Hotel Booking Analysis On Kaggle Dataset

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Buisness 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 ideal hotel room use. Consequently, lowering cancellation rates is both hotels primary goal in order to increase their efficency in generating revenue, and for us to offer thorough buisness advice to address this problem. The analysis of hotel booking cancellations as well as other factors that have no bearing on their buisness and yearly revenue generation are the main topics of this project

Research Question

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?

Dataset link --

https://www.kaggle.com/datasets/mojtaba142/hotel-booking

Context:-

This dataset contains 119390 observations for a City Hotel and a Resort Hotel. Each observation represents a hotel booking between the 1st of July 2015 and 31st of August 2017, including booking that effectively arrived and booking that were canceled.

Analysis and Findings


Reservation status count
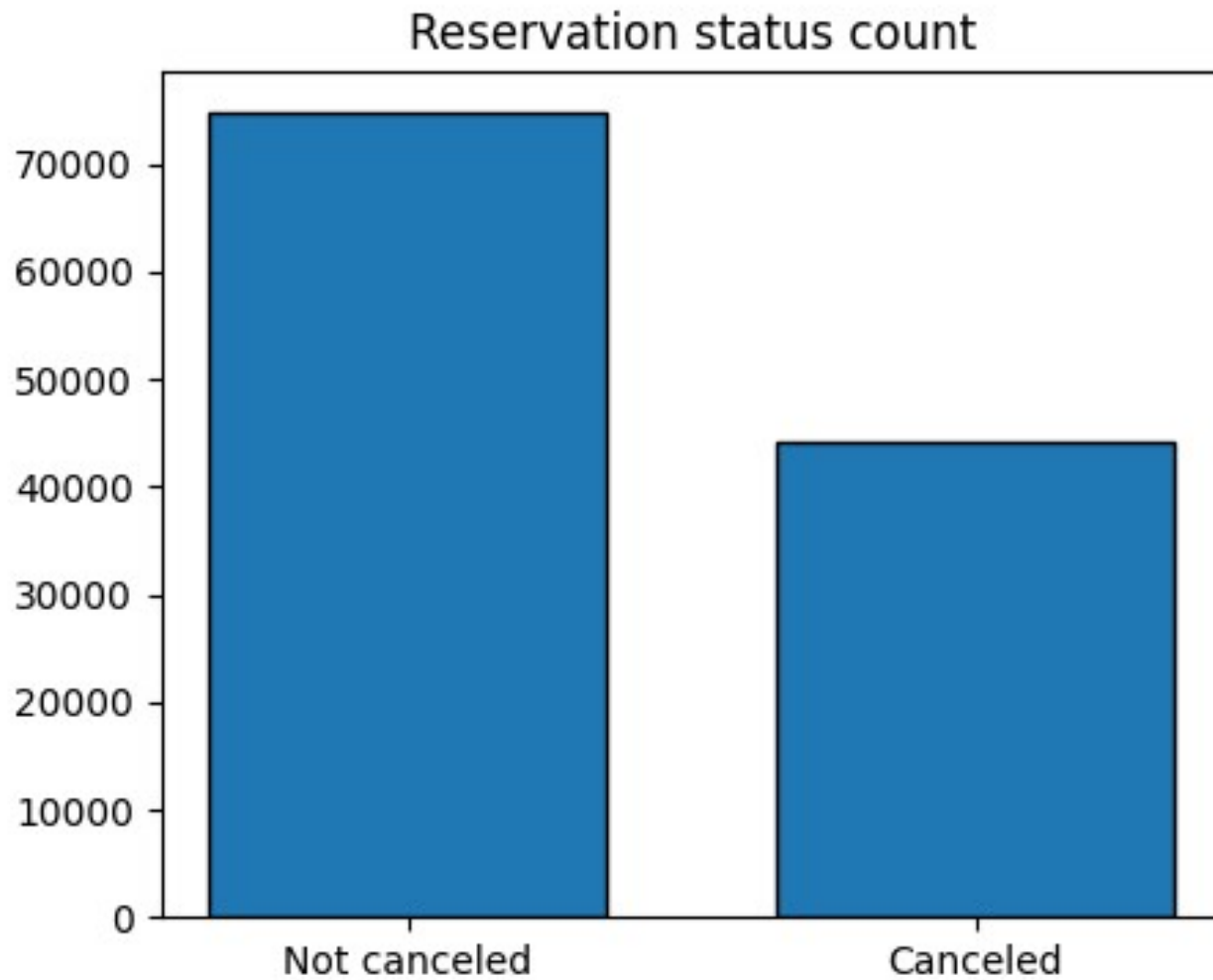
1. The accompanying bar graph shows the percentage of reservations that are cancelled and those that are not. It is obvious that there are still a significant number of reservations that have not been canceled. There are still 37% of clients who cancelled their reservation, which has a significant impact on the hostel'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 that those in cities.

