

TRAVELTIDE PROJECT

# THE LOYALTY COMPASS



Data-Driven Pathways to  
Personalized Travel  
Rewards



THE TRAVELTIDE PROJECT BY MASTERSCHOOL • MAY 2025  
SUBMITTED BY GUIDO GREGER



# Executive Summary

An outstanding position in the Travel industry – but struggling with customer retention. What sounds manageable right now, might develop into a severe problem for TravelTide.

We are here to tackle the task by developing a unique rewards program with tailor-made perks based on a data-driven customer segmentation.

## Why RFM? The Logic behind Retention

Demographics alone fail to predict behavior.

We aim to pinpoint customers with metrics that reveal true retention drivers and implement an RFM segmentation strategy – focussing on Recency, Frequency, and Monetary Value – to directly impact retention and drive business success for TravelTide.

# Executive Summary

## The Loyalty Compass

Data-Driven Pathways to Personalized Travel Rewards

### 1. The Retention Opportunity

TravelTide's rapid growth in travel inventory has outpaced its ability to retain customers. Without an existing rewards program, we designed a data-first loyalty strategy to turn transactional users into brand advocates.

### 2. Insights at a Glance

- Methodology:** Addressing TravelTide's main challenge – declining retention, and ultimately revenue – I chose the RFM segmentation model to access and analyze the business impact of the 3 key factors of customer behavior: Recency (days since last booking), Frequency (number of bookings), and Monetary Value (Total amount spent).
- Tools & Process**
  - Data Pipeline:** SQL (data cleaning, feature engineering, aggregation), Tableau (RFM scoring & visualizations, Python (Rebuild of RFM scoring, data enrichment and export)
  - Cohort:** 5,998 high-engagement users (7+ sessions since 01/2023) session-level data subset with 48,608 records (+ 603 duplicated cancellation records, that were skipped).
  - Segmentation:** Business-driven consolidation from 125 RFM cells to 7 actionable segments of distinct traveler types (e.g., VIP Voyagers, Adventure Scouts or Almost Alumni).
- Key Validations:** Customer behavior does not strictly adhere to certain demographic or behavioral aspects. Business goals can be targeted far more effectively by segmenting the users along their individual manifestations along the 3 RFM metrics. Elena's perk proposals were validated and enhanced with behavioral insights from our RFM analysis to tailor perks for TravelTide's rewards program exactly fitting the needs of the 7 customer segments.

