

## **Booking Analysis (Hotel)**

### **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 hotels' primary goal in order to increase their efficiency in generating revenue and for us to offer thorough 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 topics of this report.

### **Assumptions:**

- No unusual occurrences in the dataset used will have a substantial impact on the analysis.
- The hotels are not currently using any of the suggested solutions.
- The biggest factor affecting the effectiveness of earning income is booking cancellations.
- Cancellations result in vacant rooms for the booked length of time.
- Clients make hotel reservations the same year they make cancellations.

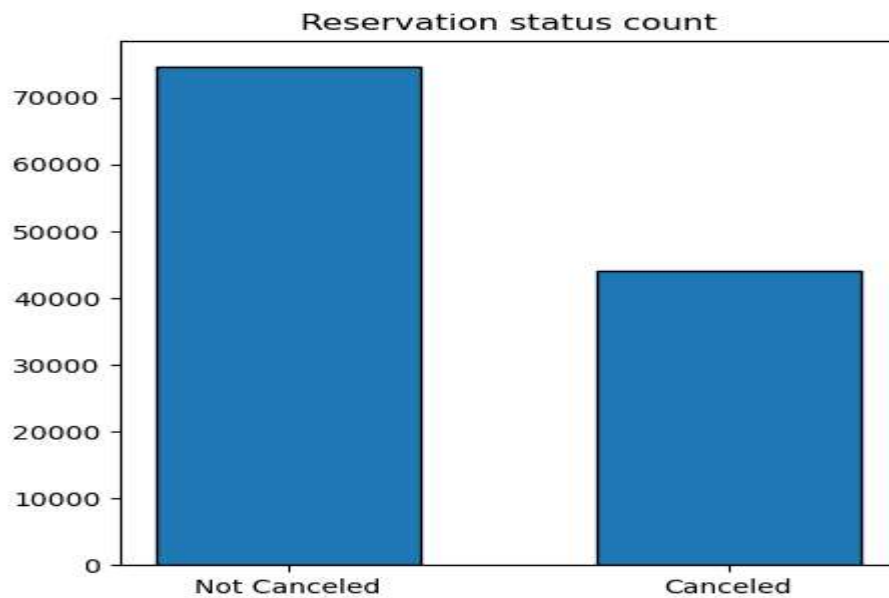
### **Research Question:**

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

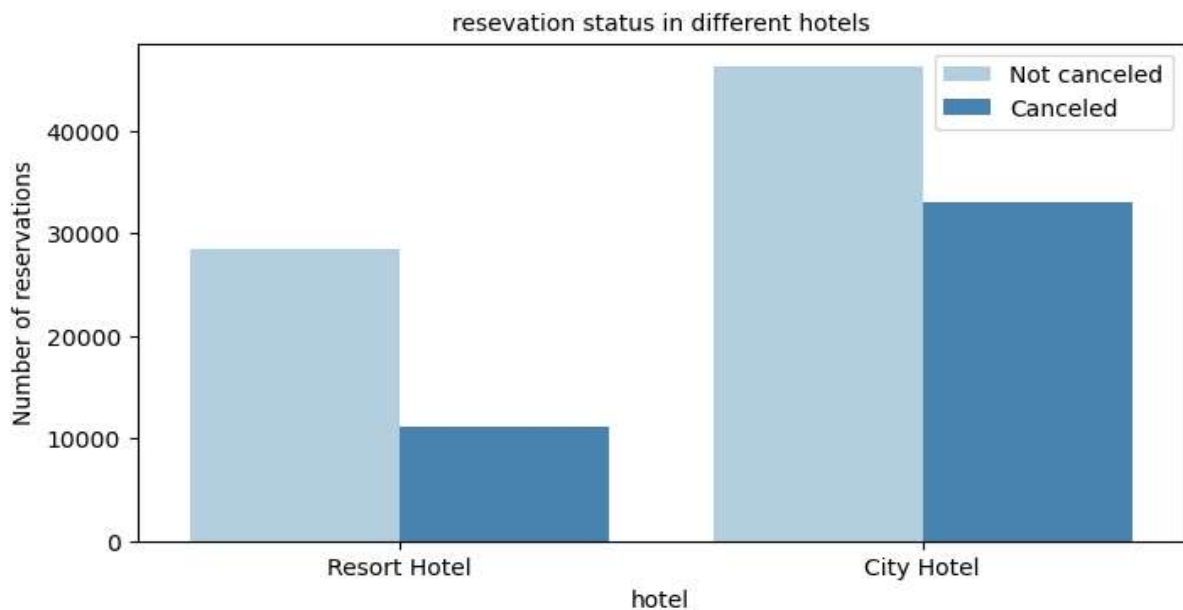
### **Hypothesis:**

- More cancellation occurs when price is higher.
- When they are wait for long period of time customers tend to cancel frequently.
- The majority of clients are coming from offline travel agents to make their reservation.