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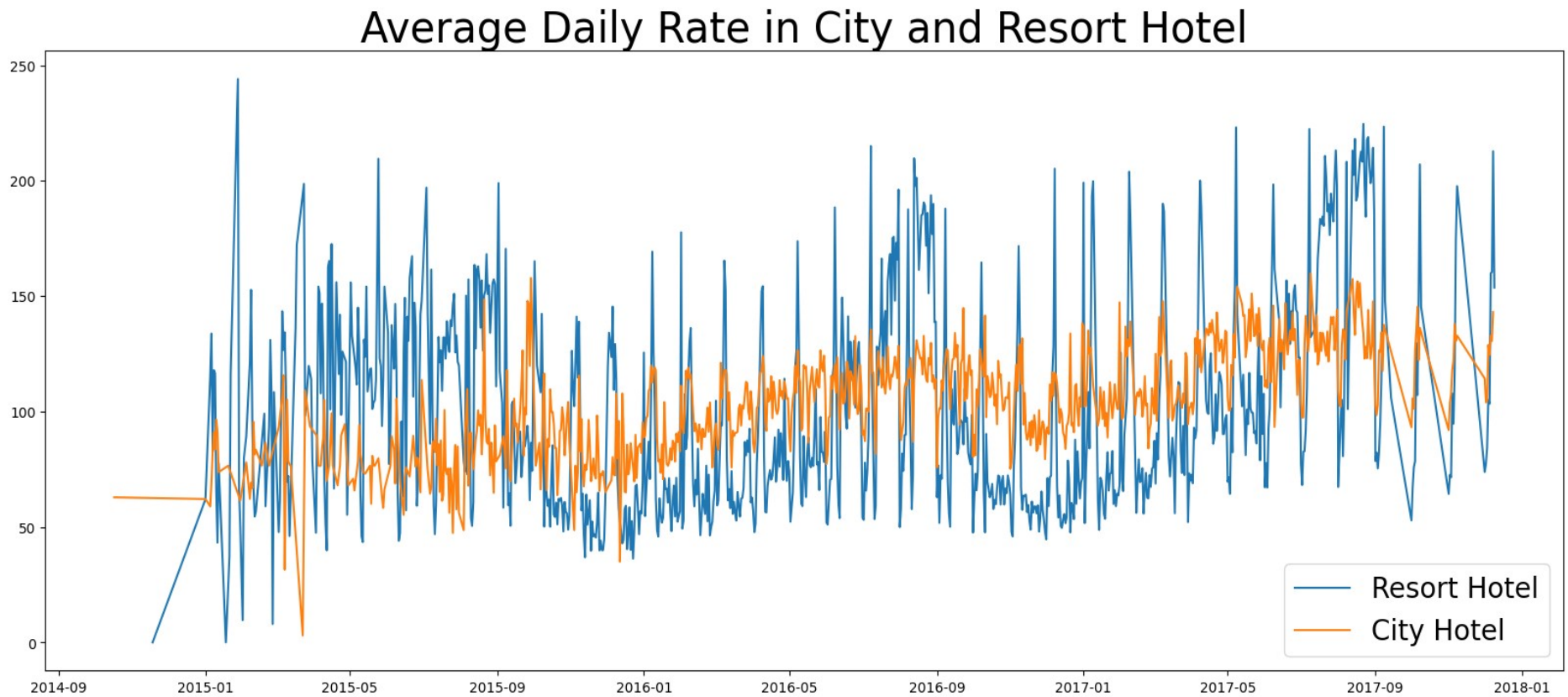
The line graph above shows that, on certain days, the average daily rate for a city hotel is less than that of a resort hotel. And on other days, it is even less . It goes without saying that weekends and holidays may see a rise in resort hotels rates.


