# **Data Analysis Report**

**Hotel Booking Data** 

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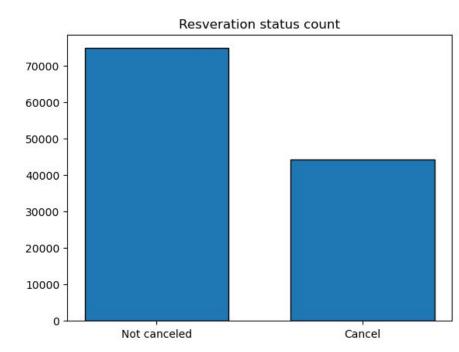
#### Research Question

- 1. What are the variables that affect hotel reservation cancellations?
- 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. Customers tend to cancel more frequently When there is a longer waiting list.
- 3. Most clients come from offline travel agents to make their reservations.

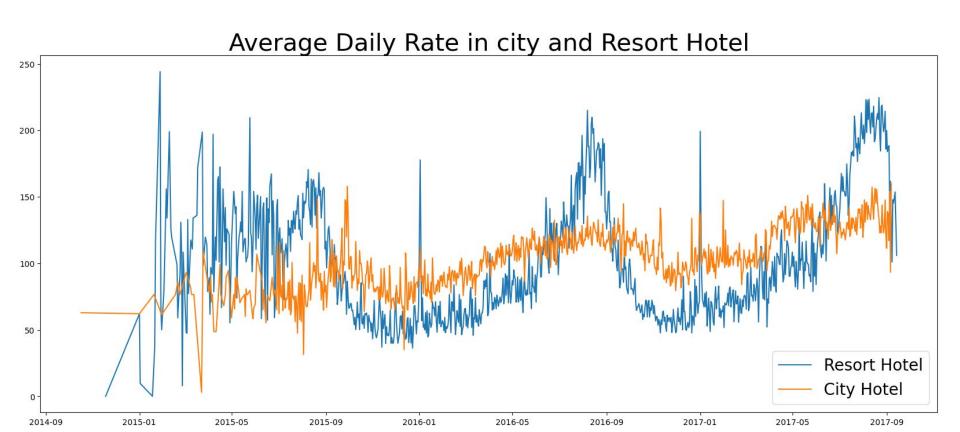
## **Analysis and Findings**



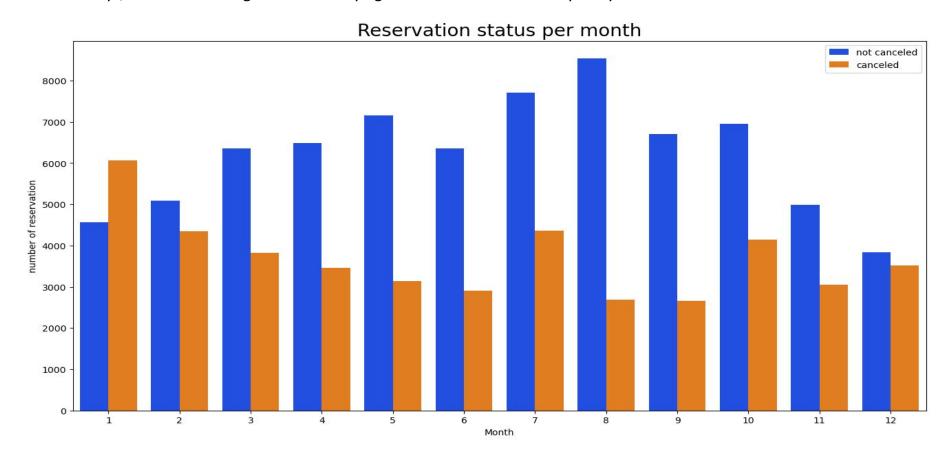
The accompanying bar graph shows the percentage of reservations that are canceled land those that are not. There are still a significant number of reservations that have not been canceled. There are still 37% of clients who canceled their reservations, which has a significant impact on the hotels' earnings.