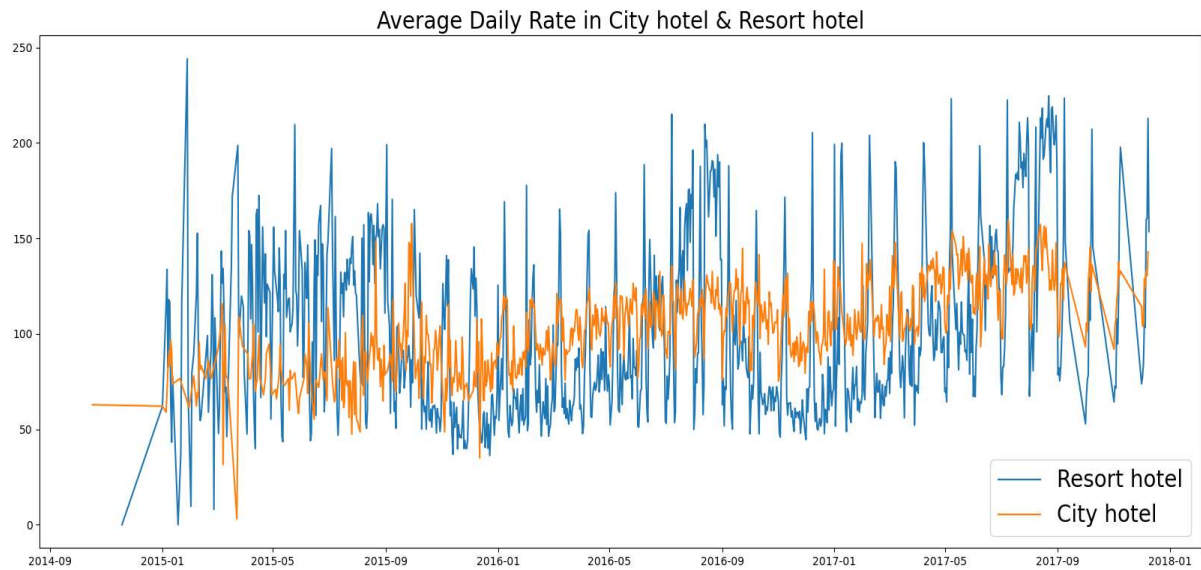
## Analysis & Findings:



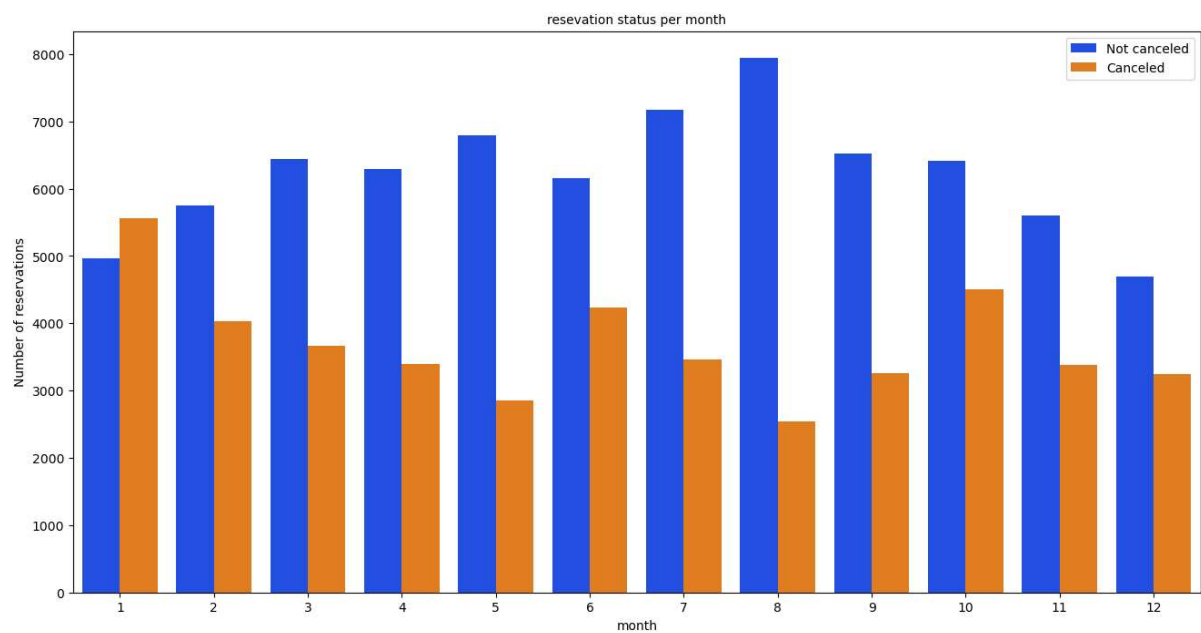
The bar graph provided displays the proportion of reservations that have been canceled and those that remain intact. It is evident that a substantial number of reservations have not been canceled. Specifically, 37% of clients have decided to cancel their reservations, thereby exerting a notable influence on the earnings of hotels.



