

Detailed Summary of the "hotel_bookings" Data

General Information:

- Total Records: 119,390
- Columns: 18
- Timeframe: Data spans multiple years, starting from 2015.

Key Features:

1. Hotel Type: "Resort Hotel" or "City Hotel."
2. Cancellation Status (**is_canceled**):
 - **0**: Not Canceled
 - **1**: Canceled
3. Lead Time: Number of days between booking and arrival.
4. Arrival Details:
 - **arrival_date_year**: Year of arrival
 - **arrival_date_month**: Month of arrival
5. Stay Duration:
 - **stays_in_weekend_nights**: Weekend nights stayed
 - **stays_in_week_nights**: Weekday nights stayed
6. Guest Information:
 - **adults, children, babies**: Count of guests
 - **country**: Origin of guests
7. Market Segment: Source of booking (e.g., Online TA, Corporate, Direct).
8. Room Booking:
 - **reserved_room_type**: Initial room booked
 - **assigned_room_type**: Final room assigned
9. Reservation Status:
 - **reservation_status**: Final outcome (Check-Out, Canceled, No-Show)
 - **reservation_status_date**: Date of status update
10. Other Attributes:
 - **room_status**: Whether the assigned room was the desired one.
 - **guest_type**: Type of guest (e.g., Couples, Single)

Summary of the "Pivot" Sheet

This sheet appears to be a summarized pivot table of hotel bookings.

Key Metrics:

- Guest Type Breakdown:
 - Couples: 27,265 bookings (11,169 canceled)
 - Families: 6,243 bookings (2,493 canceled)
 - Singles: 7,179 bookings (2,083 canceled)

Cancellation Rate Analysis

From the **Pivot** sheet, the cancellation rates for different guest types are:

- **Couples: 41%** (11,169 out of 27,265)
- **Families: 40%** (2,493 out of 6,243)
- **Singles: 29%** (2,083 out of 7,179)

This suggests that couples and families tend to cancel more than single travelers.

Market Segment & Cancellation Trends

The **hotel_bookings** sheet has a **market_segment** column, which helps track where bookings come from:

- Online Travel Agents (OTAs)
- Direct bookings
- Corporate clients
- Groups

Typically, OTA bookings tend to have **higher cancellation rates**, while direct and corporate bookings are more stable.

Lead Time & Cancellation Correlation

- If lead time (number of days before check-in) is high, cancellation rates **tend to increase** because people book early but change plans.

- If bookings have short lead times (last-minute bookings), they are **less likely to cancel**.