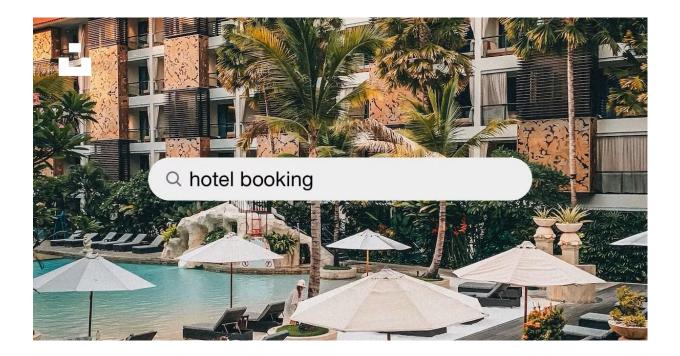
Business Problem

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.



Research Questions

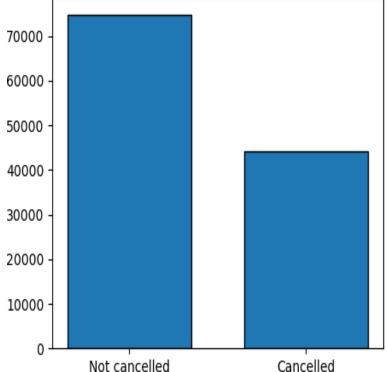
- 1. What are the variables that affect hotel reservation cancellations?
- 2. How can we make hotel reservations cancellations better?
- 3. How will hotels be assisted in making pricing and promotional decisions?

Hypothesis

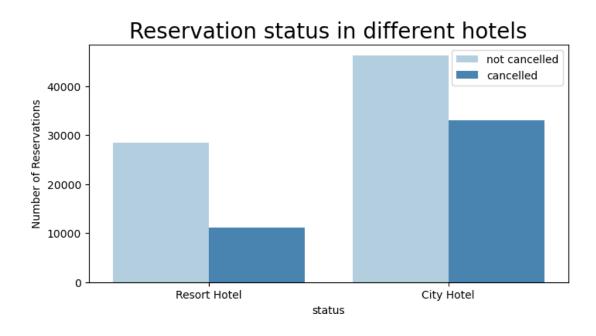
- 1. More cancellations occur when prices are higher.
- 2. When there is a longer waiting list, customers tend to cancel more frequently.
- 3. The majority of clients are coming from offline travel agents to make their reservations.

Analysis and Findings

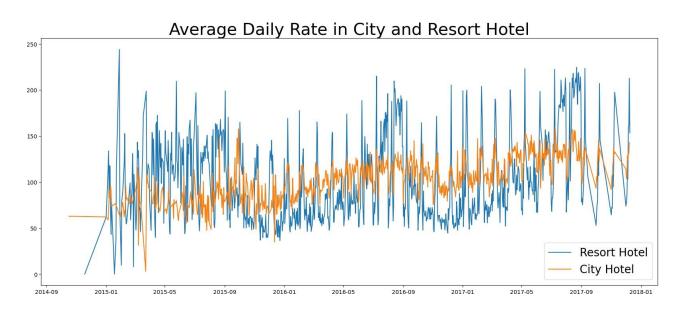




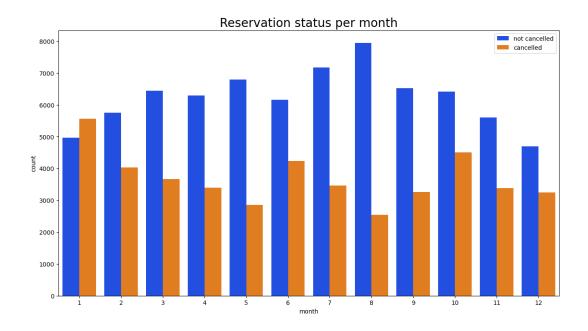
The accompanying bar graph shows the percentage of reservations that are canceled and those that are not. It is obvious that there are still a significant number of reservations that have not been canceled. There are still **37%** of clients who canceled their reservation, which has a significant impact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



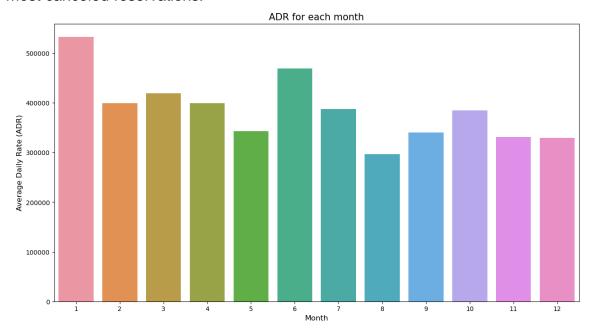
In comparison to resort hotels, city hotels have more bookings. It's possible that resort hotels are more expensive than those in cities.



The line graph 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.

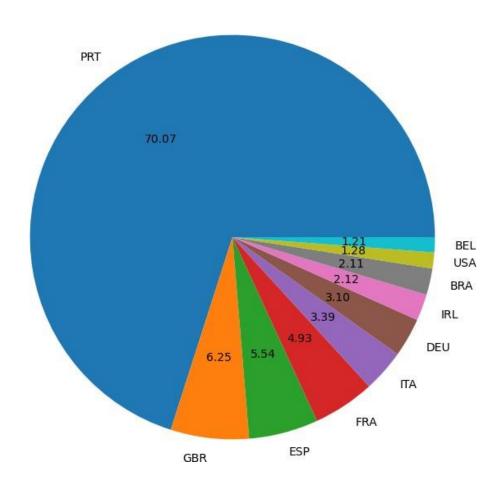


We have developed the grouped bar graph to analyze the months with the highest and lowest reservations according to reservation status. As can be seen, both the number of **confirmed reservations** and the number of canceled reservations are **highest** and **lowest** respectively in the month of **August.**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



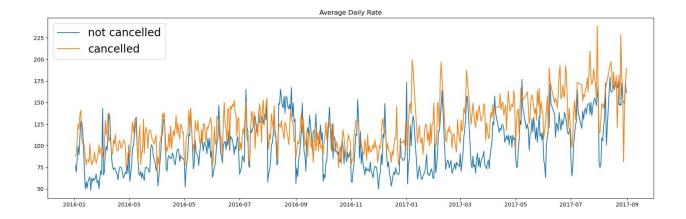
This (Average Daily Rate for each month) bar graph demonstrates that cancellations are most common when prices are highest and are least common when they are lowest. Month of **August** is a good example of that. Therefore, the cost of the accommodation is solely responsible for the cancellation.

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



Top 10 countries with reservation cancelled

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.



As seen in the graph, reservations are canceled when the average daily rate is higher than when it is not canceled. It clearly proves from above mentioned insights, that higher prices leads to higher cancellation rate.

Suggestions

- 1. Cancellation rates tend to increase as the price increases. In order to prevent cancellations of reservations, hotels shall work on their pricing strategies and try to lower the rates for specific hotels based on locations.
- As City hotels in comparison with Resort hotels have more bookings. It's possible that resort hotels are more expensive than those in cities, hence hotels should work on how can they reduce the prices of Resort hotels or maybe provide discounts on certain days.
- 3. 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.
- 4. As the number of confirmed reservations and the number of canceled reservations are highest and lowest respectively in the month of August, hotels shall figure out what they did right in that particular month hence by doing the same they can maximize on their total earnings in the month of August.
- 5. Along with more number of reservations most number of cancelations are also from City hotels, hence hotels shall focus on upgrading the quality of rooms, facilities and services provided in all hotels especially in Portugal to reduce the huge cancellation rate of 70%.