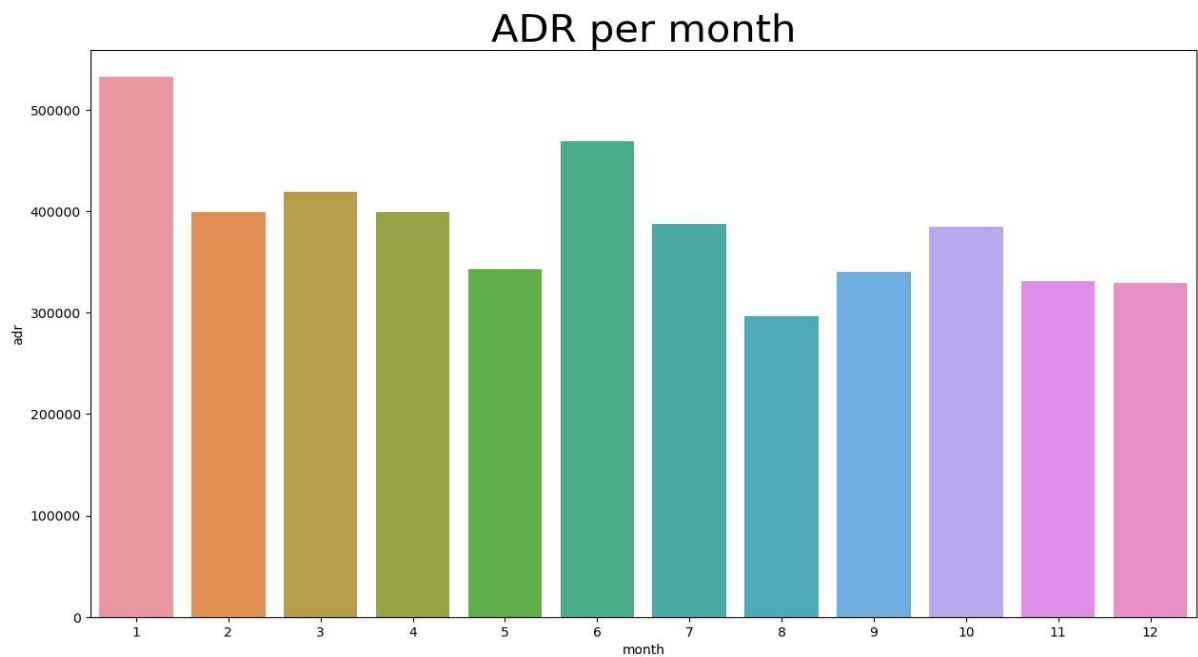
In comparison to resort hotels, city hotels have more bookings. It's possible that resort hotels are more expensive than those in cities.



The line graph depicted above indicates that there are specific days where the average daily rate for a city hotel is lower than that of a resort hotel, and on some occasions, it is even lower. It is evident that weekends and holidays could potentially witness an increase in the rates of resort hotels..



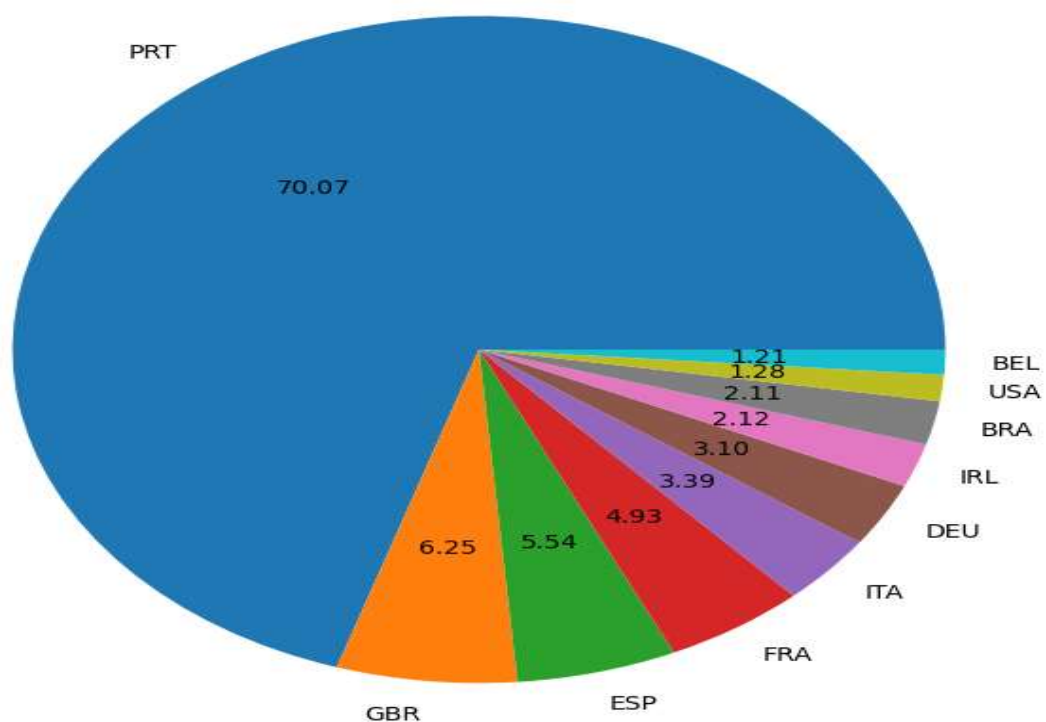
The grouped bar graph has been created to analyze the months characterized by the highest and lowest levels of reservations based on their status. It is evident that August exhibits the highest number of confirmed reservations, while January stands out as the month with the highest count of canceled reservations.



