#### **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 motive of this report.



## **Assumptions**

- 1. The information is still current and can be used to analyze a hotel's possible plans in an efficient manner.
- 2. The hotels are not currently using any of the suggested solutions.
- 3. The biggest factor that affecting the earnings is booking cancellations.
- 4. Clients make hotel reservations the same year they make cancellations.

### **Research Question**

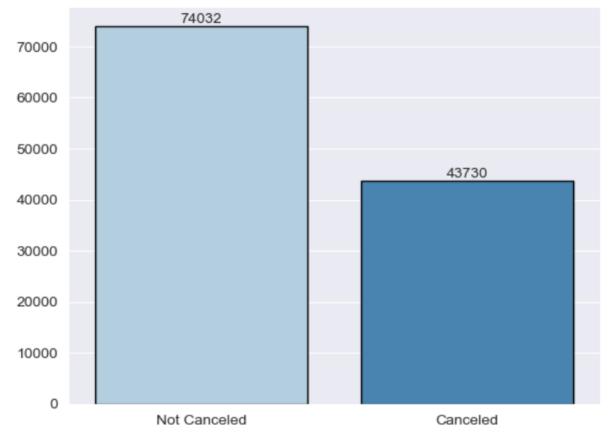
- 1. What are the variables that affect hotel reservation cancellation?
- 2. How can we make hotel reservation cancellations better?
- 3. How will hotels be assisted in making pricing and promotional decisions?

### **Hypothesis**

- 1. More cancellations occur when prices are higher.
- 2. The majority of clients are coming from offline travel agents to make their reservations.

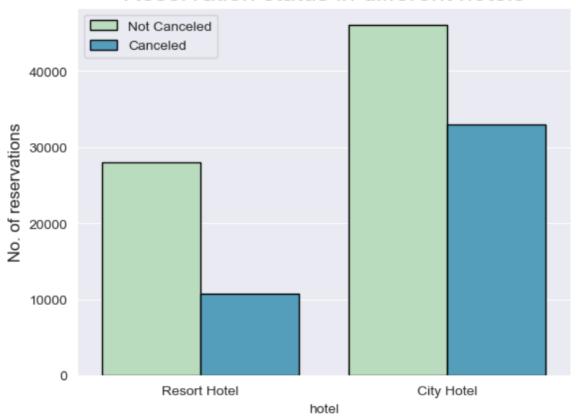
### **Analysis and Findings**

#### Reservation status count

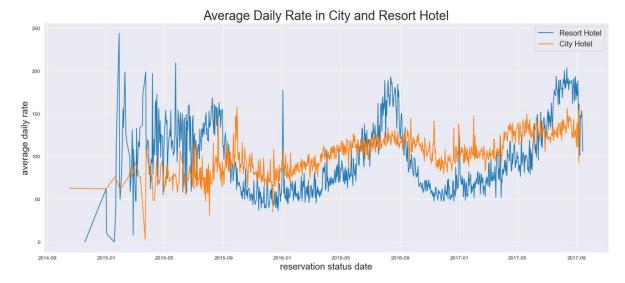


The above bar graph shows the number of reservations that are canceled and those that are not. There is significant number of reservations that have not been canceled but still 37% of clients canceled their reservation, which has a significant impact on the hotel's earnings.

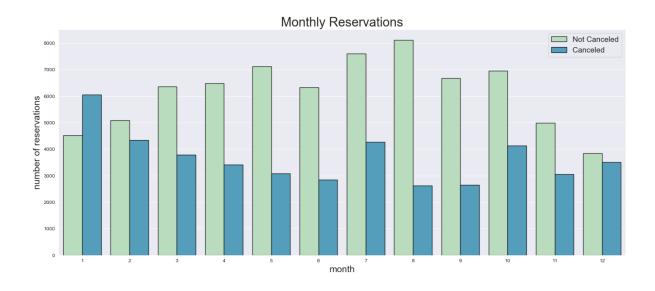
#### Reservation status in different hotels



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



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

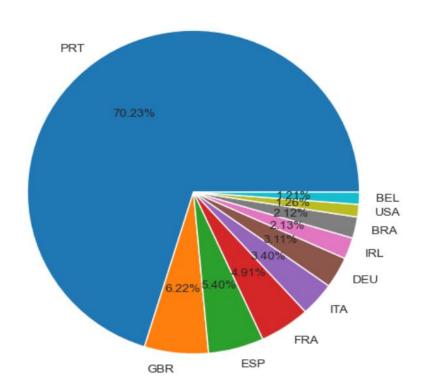


We have developed the grouped bar graph to analyze the highest and lowest reservation levels according to reservation status. As can be seen, the number of confirmed reservations is highest and number of canceled reservations is lowest in the month of August. Whereas January is the month with the most canceled reservations and one of the least confirmed reservations.



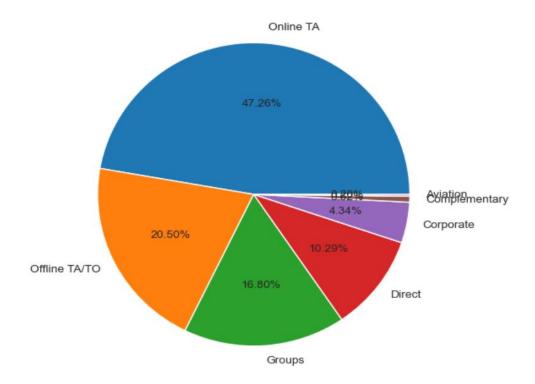
This bar graph demonstrates that which month has highest price and cancellations are most common when prices are highest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

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

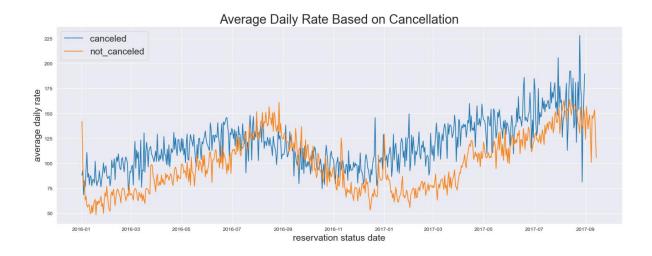


Top 10 Country with reservation Canceled

Let's check the area from where guests are visiting the hotels and making reservations. Is it coming from Direct or Groups, Online or Offline Travel Agents?



The above pie chart shows that around 47% of the clients come from online travel agencies, whereas 20% come from Offline and only 10% of clients book hotels directly by visiting them and making reservations.



As seen in the graph, reservations are canceled when the average daily rate is higher than when it is not canceled. It clearly proves all the above analysis, that the higher price leads to highest cancellation.

# **Suggestions**

- 1. Cancellation rates rise as the price does. In order to prevent cancellation of reservations, hotels could work on their pricing strategies and try to lower the rates for specific hotels based on locations. They can also provide some discounts to consumers.
- 2. As the ration of the cancellation and not cancellation of the resort hotels is higher in than city hotels. So, the hotels should provide a reasonable discount on the room prices on weekends and holidays.
- 3. In the month of January, hotels can start campaigns or marketing with a reasonable amount to increase their revenue as the cancellation is highest in this month.
- 4. They can also increase the quality of their hotels and their services mainly in Portugal to reduce the cancellation rate.