

Data Analyst Portfolio Project

Hotel Booking

Business Problem

In recent years, City Hotels and Resort Hotels 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 hotel's goal in order to increase their efficiency in generating revenue, and for us to offer through business advice to address this problem.

The analysis of hotel booking cancellation as well as other factors that have no bearing on their business and yearly revenue generation are the main topics of this report.

Assumptions

- No unusual occurrences between 2015 and 2017 will have a substantial impact on the data used.
- The information is still current and can be used to analyze a hotel's possible plans in an efficient manner.
- There are no unanticipated negatives to the hotel employing any advise technique.
- The hotels are not currently using any of the suggested solutions.
- The biggest factor affecting the effectiveness of earning is the booking cancellations.
- Cancellations result in vacant rooms for the booked length of time.
- Clients make hotel reservations the same year they make cancellation.

Research Questions

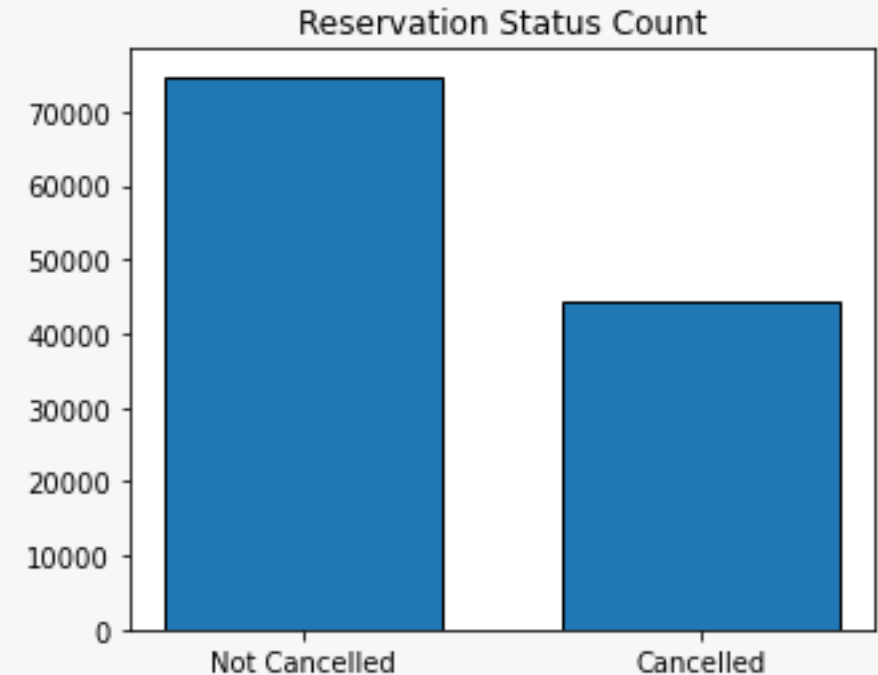
1. What are the variables affecting the reservation cancellation?
2. How can we make hotel reservation cancellation better?
3. How will hotel's be assisted in making pricing and promotional decisions?

