#### **Business Problem**

In recent years, City Hotel and Resort Hotel have seen high cancellation rates. Each hotel is now dealing with a number of issues as a result, including fewer revenues and less than ideal hotel room use. Consequently, lowering cancellation rates is both hotel's primary goal in order to increase their efficiency in generating revenue, and for us to offer through business advice to address this problem.

The analysis of hotel booking cancellations as well as other factors that have no bearing on their business and yearly revenue generation are the main focus of this report.

## **Assumptions**

- 1. No unusual occurrences between 2015 and 2017 will have a substantial impact on the data used.
- 2. The information is still current and can be used to analyze a hotel's possible plans in an efficient manner.
- 3. There are no unanticipated negatives to the hotel employing any advised techniques.
- 4. The hotels are not currently using any of the suggested solutions.
- 5. The biggest factor affecting the effectiveness of earning is booking cancellations.
- 6. Cancellations result in vacant rooms for the booked length of time.
- 7. Clients make hotel reservations the same year they make cancellations.

#### **Research Question**

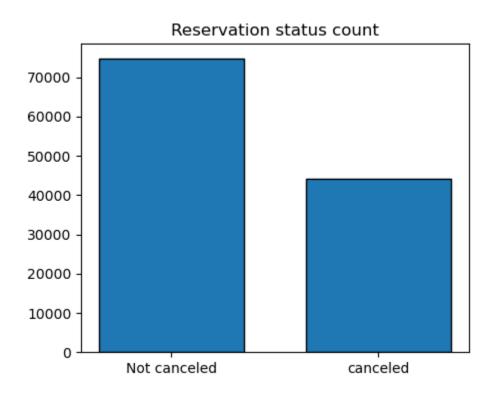
- 1. What are the variables that affect hotel reservation cancellations?
- 2. How can we make hotel reservations cancellations better?
- 3. How will hotels be assisted in making pricing and promotional decisions?

### **Hypothesis**

- 1. More cancellations occur when prices are higher.
- 2. When there is a longer waiting list, customers tend to cancel more frequently.
- 3. The majority of clients are coming from offline travel agents to make their reservations.

## **Analysis and Findings**

### 1.Reservation Status



The accompanying bar graph shows the percentage of reservations that are canceled and those that are not. It is obvious that there are still a significant number of reservations that have not been canceled. There are still 37% of clients who canceled their reservations, which has a significant impact on the hotel's earnings.

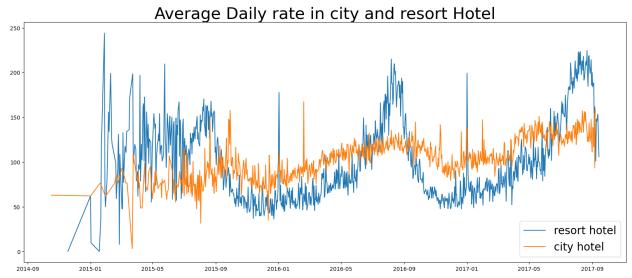
## 2. Reservation status in different Hotels

From the below bar graph, in comparison to resort hotels, city hotels have more bookings. It's possible that the resort hotels are more expensive than those in cities.

# Reservation status in different hotels



# 3. Average Daily Rate (ADR) in City and Resort Hotels

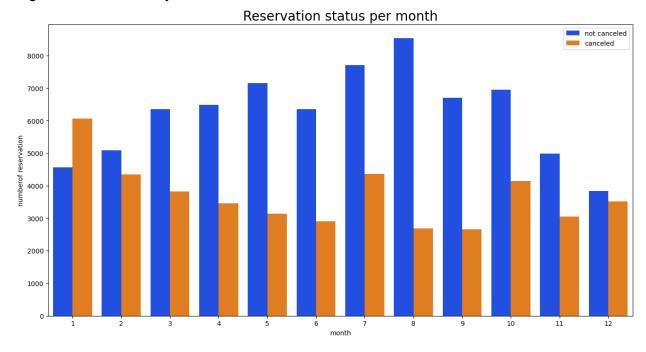


The above line graph shows that, on certain days, the average daily rate for city hotel is less than that of a resort hotel, and on other days, it is even less. It goes without saying that weekends and holidays may see a rise in resort hotel rates.

## 4 Reservation Status per month

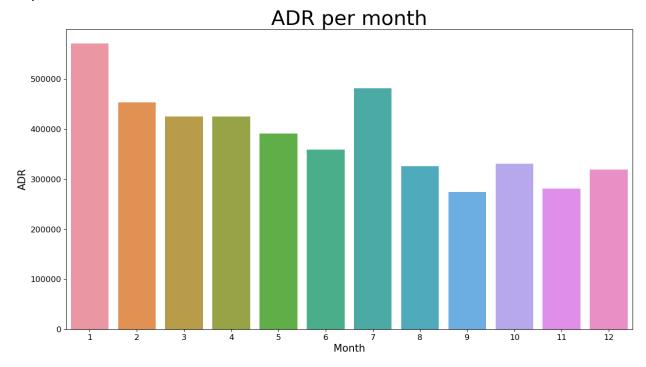
We have developed a grouped bar graph to analyze the months with the highest and lowest reservation levels according to reservation status. As can be seen, both the number of

confirmed reservations and the number of canceled reservations are largest in the month of August whereas January is the month with the most canceled reservations.



# 5. Average Daily Rate Per month

This bar chart shows that cancellations are most common when prices are the highest and are least common when they are lowest. Therefore, the cost of the accommodations is solely responsible for the cancellation rate.



# 6.Top 10 countries with reservation canceled

The below pie chart shows that the most frequent cancellation rate was from Portugal

Top 10 countries with reservation canceled

