Mastery Project

"TRAVEL TIDE"

Customer segmentation & perks

with Key Metrics

Presenter: Alexander Kuhn

Data-based analysis of travel patterns

Requirements of Travel Tide (Elena is the Lead)

6

Different customer segments based on travel behavior

7+

Minimum number of sessions per user for the analysis

Jan 2023

Analysis period begins after January 4, 2023

2+

Minimum booked trips per user for segmentation

Individual

Customized perks for every customer segment

Precise

algorithm takes into: Age, marital status and travel patterns

User 4413

Segment "Mature Single"

Perk: Premium Experience & Cultural Tours

35-64 years

Age Group

Unmarried

Marital status

Flexible

Variable travel length

Premium

Higher willingness to spend

Culture

Interest in educational tours

Quality

Focus on quality of experience

User 1664
Rate 37.7 %

Segment "Couple Traveler"

Perk: Romantic upgrade & couples spa package

Married

Marital status

Without children

Child status

2

travelers per booking

35-64 Years

Age Group

Romantic

Focus on couple experiences

Quality Time

Common experiences are important

User 1030
Rate 23.3 %

Segment "Family Traveler"

Perk: Kids Fly Free & Family Entertainment Package

Have Children

Family Travel

5 +

Nights per Trip

30 % +

Main Travel Time (Summer Holiday)

3 +

Sets per booking

3 +

Baggage per booking

Several Rooms

Preferred Apartments

User 717

Rate 16.3 %

Segment "Single Traveler"

Perk: Solo Traveler Bonus & City Tour Credits

Unmarried

Marital status

max 35 years

Age Group

Flexible

Variable travel length

Spontaneous

Travel Time

Premium

Above-average hotel prices

Adventure

Focus on experiences

User 519
Rate 11.8 %

Segment "Business Traveler"

Perk: Priority Check-in & Lounge Access

2-3

Nights per Trip

70 %

Weekdays Travel

< 65 Years

Age Group

1-2

Seats per booking

1

Baggage per booking

Single Room

Preferred Apartments

User 318

Rate 8.6 %

Segment "Senior Traveler"

Perk: Senior Discount & Flexible Booking

7 +

Nights per Trip

> 65 years

Age Group

≤ 40 %

Main Travel Time

Premium

Above-average hotel prices

Comfort

Focus on comfort

Double room / Suites

Preferred Apartments

User 103

Rate 2.3 %

Recommendation

Priority Focus

Target Mature Single segment (37.7% of users) with premium cultural experiences to maximize revenue impact and customer satisfaction

Quick Wins

Implement Business Traveler perks first - highest willingness to pay for convenience features like priority check-in and lounge access

Revenue Optimization

Focus on premium segments (Mature Single, Senior, Business) representing 48.6% of customers with above-average spending patterns

Retention Strategy

Develop family-specific packages during summer months to capture the 16.25% family segment during peak travel periods

Technology Integration

Deploy machine learning algorithms to automatically assign segments and trigger personalized perk offers in real-time

Partnership Development

Establish strategic alliances with cultural tour operators, spa networks, and business lounges to deliver authentic segment-specific experiences

Success Metrics

Track conversion rates, average booking value, and customer lifetime value by segment to measure personalization effectiveness

Risk Mitigation

Start with A/B testing on 25% of users to validate perk effectiveness before full rollout across all customer segments

Strategic implementation

Implementation of segment-specific perks

Immediate actions

✅Activate automatic segmentation:

Integration of the SQL algorithm into the booking platform

🏷️Implement perk display:

Show segment-specific offers in the user dashboard

📧Personalized e-mail campaigns:

Segment-based newsletter with relevant offers

Real-time:

Dashboard for continuous monitoring of KPIs

Automated:

Alerts for deviations from target values

🤖AI-powered:

Predictive analytics for early trend detection

Medium-term goals

🤝Establish a partnership network:

Negotiations with lounges, spas and cultural providers

📱Mobile App Enhancement:

Segment-specific features and booking options

📊A/B Testing Framework:

Continuous optimization of Perk offers

Long-term vision

🤖AI-supported personalization:

Machine learning for dynamic perk adjustment

🌍Global expansion:

Localization of perks for international markets

💎Premium Loyalty Program:

Tiered system with segment-specific rewards

# Supporting data

Tables & Diagrams

Customer segments Overview

6 main segments based on travel behavior

Segment	Key Features	Age	Nights	Travel Type
Business	*Short stays, weekdays*	< 65 years	< 3	Weekdays traveler
Family	*With children, several seats*	< 65 years	5+	Vacation & Summer
Senior	*Longer stays, Premium*	65+ years	7+	Outside peak season
Single	*Young, single*	< 35 years	Variable	Flexible
Couple	*Married, no children*	35-64 years	Variable	Romantic
Mature Single	*Middle-aged, premium*	35-64 years	Variable	Culture & Quality