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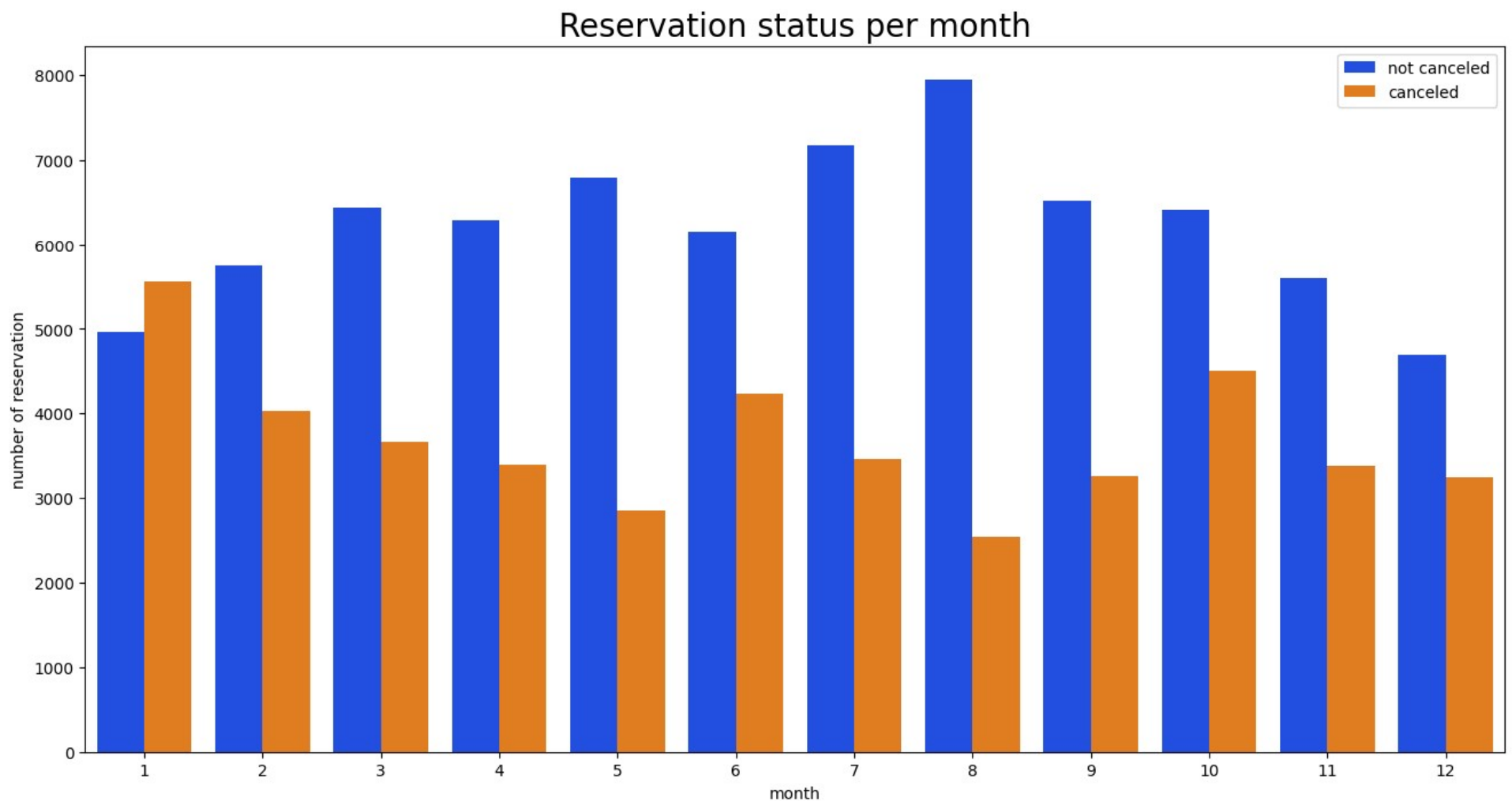
The bar graph demonstrates that cancellations are most common when prices are greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

