Executive Summary – TravelTide Customer Segmentation and Perk Strategy

Context

TravelTide has achieved rapid growth through product breadth and search excellence, but customer retention remains underdeveloped.
To support the design of a personalized rewards program, this project evaluates whether user behavior data can inform a scalable, risk-aware perk strategy.

Objectives

- Determine whether TravelTide can reliably match each user to a **single, targeted perk** based on behavioral evidence.

- Assess whether this personalization can improve conversion and retention **without increasing cancellation risk or margin erosion**.

Methodology

User behavior was analyzed at both session and user level for a fixed cohort of active users. Behavioral signals were aggregated into four interpretable dimensions: **Value, Risk, Complexity, and Engagement**.

Segmentation followed a hybrid approach:

- a **rule-based framework**, designed for transparency and business control;

- **unsupervised clustering**, used exclusively to validate alignment with natural behavioral patterns.

Key Findings

- **Behavior outweighs demographics**
  Age, gender, and household attributes do not meaningfully explain booking, cancellation, or spend behavior.

- **Trip complexity drives both value and fragility**
  Longer, multi-component trips generate the highest spend but also exhibit higher
  cancellation volatility.

- **Engagement does not equal value**
  Frequent bookers are not always high-value users; some of the most valuable
  customers book infrequently but commit to expensive, complex trips.

- **Behavioral clusters validate the framework**
  Without predefined segments, the data naturally separates into four stable
  archetypes aligned with Value, Risk, Complexity, and Engagement.

- **Perks act as friction-specific interventions**
  Each perk addresses a distinct behavioral need:

  - reassurance for fragile, high-value trips

  - logistical support for complex travel

  - experience enhancement for hotel-centric users

  - activation for low-engagement but reliable users

Assigned Perks by Behavioral Cluster (counts)
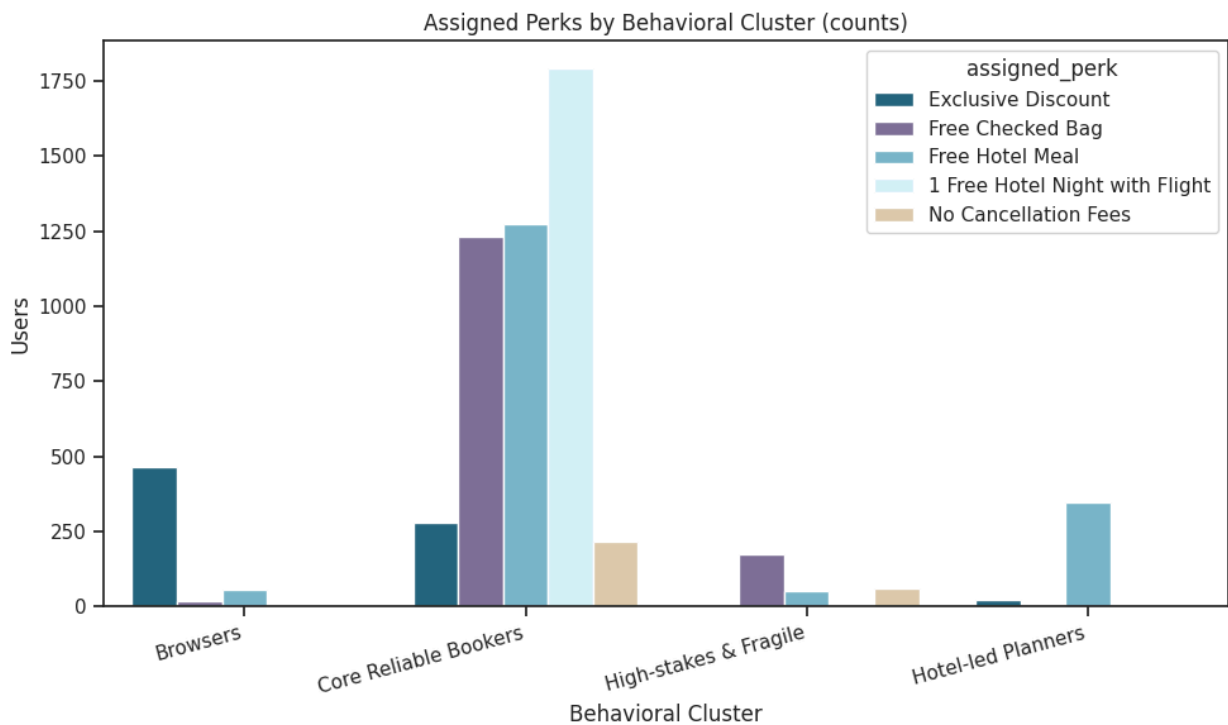
Recommendations

- **Implement the proposed perk assignment framework**
  It is behavior-driven, interpretable, and validated by independent clustering.

- **Manage high-value, high-risk users as a controlled growth segment**
  Apply reassurance-based perks selectively to unlock value while capping downside risk.

- **Avoid blanket discounts**
  Price-based incentives should be reserved for low-risk users with proven follow-through.

- **Test and iterate through controlled experiments**
  Measure impact on conversion, retention, and cancellation before scaling.

Key Takeaway

Effective incentives are not about rewarding customers uniformly, but about **removing the right friction at the right moment**.