Hypothesis

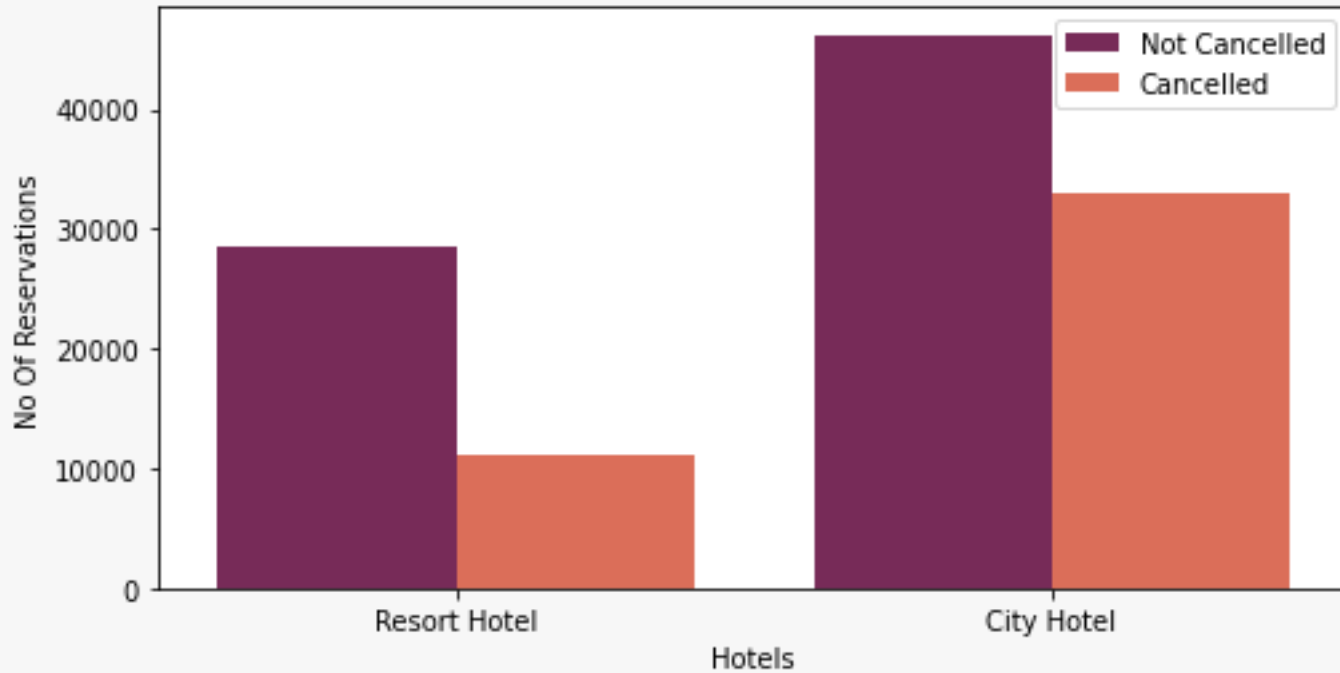
1. More cancellation occur when prices are higher.
2. When there is a longer waiting list, customers tends to cancel the reservation frequently.
3. The majority of clients coming from offline travel agents to make their reservations.

Findings and Analysis

The 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 cancelled. There are still 37% of clients who cancelled their reservations, which has a significant impact on the hotel's earnings.

