

Business Problem

In recent years, City Hotel and Resort have seen high cancellation rates. Each hotel is now dealing with several issues as a result, including fewer revenues and less-than-ideal hotel room use. Consequently, lowering cancellation rates is both hotel's primary goal to increase their efficiency in generating revenue, and for us to offer 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 topic of this report.



Assumptions

1. No unusual occurrences between 2015 and 2017 will have a substantial impact on the data used.
2. The information is still current and can be used to analyze a hotel's possible plans efficiently.
3. There are no unanticipated negatives to the hotel employing an advised technique.
4. The hotels are not currently using any of the suggested solutions.
5. The biggest factor affecting the effectiveness of earning income is booking cancellation.
6. Cancellation results in vacant rooms for the booked length of time.
7. Client makes a hotel reservation the same year they make a cancellation.

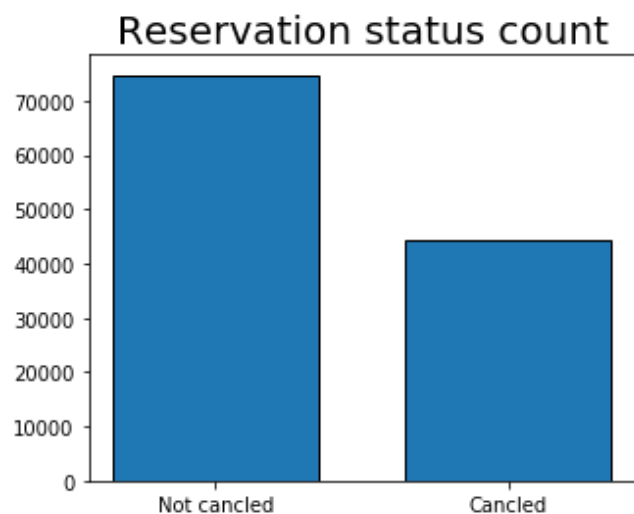
Research Question

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

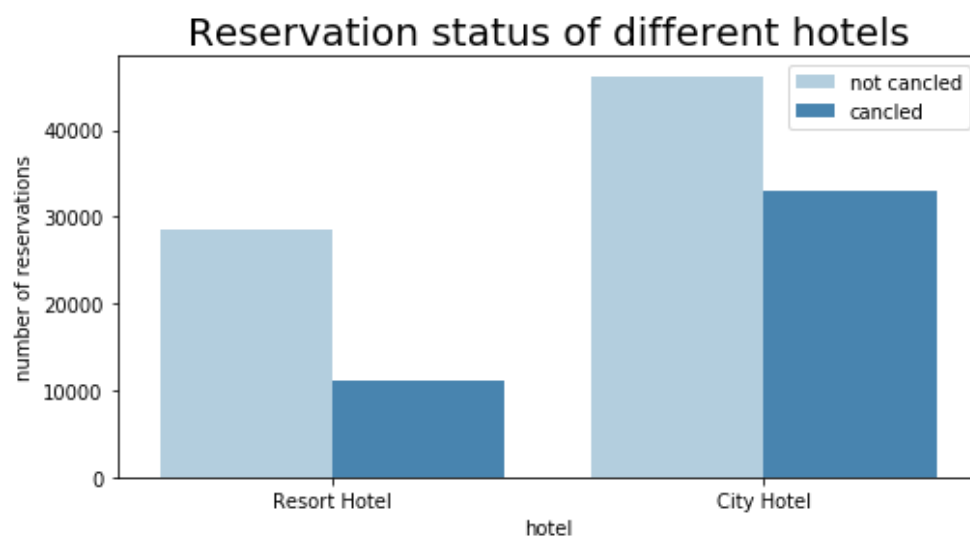
Hypothesis

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

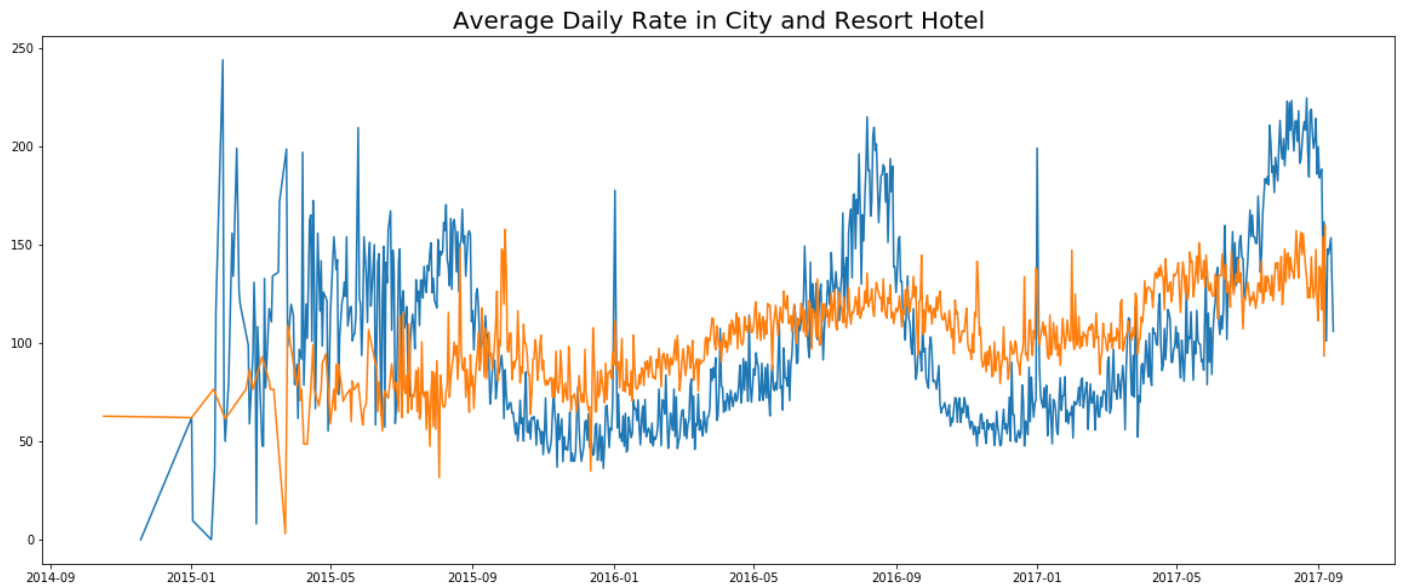
Analysis and Findings



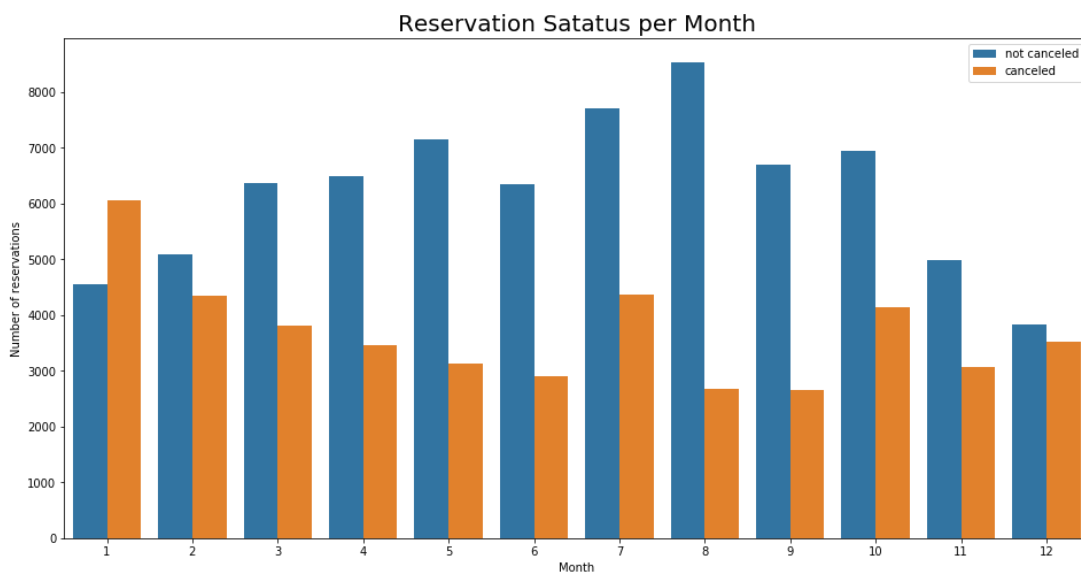
The accompanying bar graph shows the percentage of reservations that are cancelled and those that are not. There are still a significant number of reservations that have not been cancelled. There are still 37% of clients who cancelled their reservations, which has a significant impact on the hotels'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



