

Customer segments	Features	Weight	Feature name	Level	Pseudocode	Dependencies	Order of operation	Perk	Note	Question	Draft	Quality check	Done
Business Traveller	20-60 Jahre	must	is_between_20_and_60	user_level	if age between 20-60 then	no	Feature_engineering_user_level	Lounge access, priority boarding and check in			ok	ok	ok
	1 seat	0.4	avg_seats_booked	user_level	avg(seats) over(user_id)	no	Feature_engineering_user_level		only not canceled trips		ok	ok	ok
	1 room	0.4	ratio_hotel_flight_ratio	user_level	sum(hotel_booked) / sum(flight_booked)	no	Feature_engineering_user_level		only not canceled trips		ok	ok	ok
	1-4 nights	0.2	avg_nights	user_level	avg(nights_cleaned) over(user_id)	nights_cleaned	Feature_engineering_user_level		only not canceled trips		ok	ok	ok
	during week trip	0.1	is_during_week_trip	session_level	departure weekday and return weekday and no overlap with weekend	no	Feature_engineering_session_level		only not canceled trips		ok	ok	ok
VIPs	total_trip_costs	0.8	total_trip_costs	user_level		no	Feature_engineering_user_level	like premium + business + special discounts					
	cancellation_rate (inverse)	0.2	cancellation_rate	user_level		no	Feature_engineering_user_level						
Premium	Premium booking rate	0.5					Feature_engineering_user_level						
			ratio_premium_hotels_flights_booked_to_all	user_level				lounge access, pick-up-limo-service	only not canceled trips	how to make a scoring with a boolean (is above 0.85 of price?) What alternatives are there?			
Young People on a budget	Low ratio of bookings with discount	0.5	ratio_trips_booked_with_out_discount_to_total	user_level									
	18-19 years old	0.25	is_below 20	User_level	if age below 20 then	no	Feature_engineering_user_level	free-meals, sesonal discounts during school breaks	only not canceled trips		OK	OK	OK
	1,2 seats	0.25	avg_seats_booked	User_level	if seats 1 or 2	no	Feature_engineering_user_level		only not canceled trips		OK	OK	OK
	cheap trips	0.25	cnt_flight_bookingCheap_ratio Cheap_flights_booked_to_all	User_level	avg_flight_price_per_km_of_user is < median_all_users (?)	cnt_flight_booking_cheap	stats_flight_hotel_prices aggregate_user_level feature_engineering_user_level		only not canceled trips				
		0.25	cnt_hotel_bookingCheap_ratio Cheap_hotels_booked_to_all	User_level	avg_hotel_price_per_room_per_night_user is < median_all_users (?)	cnt_hotel_booking_cheap	stats_flight_hotel_prices		only not canceled trips				
	discount booker	-	ratio_trips_booked_with_discount_to_total	User_level	share of discount booking of users total bookings	sum(discount_trips) / count(trips) over(user)	Feature_engineering_user_level		only not canceled trips		ok	ok	ok
	discount_trip	-	trips_booked_with_discount_not_canceled	Session_level	if discount_offered and trip is booked then 1 else 0	no	Feature_engineering_session_level		only not canceled trips		OK	OK	OK
Window Shopper	No booking OR booking + canceled	1		no booking	trips_booked_not_canceled = 0		User_Segmentation_level	1 night for free, or special discount for previously selected / checked locations and flights	all sessions		not required		
	Average clicks user	-	avg_clicks_per_session_per_user	user level	sum(clicks) filter(session=browsing) group by user / count(sessions) filter(session=browsing) user		Feature_engineering_user_level		all sessions		not used		
	Average clicks all users	-	avg_clicks_per_session_all_users	user level	sum(clicks) filter(session=browsing) over(all users) / count(sessions) filter(session=browsing) over(all users)		stats_all_users_level Feature_engineering_user_level		all sessions		not used		
	>085 percentile clicks all users	-	>085 percentile clicks all users				stats_all_users_level before feature_engineering_user_level		all sessions		not used		
Family on vacation	has children	0.4	has_children	user level				free bags, free meals, family priority boarding			already exists		ok
	25-50 years old	0.1	is_age_between_20 and 50	user level	case when age between 20 and 50		User_Segmentation_level				not required, check age		ok
	4+ seats	0.1	avg_sum_seats_not_canceled	user_level			Feature_engineering_user_level		only not canceled trips		created above		ok
	2+ rooms	0.1	avg_sum_rooms_not_canceled	user_level	sum(rooms) / sum(hotels_booked) filter(trip_is_not_canceled) group by user		Feature_engineering_user_level		only not canceled trips		ok	no check required	ok
	4+ bags	0.2	avg_sum_checked_bags_not_canceled	user_level	sum(hotels_booked) / sum(flights_booked) between 0.9 and 1.1		Feature_engineering_user_level		only not canceled trips		created above	no check required	ok
Groups	5+ seats	0.4	avg_seats_booked	user_level	sum(seats) / sum(flights_booked) filter(trip_is_not_canceled) group by user		Feature_engineering_user_level	Special group discounts	only not canceled trips		created above	no check required	ok
	2+ rooms	0.4	avg_rooms_booked	user_level	sum(rooms) / sum(hotels_booked) filter(trip_is_not_canceled) group by user		Feature_engineering_user_level		only not canceled trips		created above	no check required	ok
	5+ nights	0.2	avg_nights_booked	user_level			Feature_engineering_user_level						
Weekend-Tripper (couple travelling without kids)	1,2 seats	0.2	avg_seats_booked	user_level	sum(seats) / sum(flights_booked) filter(trip_is_not_canceled) group by user		Feature_engineering_user_level	romantic canddle light dinner, champaign on the room, discount for a suite upgrade	only not canceled trips		created above	no check required	ok
	1 room	0.2	avg_rooms_booked	user_level	sum(rooms) / sum(hotels_booked) filter(trip_is_not_canceled) group by user		Feature_engineering_user_level		only not canceled trips		created above	no check required	ok
	weekend_trip_ratio	0.6	week_end_trip_ratio	user_level	sum(is_weekend_trip) / count(trips)	is_weekend_trip	Feature_engineering_user_level		only not canceled trips		ok	ok	ok
			is_week_end_trip	session_level	departure friday or saturday) and 1-2 nights		feature_engineering_session_level		only not canceled trips		ok	ok	ok