

HOTEL BOOKING CANCELLATION PROJECT

BY: ZOHAIB HASSAN (THE ANALYST)



Problem Statement

Project Title: Hotel Booking Cancellation Analysis

Objective:

The objective of this project is to analyze hotel booking data to identify patterns and trends in reservations and cancellations over a period from 2014 to 2017. By utilizing various pivot tables and measures, the project aims to provide insights into customer behavior, seasonal trends, and the impact of different factors on booking cancellations.

Background:

Hotel booking cancellations pose significant challenges for the hospitality industry, leading to potential revenue loss and inventory management issues. Understanding the underlying reasons and patterns behind these cancellations can help hotel management implement strategies to reduce cancellation rates and optimize operations.

Key Problems Addressed:

1. **High Cancellation Rates:** Identifying the months and years with the highest cancellation rates to address peak periods of booking volatility.
2. **Seasonal Trends:** Understanding the impact of different seasons on booking and cancellation trends.
3. **Room Status Impact:** Assessing how room status (desired vs. undesired) influences cancellation rates.
4. **Hotel Type Analysis:** Comparing the cancellation rates between city hotels and resort hotels to identify specific issues related to each type of accommodation.
5. **Yearly Trends:** Analyzing year-over-year changes in reservations and cancellations to identify long-term trends and shifts in customer behavior.
6. **Guest Demographics:** Investigating the demographics of guests (total guests, adults, babies) to understand if specific guest profiles have higher cancellation tendencies.

Methodology:

- **Data Collection:** Gather historical booking data from the hotel's reservation system, including details on booking dates, cancellation status, room types, guest demographics, and hotel types.

- **Data Processing:** Use Excel pivot tables to organize and summarize the data, creating various measures to represent different aspects of the data.
- **Visualization:** Develop graphical representations (bar charts, pie charts, line graphs) to visualize the summarized data and highlight key insights.
- **Analysis:** Conduct a thorough analysis of the visualized data to identify patterns, trends, and anomalies in booking and cancellation behaviors.

Expected Outcomes:

1. **Identification of Peak Cancellation Periods:** Clear visualization of the months and years with the highest cancellation rates.
2. **Seasonal Influence Insights:** Understanding how different times of the year affect booking and cancellation rates.
3. **Room Status Effects:** Determination of the impact of room status on cancellation rates, highlighting any significant differences between desired and undesired bookings.
4. **Comparative Hotel Type Analysis:** Insights into how cancellation rates vary between city hotels and resort hotels.
5. **Trend Analysis:** Recognition of long-term trends in booking and cancellations, helping in forecasting future patterns.
6. **Guest Demographic Impact:** Analysis of guest demographics to identify if certain groups are more likely to cancel their bookings.

Reason for Creating This Project:

This project was created to provide hotel management with actionable insights into booking cancellations. By understanding the factors that contribute to cancellations, the hotel can develop targeted strategies to reduce these rates, optimize booking policies, and improve overall customer satisfaction. The analysis will also aid in better resource planning, marketing strategies, and financial forecasting, ultimately contributing to increased operational efficiency and profitability.

This project serves as a comprehensive tool for hotel managers to make data-driven decisions and enhance their approach to handling reservations and cancellations.