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

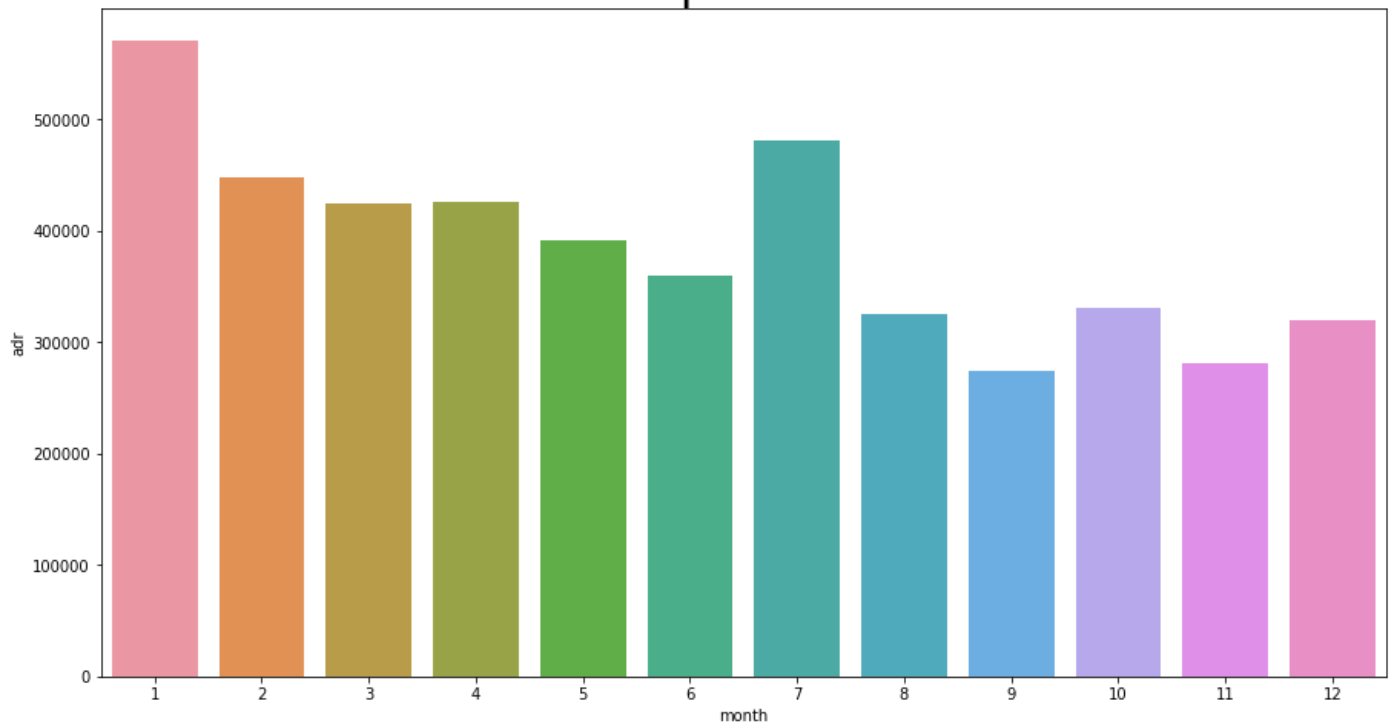


The line graph above shows that, on certain days, the average daily rate for a city hotel is less than that of a resort hotel, and on other days, it is even less. Weekends and holidays may see a rise in resort hotel rates.



We have developed the grouped bar graph to analyze the month with the highest and lowest reservation level 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.

