# Customer Segmentation

Outcomes of the Customer Segmentation for the marketing reward program

### Outline

- Methodology
- Results
- Considerations / Outlook

## Methodology

- Analyzed customer cohort: Users active for the last 12 months, excluding users who booked within the last 7 days.
- Segmentation: Statistical modelling using kmeans clustering to ensure a model-based segmentation with less bias.
- Validation: Comparing metrics and inspecting mean score values

### Results

#### Customer Segments Share %

customer_segments	
Hotel Discount Hunter	31.71
Frequent Flight Traveler	25.97
Flight Discount Hunter	19.03
Churn-risk Users	13.01
Frequent Hotel Traveller	8.08
Frequent Traveller with Cancellations	2.20

#### Targeted Perks by Segment

Segment	Reward Perk
Frequent Hotel Traveller	Free hotel meal
Frequent Flight Traveller	Free checked bags
Traveller with Cancellations	X No cancellation fees
Flight Discount Hunter	Exclusive flight discounts
Hotel Discount Hunter	Exclusive hotel discounts
Churn-Risk User	■ 1 night free hotel with flight

#### Considerations / Outlook

- Kmeans clustering was first approach -> additional models can be tested and validated
- Measuring cost/benefits to allocate resources for building a model in production
- Running A/B-Tests on one user group first to measure performance improvement before rolling out reward program
- Use test results to improve the model (iterative process)