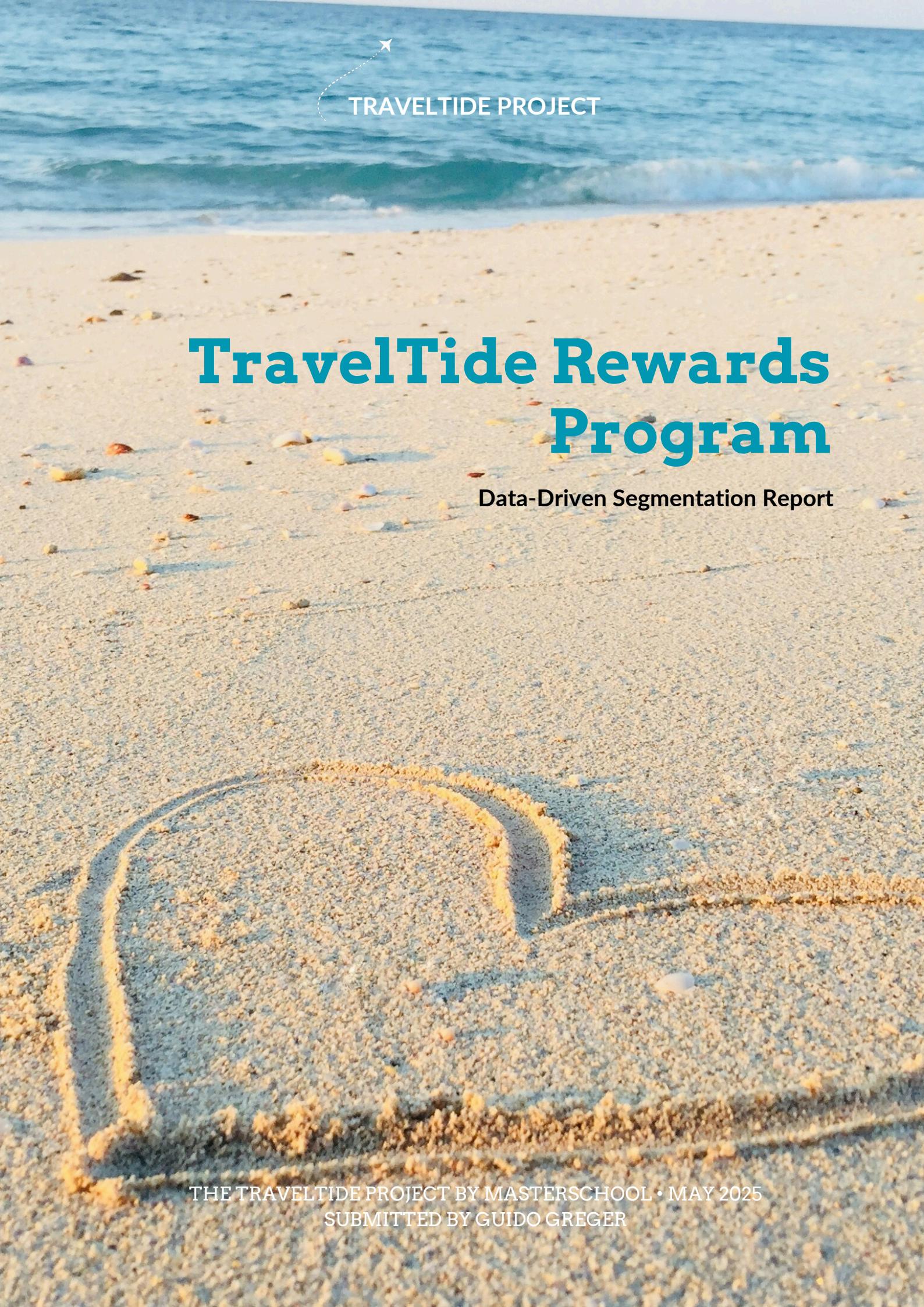
### 3. Segmentation & Perks

The RFM analysis revealed 7 clearly distinct customer segments that can be addressed with a set of perks specifically designed to meet their individual requirements and raise the retention level for TravelTide.

<b>VIP Voyagers</b> (Champions & Loyalists) RFM: 4-5   4-5   4-5 – Book recently & frequently, high spenders	<b>"Elite Key Membership"</b> Concierge trip planning, room upgrades, priority rebooking
<b>Adventure Scouts</b> (Engaged Prospects) RFM: 3-5   3-5   1-3 – Lately active, books occasionally, budget-conscious	<b>"Scout's Rewards" Program</b> Flexible cancellation (48hr free), credit for tours, price guarantee 72hr
<b>Jet-Set Newbies</b> (High Value Newcomers) RFM: 4-5   1-3   4-5 – Recent, but bookings, big first purchases	<b>"Newbie Welcome Kit"</b> Free checked bags next 2 bookings, surprise amenity, early check-in
<b>Wandering Regulars</b> (Attention needed) RFM: 2-3   3-4   2-4 – Slipping away, historically regular, mixed spending	<b>"Comeback Trail Program"</b> Personalized offers, loyalty point boost, mystery reward wheel checkout
<b>Almost Alumni</b> (At risk) RFM: 1-2   1-5   4-5 – Nearly lapsed, varied history, high past value	<b>"Red Carpet Recall"</b> Free meal with booking, best price + \$50 if found lower, CEO message
<b>Fading Explorers</b> (Disengaging) RFM: 2-3   1-3   1-2 – Declining activity, reduced bookings, low spend	<b>"Wanderlust Revival"</b> Surprise fee waiver, Throwback Thursday deals, charity donations
<b>Sleeping Trekkers</b> (Inactive) RFM: 1   1-3   1-3 – Dormant, rare bookings, minimal spend	<b>"Reawakening Campaign"</b> Platform update highlights, no-strings credit \$10, account pause option