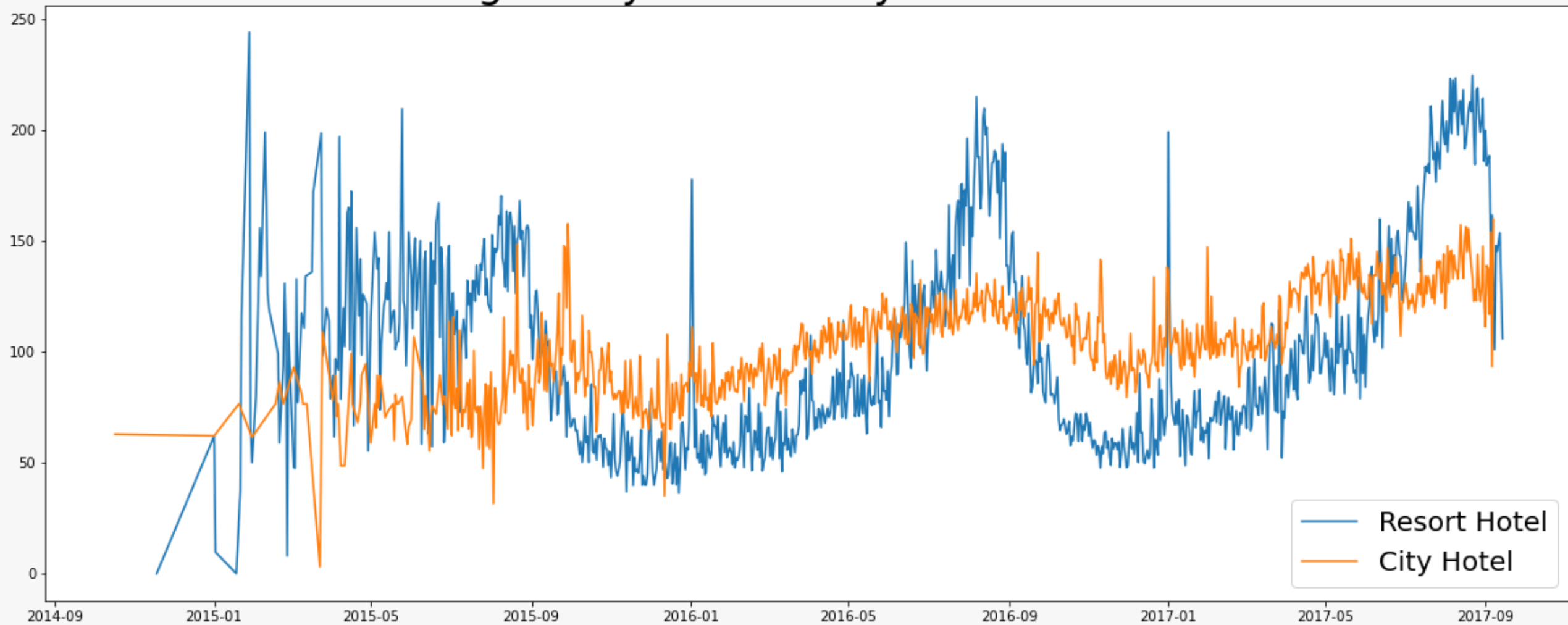


Reservation Status In Different Hotels

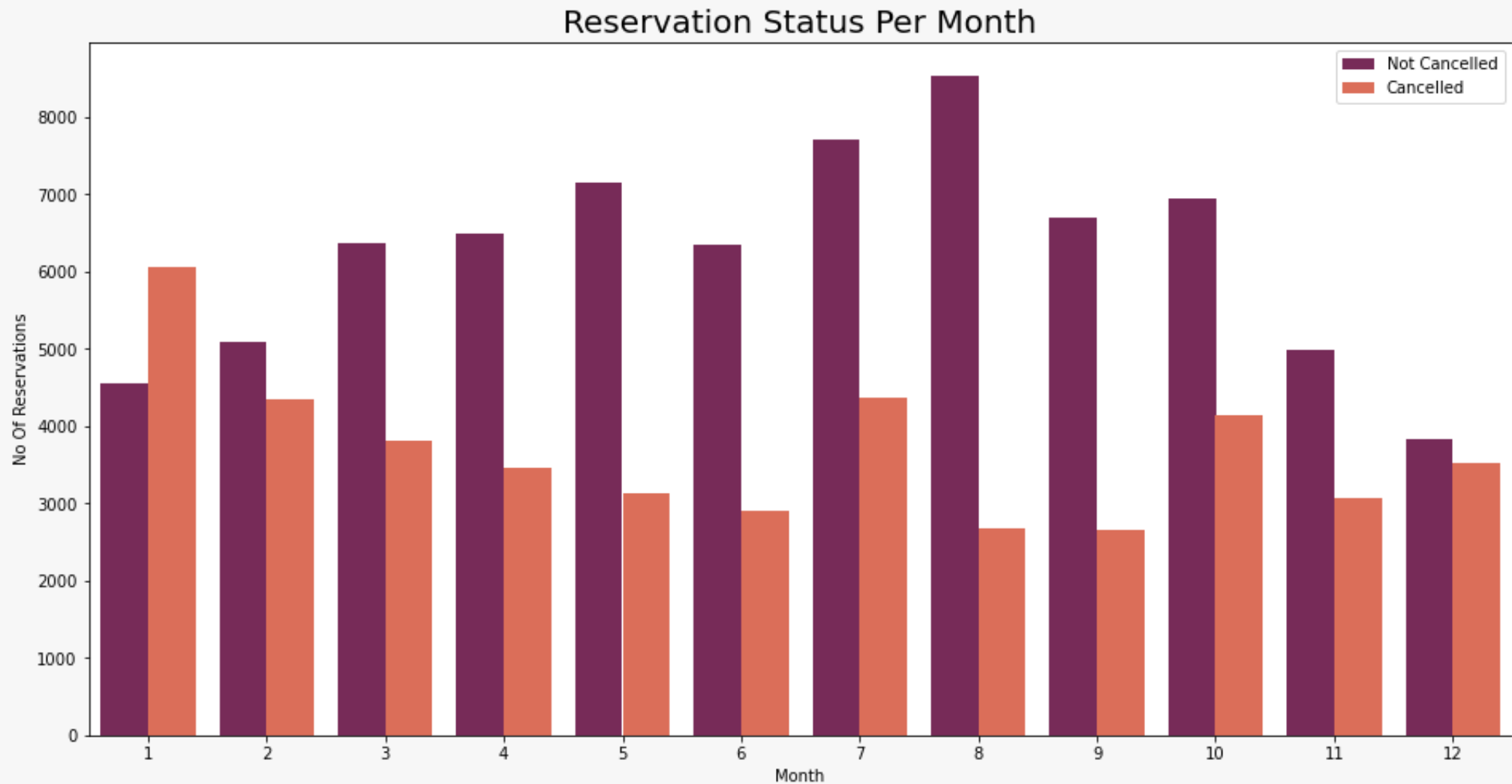


