From Segmentation to Experimentation: Future A/B Testing Plan

While this project focuses on exploratory segmentation and reward design, it naturally leads to a set of testable hypotheses regarding customer preferences. The segmentation and segment-to-perk mapping define expected behavioural responses, which can be validated through controlled A/B experiments.

Each segment–perk pairing represents a hypothesis about what type of incentive is most effective for a specific behavioural profile. In a future experiment, customers within each segment could be randomly assigned to receive either the recommended perk or a generic rewards message. Conversion rate, rewards program sign-up, and post-booking behaviour would serve as primary evaluation metrics.

The following hypotheses are derived directly from the observed behavioural patterns:

- Flexibility vs. Cancellation Risk

  Customers with historically high cancellation rates are more likely to respond positively to flexibility-based perks (such as no cancellation fees) than to price-based incentives.

- Discount Access vs. Premium Rewards

  Discount-oriented customers respond more strongly to early access to deals than to premium, non-monetary perks.

- Loyalty vs. Monetary Incentives

  High-value frequent users do not require direct monetary discounts to remain engaged and are more responsive to loyalty-based rewards such as complimentary hotel nights.

- Soft Activation for Low-Value Users

  Low-value users with longer stays are more likely to increase engagement when offered simple, low-commitment incentives rather than aggressive discounting.

- Visible Savings for Deal Seekers

  Deal-sensitive, high-risk users respond better to visible and tangible savings (e.g. free checked bags) than to abstract or delayed rewards.

These hypotheses provide a structured foundation for future A/B testing. By validating them experimentally, TravelTide could quantify the causal impact of personalized perk messaging and iteratively refine its rewards strategy based on observed uplift.