### 4. Implementation Roadmap

- Phased deployment:** 3 steps – high-value segments | at-risk segments | all other segments
- Continuous tracking:** Segment migration and redemption rates
- Optimizing:** A/B-testing (e.g. generic discounts vs. segment-specific perks)



TRAVELTIDE PROJECT

# TravelTide Rewards Program

Data-Driven Segmentation Report

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# TravelTide Rewards Program: Data-Driven Segmentation Report

## Introduction & Data Foundations

### 1. The Retention Opportunity

TravelTide's industry-leading travel inventory masks a critical vulnerability: declining customer retention. While the platform excels at attracting users, many high-value customers fail to rebook. This project addresses the gap by designing a rewards program tailored to behavioral segments, moving beyond demographic assumptions.

### 2. Data Cleaning & Transformations

**Raw database:** 4 tables with 5.41M sessions, 1.02M users, 1,92M hotel trips, 1,90M flight trips

**Dataset:** 48,608 sessions (Jan-Jul 2023) → 5,998 high-engagement users (7+ sessions)

#### Key Adjustments:

- Cancellation Handling:** Excluded duplicate booking sessions while retaining cancellation flags (3.8% of bookings).
- Data Integrity:**
  - Corrected negative hotel nights and reversed timestamps
  - Imputed zero values for missing seats/bags
  - Fixed destination coordinates using Python geocoding
- Activity Threshold:** 7+ sessions ensured focus on repeat bookers.

### 3. RFM Segmentation Framework

#### Business Rationale:

To address TravelTide's retention challenges, we implemented RFM segmentation, focusing on recent engagement, overall loyalty, and total revenue contribution. This approach enables us to identify and target key customer segments with tailored strategies for effective retention and revenue growth.

#### RFM Metrics:

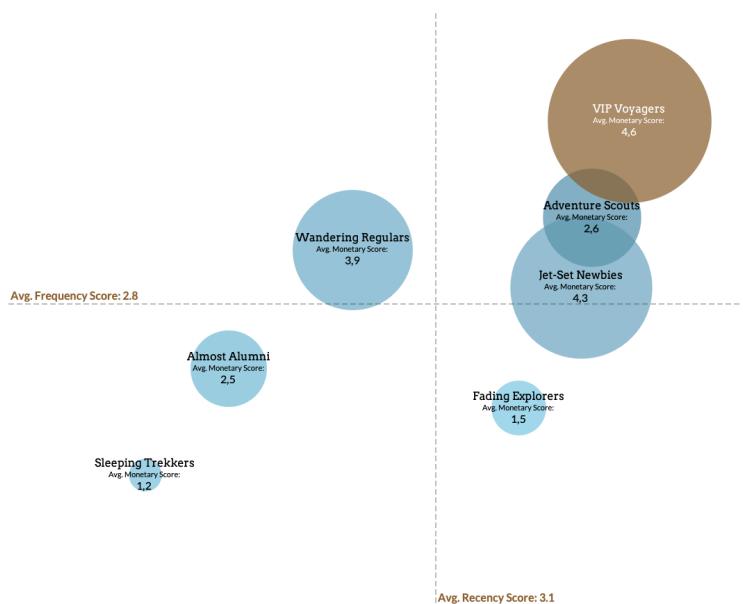
- Recency (Days since booking):** Predicts immediate churn risk, enabling timely interventions for customers at risk of lapsing.
- Frequency (Total bookings):** Measures platform loyalty, identifying high-frequency users who are prime candidates for loyalty programs.
- Monetary (Total spend):** Identifies revenue potential, enabling prioritization of VIP treatment for high-spending customers.

#### Implementation:

**1. Tableau Prep:** We calculated Recency, Frequency, and Monetary values for each user, leveraging Tableau's data preparation capabilities for efficient data processing and transformation.

**2. Scoring:** We assigned scores of 1–5 to each metric based on user's performance relative to the cohort, standardizing the metrics to allow for comparison and combination into a single RFM score.

**3. Consolidation:** We consolidated 125 RFM cells into 7 actionable segments using business rules and expert judgment, reducing the complexity of the segmentation while ensuring that each segment was meaningful and actionable from a business perspective.