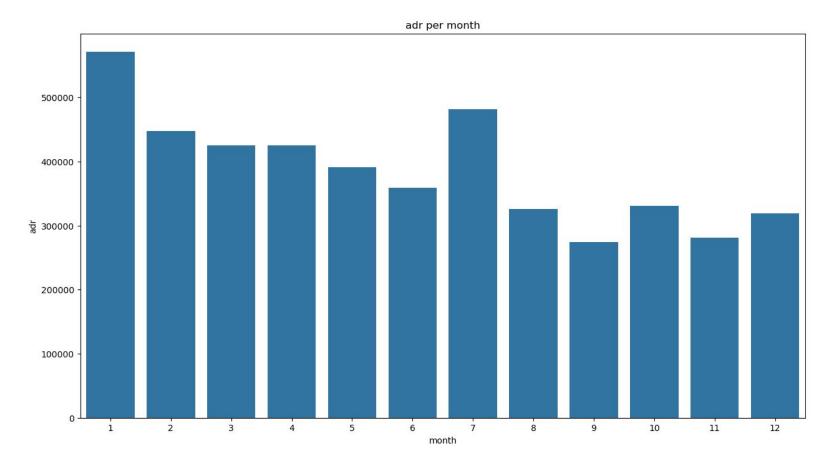
In comparison to resort hotels, city hotels have more bookings. It's possible that the resort hotels are more expensive than those in cities.



The line graph above shows that, on certain days, the average daily rate for a 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.



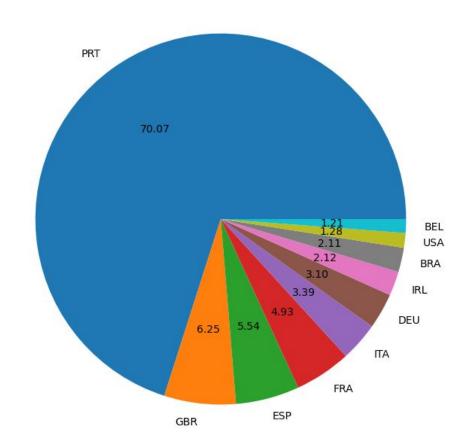
We have developed the grouped bar graph to analyze the months with the highest and lowest reservation levels according to reservation status. As can be seen, both the number of confirmed reservations and the number of canceled reservations are the largest in August. whereas January is the month with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



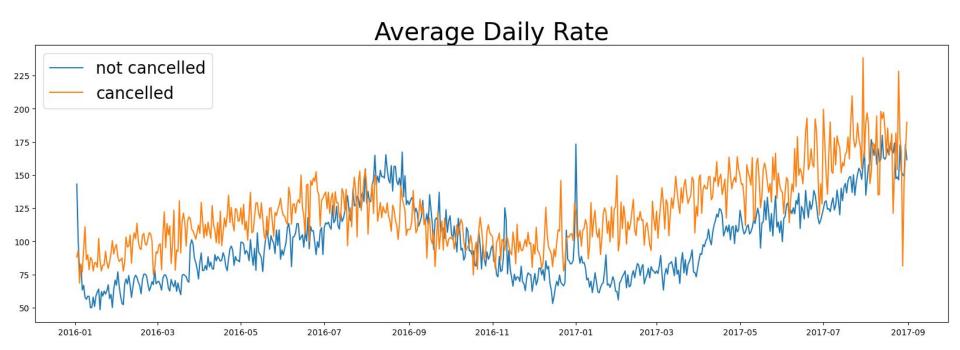
This bar graph demonstrates that cancellations are most common when prices are greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

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

top 10 countries 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? 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.



## **Suggestions**

- 1. Cancellation rates rise as the price does. To prevent cancellations 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 the consumers.
- 2. As the ratio of cancellations and cancellations of the resort hotel is higher in the resort hotel than in the city hotels. So the hotels should provide a reasonable discount on the room prices on weekends or on holidays.
- 3. In January, hotels can start campaigns or marketing with a reasonable amount to increase their revenue as the cancellations is 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.