# **Report on the Analysis of Hotel Booking**

#### **Research Question**

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

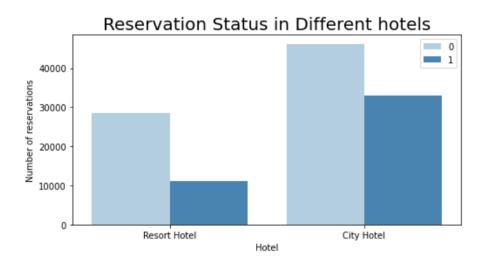
# **Hypothesis**

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

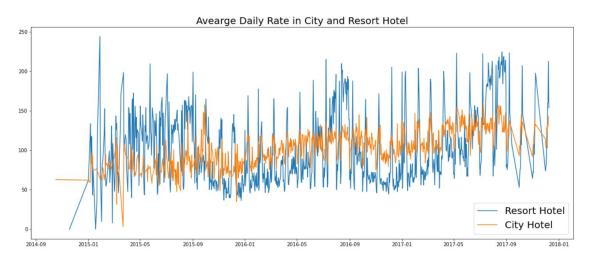
# **Analysis Findings**



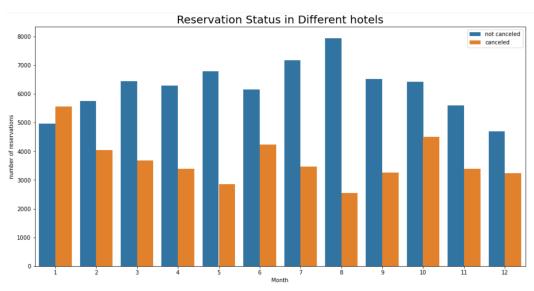
The accompanying bar graph shows the percentage of reservations that are cancelled and those of are not. It is obvious that there are still a significant number of reservations that have not been cancelled. There are still 37% of clients who cancelled their reservations, which has a significant impact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



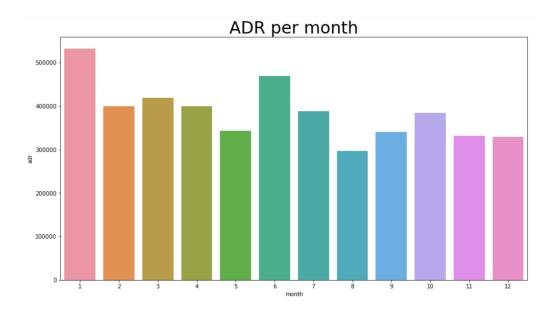
In comparison to hotels, city hotels have more bookings. It's possible that the resort hotes are more expensive than those of cities.



The line graph above shows that, on certain days, the average daily rate for a city hotel is less than that of the 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.

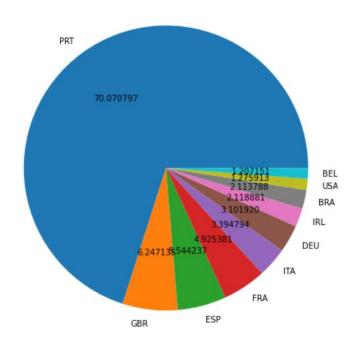


We have developed the grouped bar chart to analyse the months with the highest and lowest reservation levels according to reservation status. As can be seen, both the number of confirmed reservations and the number of cancelled reservations are the largest in the month of August. Whereas January is the month with the most cancelled reservations.



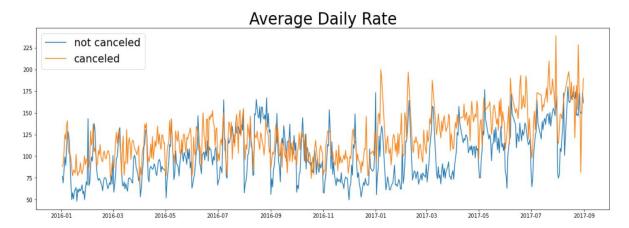
This bar graph illustrates that cancellations are most common when prices are greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

Now, let's move on to the country-wise list and see which country has the highest reservation cancelled. The top country is Portugal with the highest number of cancellations.



Top 10 countries with reservation canceled

Lets check the area from which guests are visiting the hotels and making reservations. It is coming from Direct or Group, Online, or Offline Travel Agents? Around 46% of the clients come from online travel agencies, whereas, 27% come from groups. Only 4% of the clients book hotels directly by visiting them and making reservations.



As seen in the graph, reservations are cancelled when the average daily rates are higher than when it is not cancelled. It clearly proves all the above analysis, that higher prices lead to higher cancellations.

# **Suggestions**

- 1. Cancellation rates rise as the prices do. In order to prevent cancellations of reservations, hotels could work on their pricing strategies and try to lower the prices for specific hotels based on the locations. They can also provide some discounts to the customers.
- 2. As the ratio of cancellation and no cancellation of the resort hotel is higher in the resort hotel than in city hotels. So, the hotels should provide reasonable discounts on room prices on weekdays or on holidays.
- 3. In the month of January, hotels can start campaigns or marketing with a reasonable amount to increase their revenue as cancellations are the 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.