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
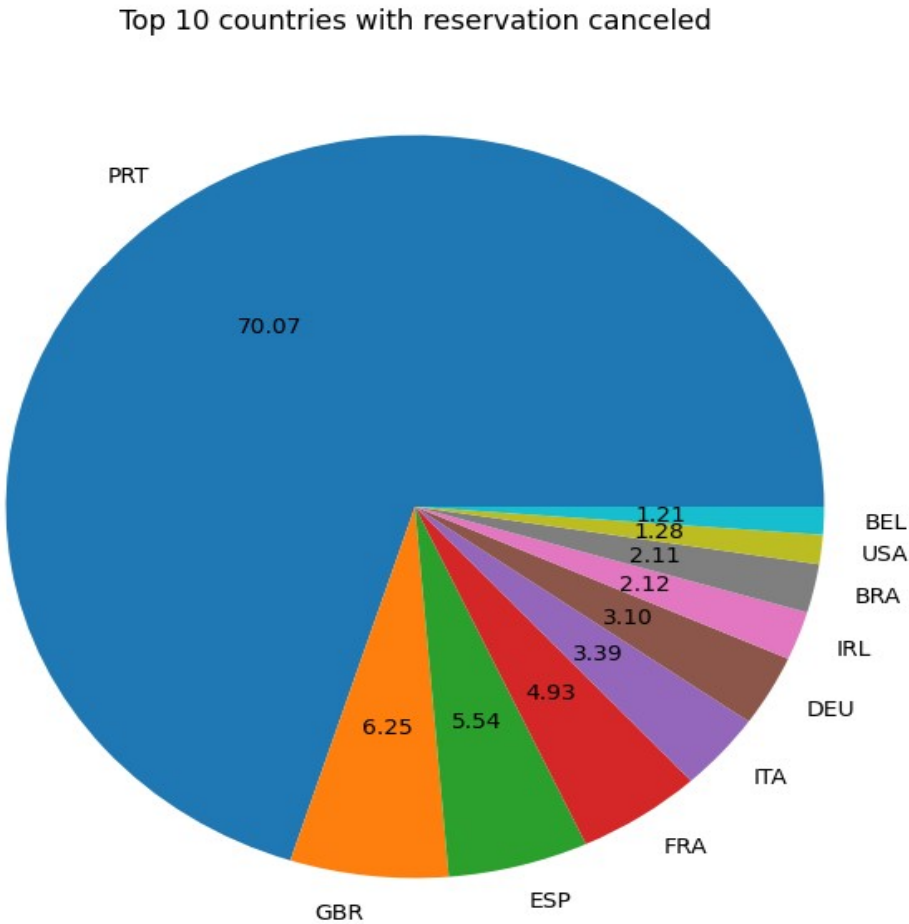
Let's check the area from where guests are visiting the hotels and making reservations. Is it coming from Direct or Groups , Online or Offline Travel Agents? Around 46% of the clients come from online travel agencies, whereas 27% come from groups. Only 4% of clients book hotels directly by visiting them and making reservations.

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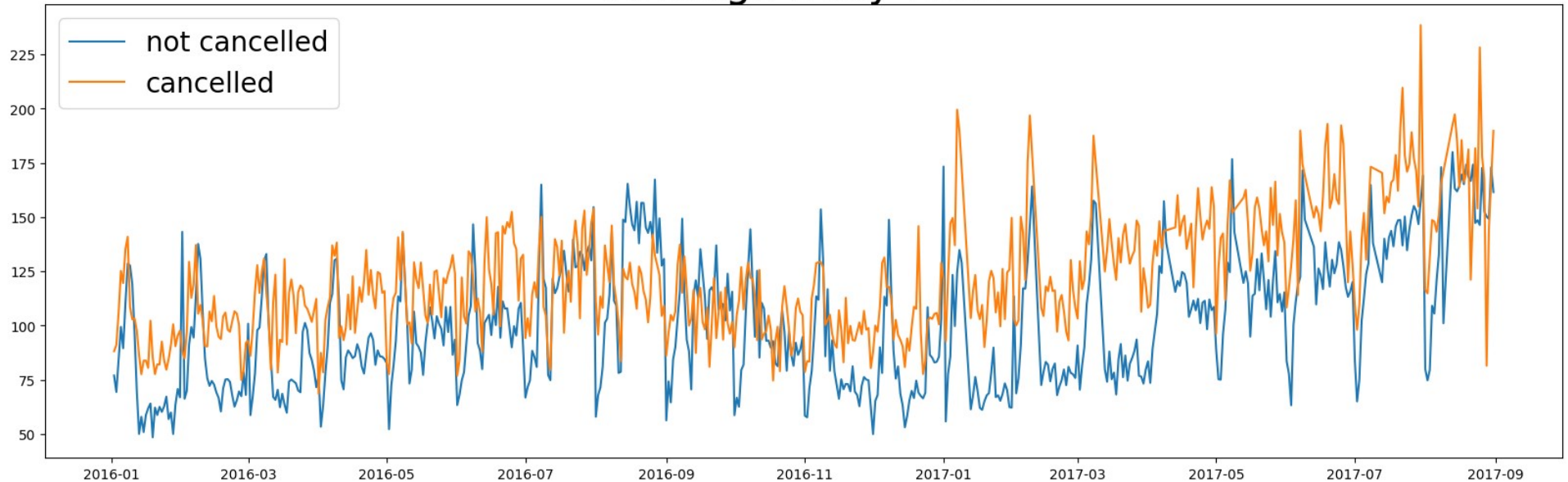
As seen in the graph, reservations are cancelled when the average daily rate is higher than when it is not cancelled . It clearly proves all the above analysis , that the higher price leads to higher cancellation.

Suggestions:-

1.Cancellation rates rises as the prices does. In order to prevent cancellation of reservation,hotels 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 the cancellation and not cancellation of the resort hotel is higher in the resort hotel than the city hotels. So the hotels should provide a reasonable discount on the rooom prices on weekends or on holidays.

3.In the month of January , hotels can start campaigns or marketing with a reasonable amount to increase their revenues as the cancellation 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.