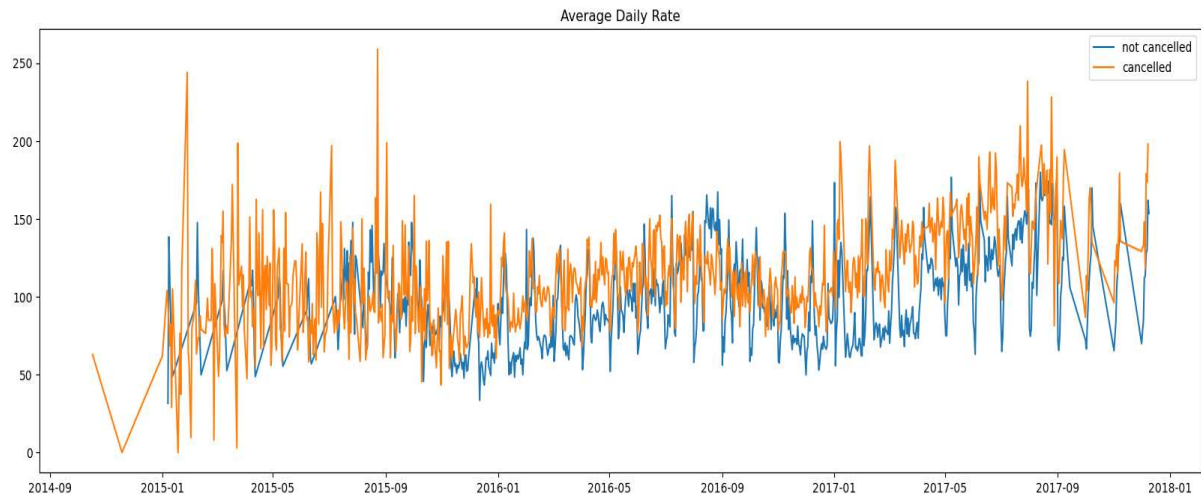
The presented bar graph illustrates that cancellations tend to occur more frequently when prices are higher and are less prevalent when prices are lower. This suggests a strong correlation between the cost of accommodation and the occurrence of cancellations, indicating that pricing plays a significant role in the decision to cancel reservations.

Now, let's see which country has the highest reservation which are canceled. The top country is Portugal with the highest number of cancellations.

**Top 10 countries based on cancelled reservations**



Let's check the area from where guests are visiting the hotels and making reservations. Around 46% of the clients come from online travel agencies, whereas 27% come from groups. Only 4% of clients book hotels directly by visiting them and making reservations.



As observed from the graph, reservations are canceled when the average daily rate is higher. This provides clear evidence supporting the aforementioned analysis, which indicates that a higher price directly correlates with an increased rate of cancellations.

### **Suggestions:**

There is a direct correlation between the increase in cancellation rates and rising prices. To mitigate reservation cancellations, hotels can focus on refining their pricing strategies, such as lowering rates for specific hotels based on their locations. Additionally, offering discounts to customers could be an effective approach to discourage cancellations and encourage bookings.

Considering that the ratio of cancellations to non-cancellations is higher for resort hotels compared to city hotels, it is advisable for the hotels to offer reasonable discounts on room prices during weekends and holidays. This approach can help mitigate cancellations and attract more bookings for resort hotels.

In the month of January, hotels can start campaigns or marketing with a reasonable amount to increase their revenue as the cancellation is the highest in this month.

To decrease the rate of cancellations, hotels can prioritize enhancing the quality of their establishments and services, particularly in Portugal. By focusing on improving various aspects of their hotels, such as facilities, amenities, and customer service, they can create a more compelling and satisfying experience for guests, thereby reducing the likelihood of cancellations.