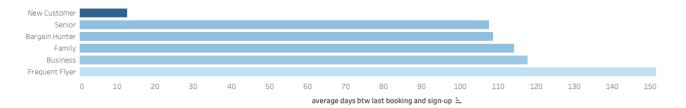
Perk: Frequent Flyer have a high loyalty potential. A *free checked bag* will add

convenience and ensures they continue booking with TravelTide.

5. New Customers (7% of customers)

New Customers are recently onboarded and need nurturing and trust-building.

Characteristics: very recent sign-up, limited booking history, less than 29 days between last booking and sign-up



Perk: New Customers require reassurance and incentives to build loyalty. Offering

a free night at hotel with flight booking to encourage returning to

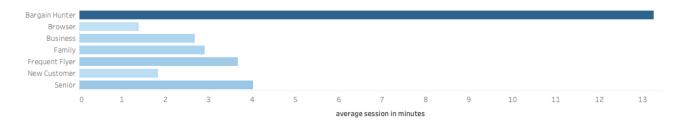
TravelTide platform.

6. Bargain Hunters (4% of customers)

Bargain Hunter are very active online, are highly price-sensitive, and book mainly during discounts.

Characteristics: <u>longer sessions</u>, active clicker, higher booking rate, but only when discounts

are present.

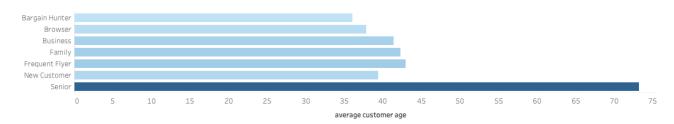


Perk: **Exclusive discounts** align perfectly; discounts are this group's purchase trigger.

7. Seniors (1% of customers)

Seniors are the smallest group with a lower booking rate that prefer simple sessions.

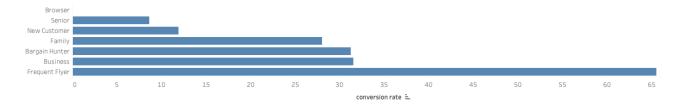
Characteristics: <u>customer age 67+</u>



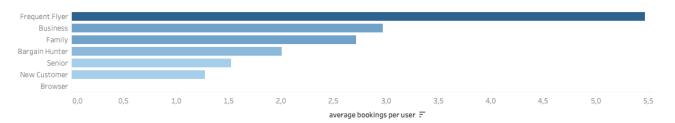
Perk: Seniors value comfort. A *free pick-up from airport* focuses on this group's needs to make travel attractive without aggressive upselling.

Insights

- **Margin focus:** *Bargain Hunter* are highly price-sensitive and only book on discounts, which risks eroding margins if over-incentivized.
- Conversion focus: Browsers, Senior and New Customers present the largest conversion opportunities, where the right perk could turn passive users into loyal bookers.



 Retention focus: Frequent Flyers and Business Travelers show strong retention potential, where convenience-focused perks strengthen loyalty.



Flexibility focus: Families plan months ahead. They value flexibility and reassurance more
than aggressive rewards. Perks that reduce travel risk (e.g., waived cancellation fees, easy
rescheduling) are likely to build trust and repeat use.

Conclusion

This segmentation demonstrates how customer insights can directly shape a reward strategy that is both personalized and impactful. By grounding segment definitions in behavioral data and assigning perks that address the specific pain points and motivators of each group, the TravelTide Rewards Program is positioned to drive both conversion of untapped users and loyalty among high-value customers. Nevertheless, it must be mentioned that the insights regarding segments and perks are only a first approach based on the limited dataset. They need to be tested and validated in the next step. Only then the result is a balanced rewards system that not only increases engagement but also deepens long-term relationships with diverse travelers.

Recommendations/Next Steps

- A/B Testing to evaluate perk effectiveness (e.g. track booking rates, satisfaction metrics and uplift in bookings by perk vs. control group). We could test a random assignment of perks. Group A receives the suggested perk, while group B is randomly recommended another existing perk. Then we check the number of subscribers in the rewards program. Do users join more often with the recommendation? But it's not enough to just see the difference. TravelTide should use a chi-square test to test the probability of chance. A good approach shows a positive difference that is very unlikely to be due to chance.
- Refine perk allocation dynamically as customer behavior shifts to adjust perks for customers in the rewards program, moving users between groups as behavior evolves (e.g., New Customers → Frequent Flyer).
- **Develop hybrid perks** for users with mixed segments scores (e.g. seniors & bargain hunter)
- **Implement feedback mechanism** within the rewards program to collect insights from customers to make real-time adjustments, continuously improve the program, and to keep customers in the program.
- As TravelTide has over 1 million users try to invite all customers to the rewards program over time by creating more **segmentations** and perks that addresses their needs.