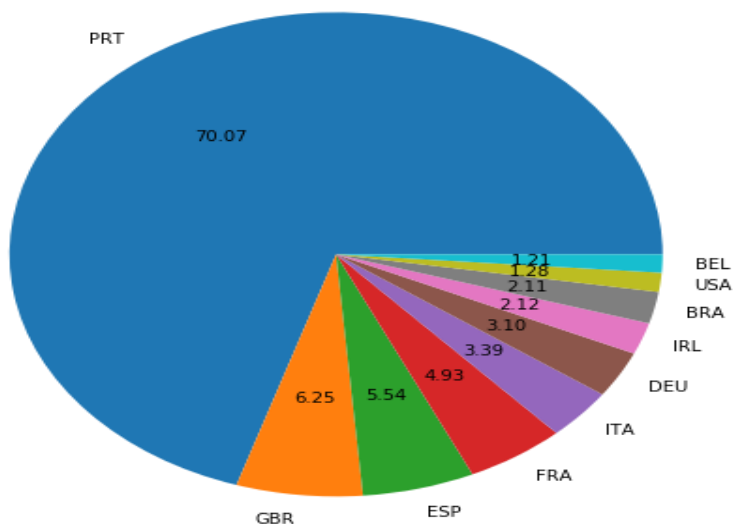
ADR per month



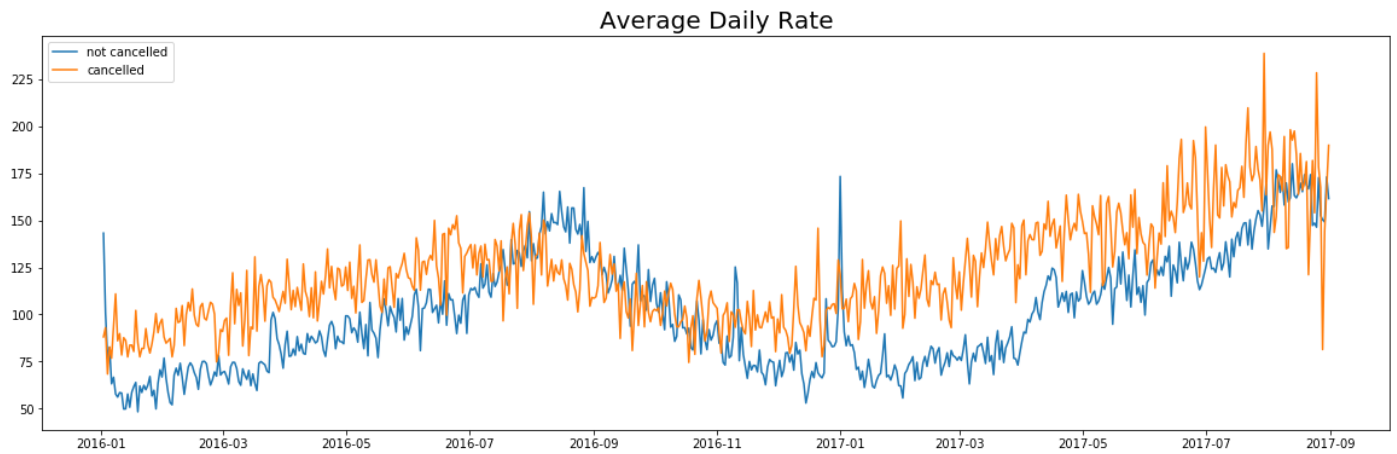
This bar graph demonstrated that cancellations are most common when prices are greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

Now let's see which country has the highest reservation cancellation. 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.



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 cancellations.

Suggestions

- 1. Cancellation rates rise as the price does. In order to prevent cancellation 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. The ratio of cancellations and no cancellations of the resort hotel is higher in resort hotels than in city hotels. So the hotels should provide a reasonable discount on the room price on weekends or on holidays.**
- 3. In the month of January, hotels can start campaigns or making with a reasonable amount to increase their revenue as the cancellation is the highest in this month.**
- 4. They can also increase the quality of their hotels and their service mainly in Portugal to reduce the cancellation rate.**