In comparison to resort hotels, city hotels have more bookings. it is possible that the resort hotels are more expensive than those in cities.

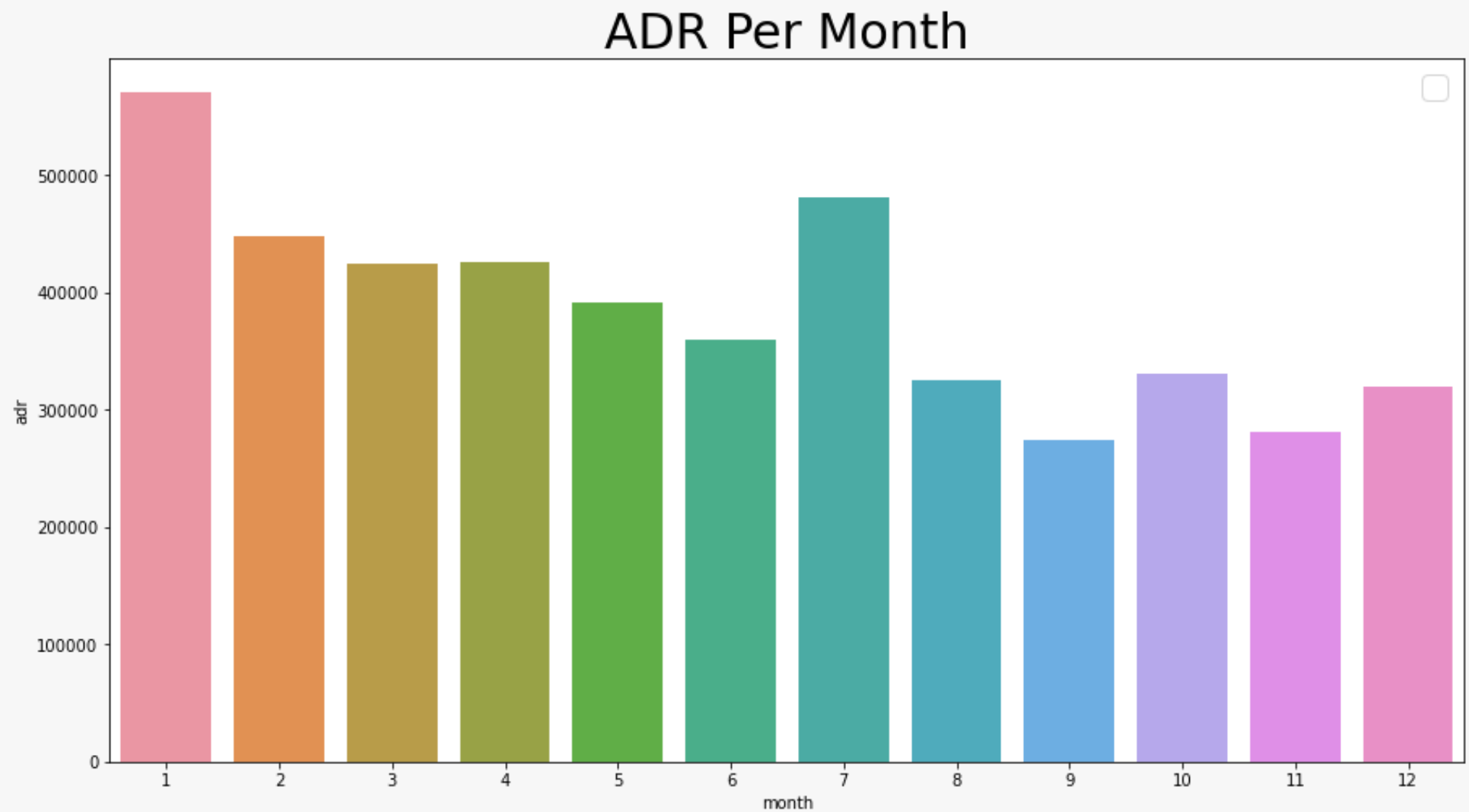
Average Daily Rate In City And Resort Hotel