# TravelTide Rewards Program: Data-Driven Segmentation Report

## Segment Analysis & Perk Strategy

### 4. Segment Profiles

Segments, RFM scores & characteristics, personas & proposed perks

#### VIP Voyagers (Champions & Loyalists)

- Recency 4-5: Booked recently
- Frequency 4-5: Books frequently
- Monetary 4-5: High spenders

**Persona:** Sophisticated travelers who consider TravelTide their primary booking platform. Value convenience and exclusivity over price sensitivity.

#### Proposed Perks: "Elite Key"" Membership

- Concierge trip planning (1 free annually)
- Automatic room upgrades at partner hotels
- Priority rebooking during disruptions

**Why this perk?** Replaces Elena's generic discounts. Creates emotional loyalty beyond transactional discounts. Costs less than blanket "free nights" while feeling more exclusive.

#### Adventure Scouts (Engaged Prospects)

- Recency 3-5: Active recently
- Frequency 3-5: Books occasionally
- Monetary 1-3: Budget-conscious

**Persona:** Experience-driven travelers who comparison shop. Need nudges to book directly with TravelTide. Often book flights but rarely hotels.

#### Proposed Perks: "Scout's Rewards" Program

- Flexible cancellation (48hr free changes)
- Local experience credits (\$25 towards tours)
- Price freeze guarantee for 72hr

**Why this perk?** Improves on Elena's cancellation fee idea. Addresses their hesitation points while encouraging deeper platform engagement.

#### Jet-Set Newbies (High Value Newcomers)

- Recency 4-5: Very recent signups
- Frequency 1-3: few bookings or 5 frequent, but new
- Monetary 4-5: Big first purchases

**Persona:** Affluent first-time users testing TravelTide. Need reassurance to become regulars.

#### Proposed Perks: "Newbie Welcome Kit"

- Extra checked bag on next 2 bookings
- Surprise amenity (airport lounge pass or meal voucher)
- Dedicated onboarding specialist for first trip
- Early check-in priority

**Why this perk?** Enhances Elena's free bag offer. Makes the first experience memorable without excessive cost.

#### Wandering Regulars (Attention needed)

- Recency 2-3: Slipping away
- Frequency 3-4: Historically regular
- Monetary 2-4: Mixed spending

**Persona:** Formerly loyal customers starting to explore alternatives. Need reminders of TravelTide's value. Often book hotels, not flights.

#### Proposed Perks: "Comeback Trail" Program

- "We noticed you're browsing..." personalized offer
- Loyalty points boost (2x on next booking)
- Mystery reward wheel at checkout

**Why this perk?** Building on discounts. Creates FOMO and gamification vs. generic "10% off".

#### Almost Alumni (At risk)

- Recency 1-2: Nearly lapsed
- Frequency 1-5: Varied history
- Monetary 4-5: High past value

**Persona:** High-value customers one step from churn. Need dramatic intervention."

#### Proposed Perks: "Red Carpet Recall"

- Free hotel meal with flight booking
- Guaranteed best price + \$50 credit if found lower
- Personalized video message from CEO
- Option for low-spenders in segment: \$25 credit after next booking

**Why this perk?** Emotional re-engagement at similar cost to free meal offers.

#### Fading Explorers (Disengaging)

- Recency 2-3: Declining activity
- Frequency 1-3: Reduced bookings
- Monetary 1-2: Low spend

**Persona:** Occasional travelers losing connection with TravelTide. Need low-cost re-engagement. Often books last-minute deals.

#### Proposed Perks: "Wanderlust Revival"

- Surprise fee waiver (randomly selected bookings)
- "Throwback Thursday" deals on past routes
- Charity donation in their name per booking

**Why this perk?** Builds goodwill without significant margin impact.

#### Sleeping Trekkers (Inactive)

- Recency 1: Dormant
- Frequency 1-3: Rare Bookings
- Monetary 1-3: Minimal Spend

**Persona:** One-time users who didn't form a habit. Need reactivation or graceful exit.

#### Proposed Perks: Reawakening Campaign"

- "We've changed!" platform update highlights
- No-strings credit (\$10 towards any booking)
- Sunset option: Account pause instead of deletion
- Survey option: Tell us why you left

**Why this perk?** Balances re-engagement with cost control.

# TravelTide Rewards Program: Data-Driven Segmentation Report

## Strategic Priorities & Next Steps

### 5. Immediate Focus Areas

TravelTide's future hinges on retaining high-value customers. While attracting new users is essential, our analysis reveals that a significant portion of revenue is at risk due to customer churn. By focusing on targeted retention strategies, we can maximize the lifetime value of our existing customer base and drive sustainable growth.