Segment overview by number of users
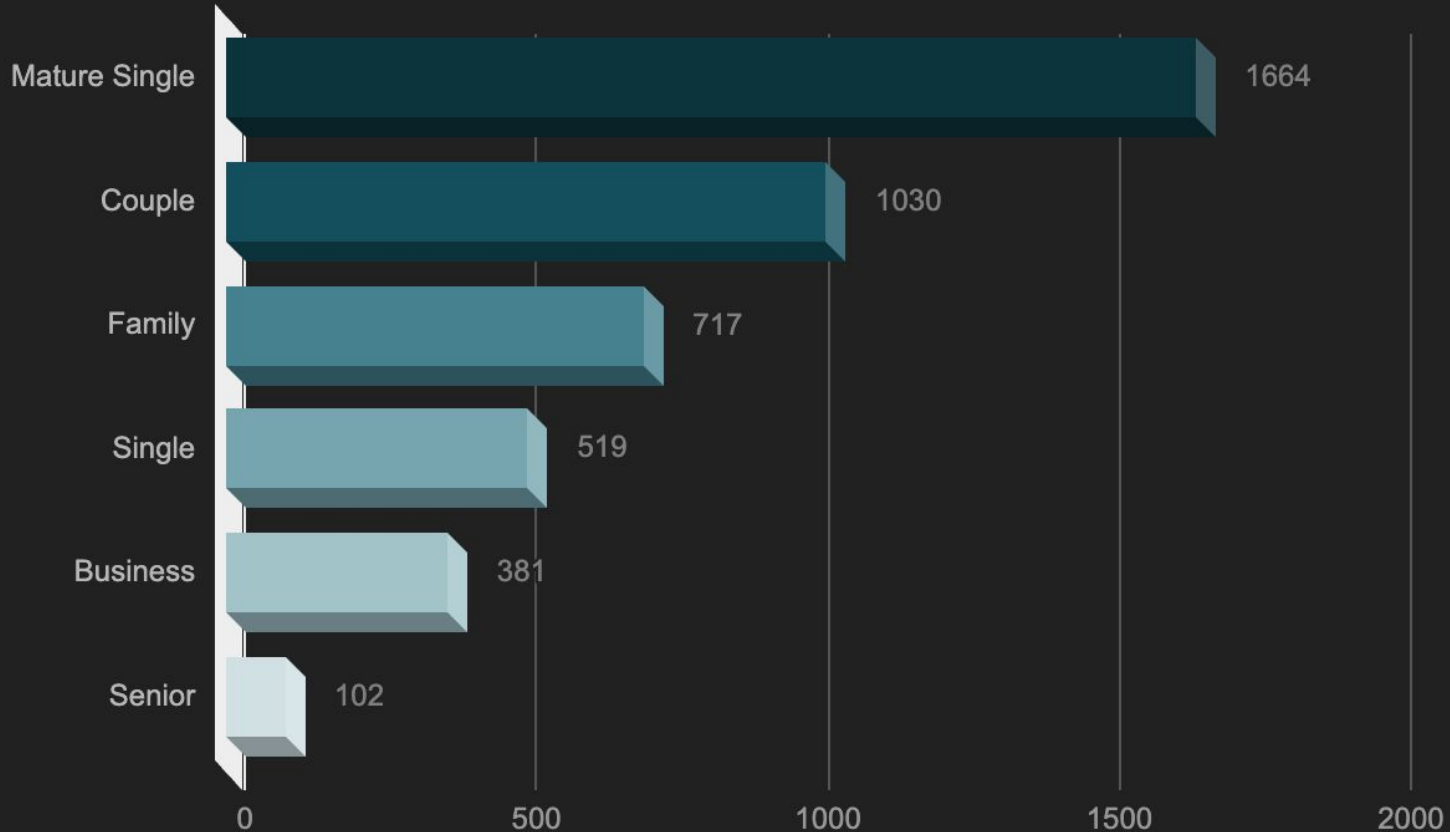
Segment distribution by user in percent