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

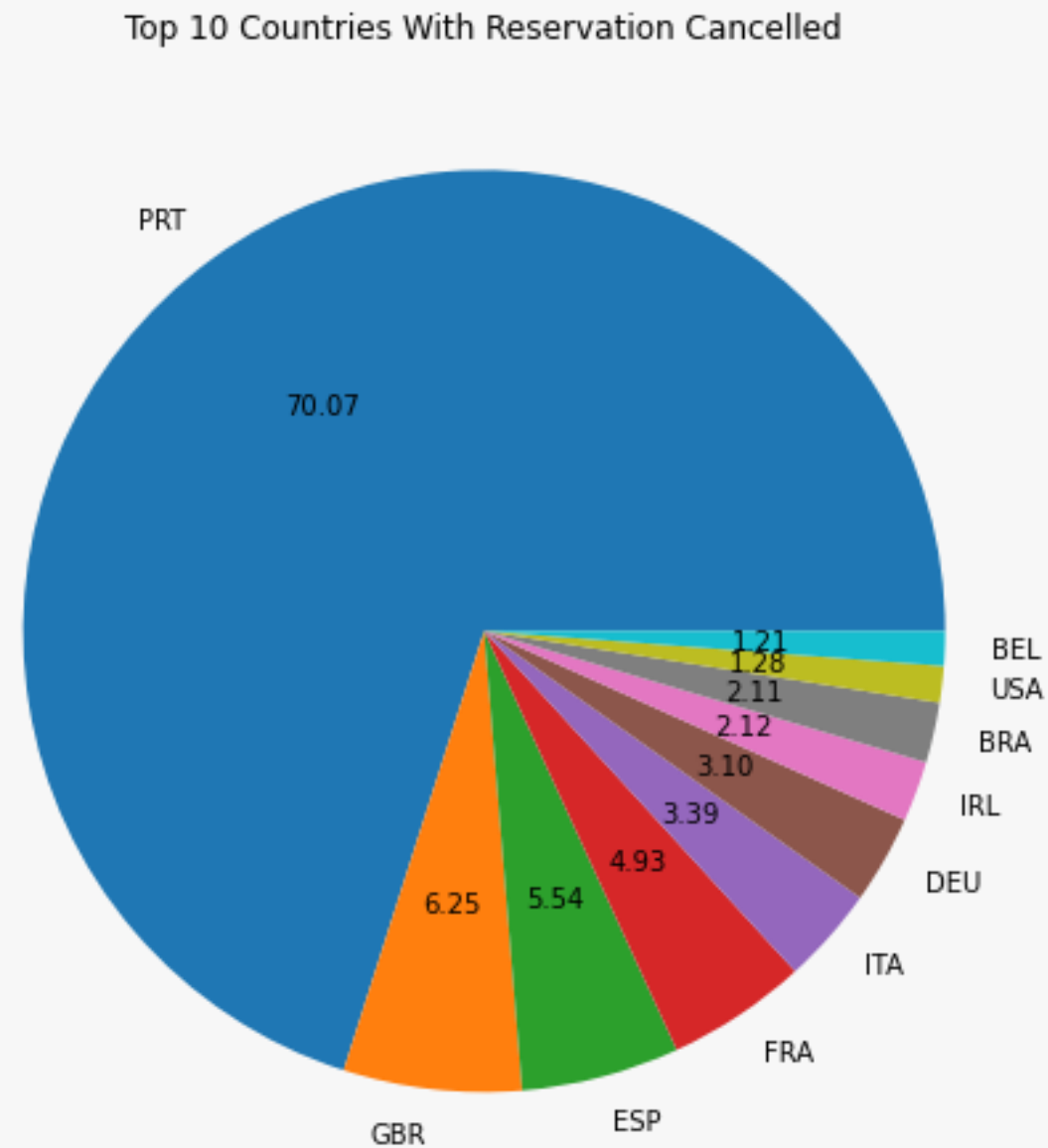


We have created a group bar graph to analyze the months with the highest and lowest reservations level according to reservation status. As it can be seen, the large number of reservation and less number of cancelled reservation are in month of August. whereas January is the month with the most cancelled reservations.

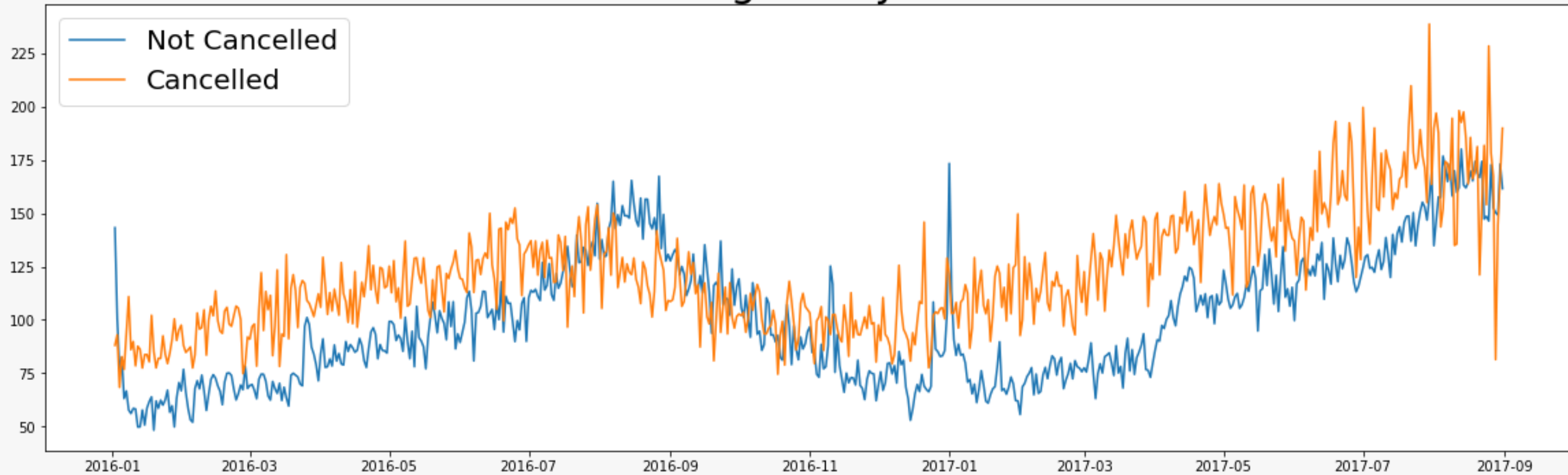


This bar graph demonstrates that the cancellation are most when the rates are higher and are less when the rates are lower. Therefore the cost of accommodation is solely responsible for the cancellation.

Portugal is the top country with the highest no of cancellations.



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 from all the above analysis, that the higher price leads to higher cancellations.

Suggestions

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