### 6. Key Segments at Risk

Our analysis highlights two critical segments that require immediate attention:

- **Wandering Regulars:** Historically loyal customers who are now slipping away, accounting for 24.7% of total net revenue.
- **Almost Alumnis:** High-value users at risk of churning, representing 12.8% of total net revenue.

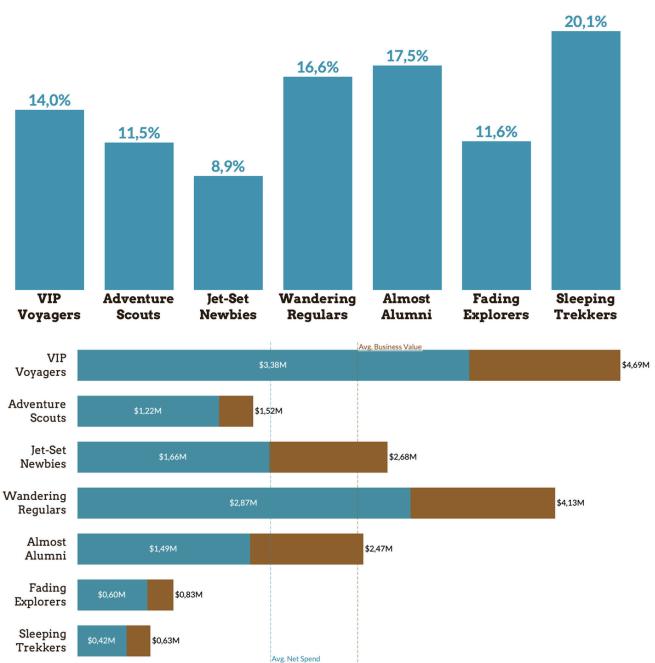
These segments represent a significant opportunity for retention improvement, as they have a proven track record of loyalty and spending.

### 7. Visualizing the Opportunity

To illustrate the potential impact of our retention strategies, we can use the following visualizations:

**1. Segment Distribution** showing the percentages of users assigned to each segment. This provides a clear overview of the relative size of each segment, highlighting the importance of targeting the largest segments.

**2. Revenue by Segment** showing the gross and net total spend split by segments. This visualization demonstrates the revenue contribution of each segment, emphasizing the importance of retaining high-spending segments like VIP Voyagers and Wandering Regulars. The difference between gross and net revenue also highlights the impact of discounts on profitability.



### 8. Next Steps & Strategic Recommendations

Based on our analysis, we recommend the following strategic priorities:

1. **Prioritize Retention Efforts:** Focus on retaining Wandering Regulars and Almost Alumnis through personalized offers and targeted interventions.
2. **Maximize VIP Value:** Implement the Elite Key program for VIP Voyagers to reinforce their loyalty and increase their lifetime value.
3. **Rethink Discount Strategy:** Evaluate the effectiveness of current discount practices and explore alternative strategies to reduce the gap between gross and net revenue.
4. **Reactivate Lapsed Users:** Develop re-engagement campaigns for Fading Explorers and Sleeping Trekkers to win back lost customers.

### 9. Measuring Success

- **Primary KPI:** Segment upgrade rate (e.g. Wandering Regulars → VIP Voyagers)
- **Cost Control:** Perk spend ≤ 1.2% of segment revenue
- **Validation:** A/B test response rates (e.g. generic discounts vs. segment-specific perks)

### 10. Resources

- **GitHub:** <https://github.com/GuidoGreger>
- **Tableau Public:** <https://public.tableau.com/app/profile/guido.greger/>