6%

Senior
2,3%
Business
8,6%

Single
11,8%

Family
16,2%

Mature Single
37,7%

Couple
23,3%
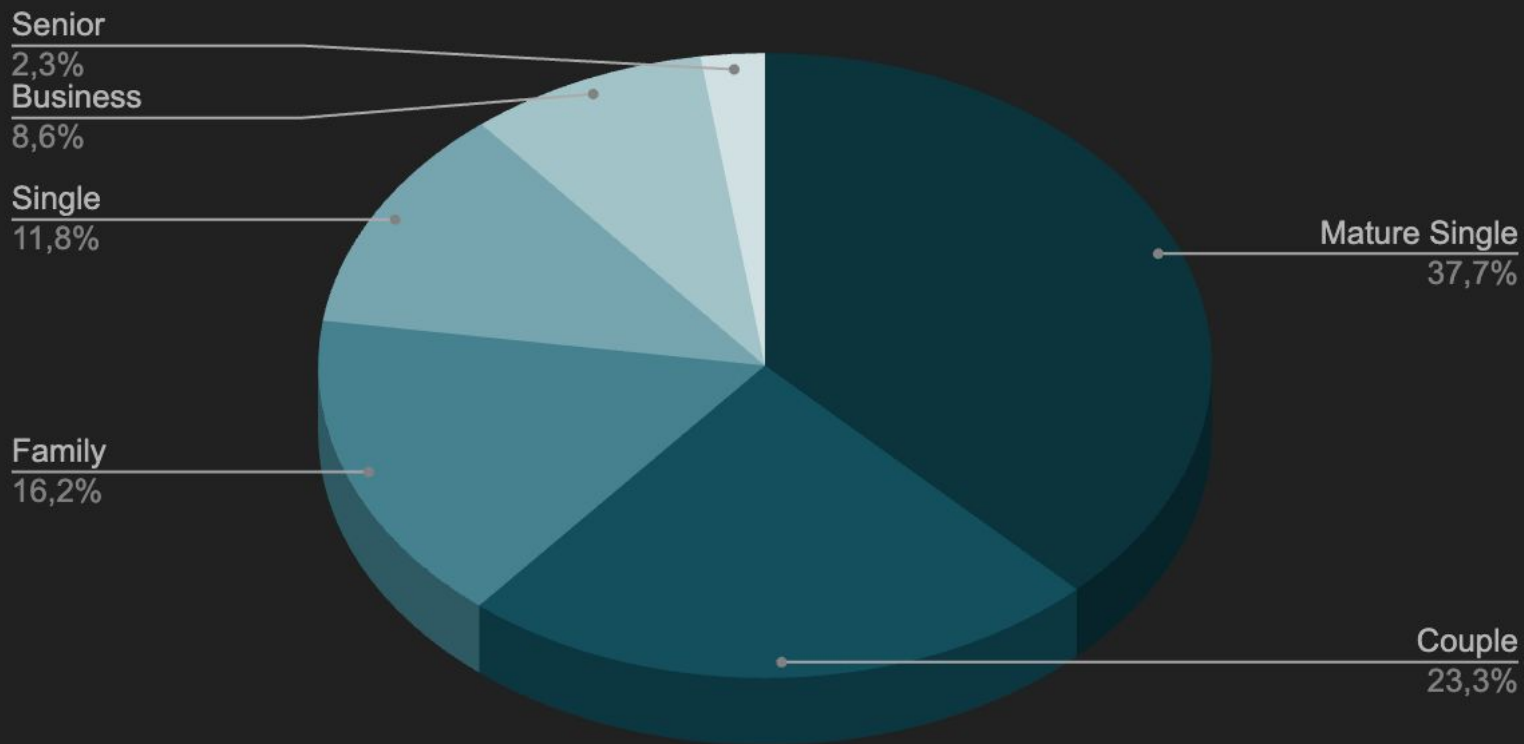
Segment distribution and key metrics

Segment	User Count	% of Total	Avg Age	Avg Trips	Avg Nights/Trip	Avg Seats	Avg Hotel Price	Weekday Ratio	Holiday Ratio	% Male	% Female	% Married	% w/ Children
Mature Single	1,664	37.71	44.3	3.6	4.2	1.2	178	0.69	0.18	13.1	86.7	0.0	25.7
Couple	1,030	23.34	47.5	3.4	4.4	1.2	176	0.67	0.19	8.8	91.1	100.0	0.0
Family	717	16.25	47.4	3.2	4.5	1.3	180	0.69	0.17	11.3	88.3	99.9	100.0
Single	519	11.76	28.4	2.8	5.1	1.2	183	0.62	0.16	9.2	90.8	0.0	23.7
Business	381	8.63	44.0	3.2	2.1	1.0	175	0.95	0.17	10.5	89.5	45.4	33.3
Senior	102	2.31	69.2	2.5	5.8	1.3	174	0.62	0.20	5.9	94.1	75.5	14.7

Segment & Perk per User ID

User ID	User Segment	Segment Perk
94883	Couple	*Romantic Upgrade & Couples Spa Package*
101486	Family	*Kids Fly Free & Family Entertainment Package*
101961	Couple	*Romantic Upgrade & Couples Spa Package*
118043	Mature Single	*Premium Experience & Cultural Tours*
125845	Couple	*Romantic Upgrade & Couples Spa Package*
153982	Business	*Priority Check-in & Lounge Access*
171470	Single	*Solo Traveler Bonus & City Tour Credits*
174997	Business	*Priority Check-in & Lounge Access*
175032	Single	*Solo Traveler Bonus & City Tour Credits*
181157	Couple	*Romantic Upgrade & Couples Spa Package*

Thank you for your attention !

Do you have any questions ?

https://github.com/akms2411/Mastery-Project-Travel-Tide-