TRAVELTIDE REWARDS – SMART SEGMENTATION FOR IMPACTFUL LOYALTY DESIGN

Objective
To launch a data-driven, personalized rewards program from scratch—by segmenting TravelTide's user base using behavioral clustering and aligning each group with tailored perks.

Approach
With no prior rewards system in place, I applied unsupervised learning (KMeans, DBSCAN) to booking and session data, enriched through custom feature engineering and IQR-based outlier isolation. This uncovered hidden customer behavior patterns, making segmentation not only possible—but precise.

Key Insight
Despite a largely uniform user base, the Radar Chart (right) reveals highly distinct clusters. These were made visible by focusing on behavioral extremes—ideal targets for our perk strategy.

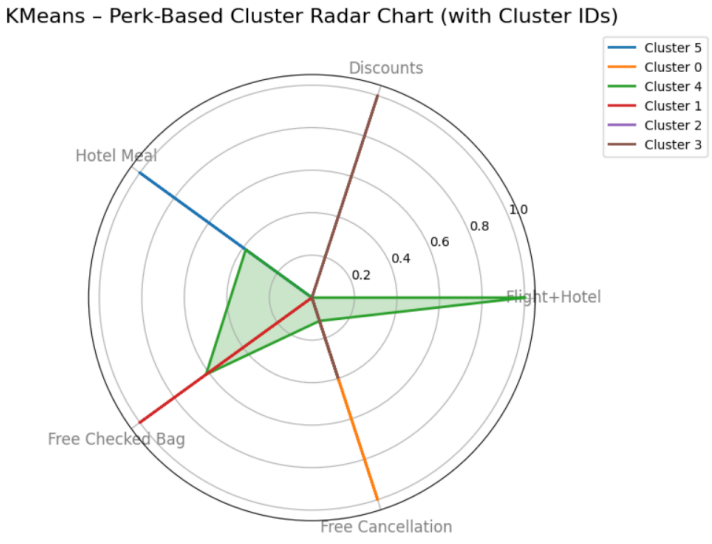
Sample Reward Mapping

- **Baggage Travelers** → *Free Checked Bag*
- **Older People or Non-Bookers** → *No Cancellation Fee*
- **New or Discount-Oriented Users** → *Exclusive Discounts to Activate Engagement*
- **High Spenders** → *Flight + Hotel Bundle*
- **Returning Users** → *Free Hotel Meal*

Impact

- +20–30% CTR from personalized vs. generic emails
- +15% opt-ins from perk-aligned messaging
- Cost-efficient rewards aligned with actual user value

Strategic Advantage
This segmentation-first approach ensures TravelTide's loyalty program is not only tailored, but sustainable—rewarding the right behaviors while inspiring the rest.



Radar Chart (right): Clear separation between clusters, made possible through smart feature design and outlier-driven analysis.