

Hotel Booking Analysis

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 cancellations rates in 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



Assumptions

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

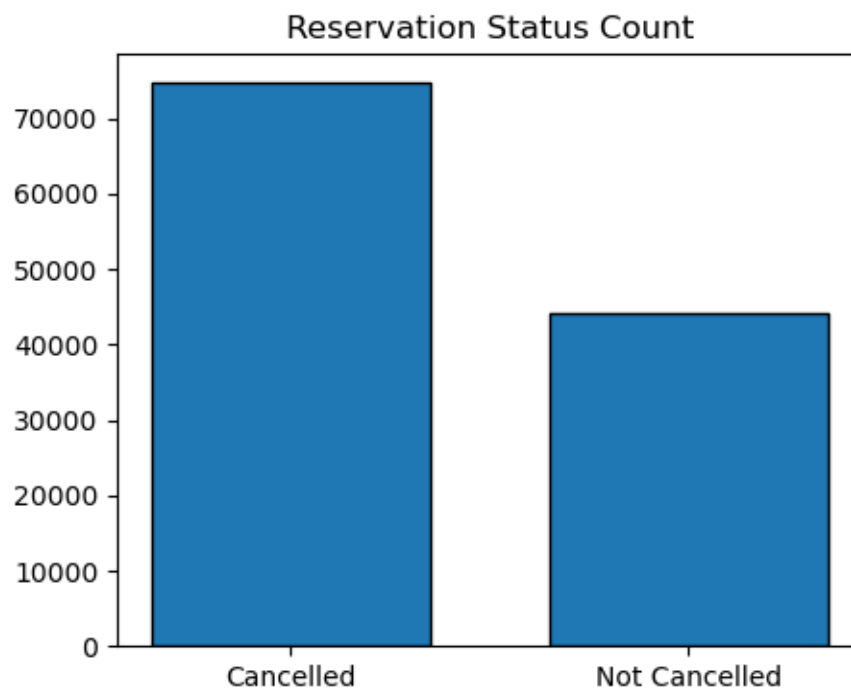
Research Question

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

Hypothesis

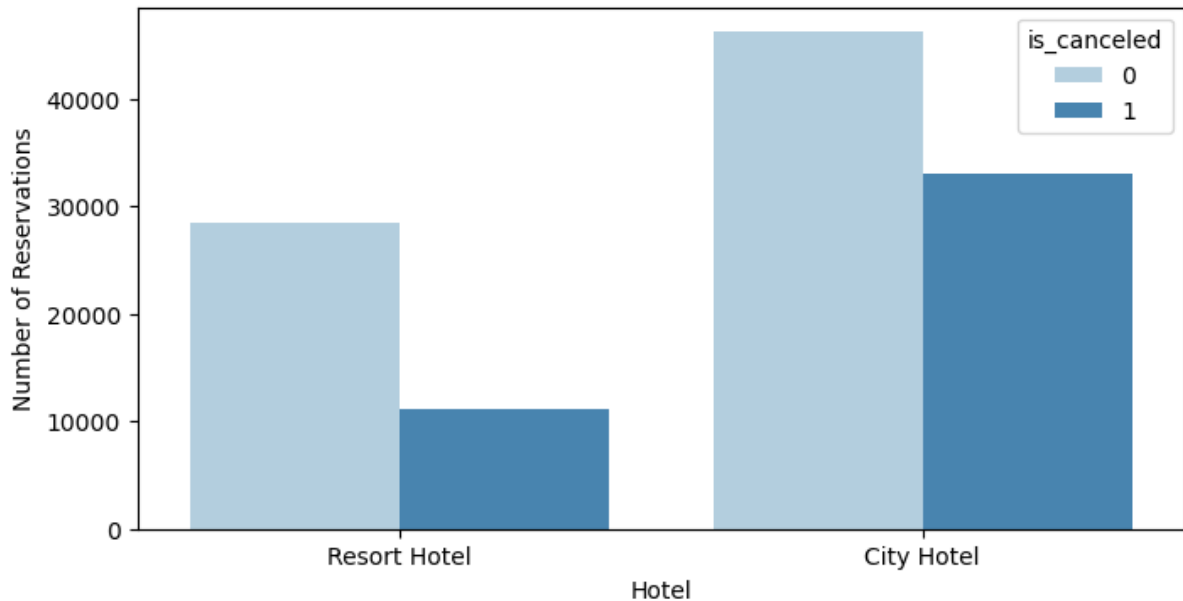
1. More cancellations occur when prices are higher.
2. When there is a longer waiting list. Customers tend to cancel more frequently
3. The majority of clients are coming from offline travel agents to make their reservations

Analysis and Findings



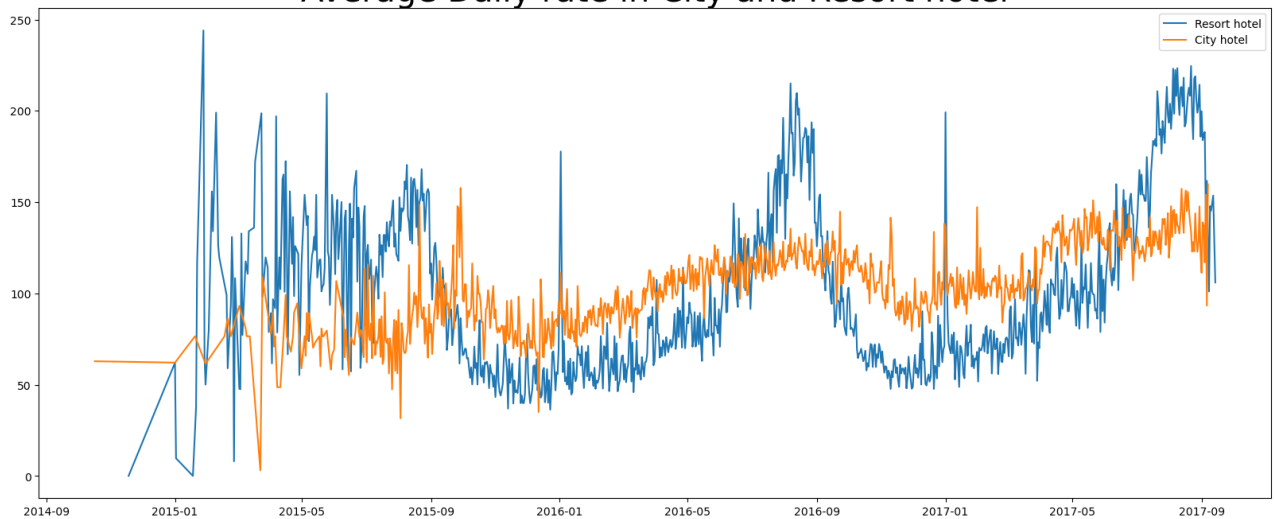
The accompanying bar graph shows that the percentage of reservations cancelled and not cancelled. It is obvious that there are still a significant number of reservations that have not been cancelled. There are still 37% of clients who cancelled their reservation, which have the significant impact on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

Reservation status in different hotels



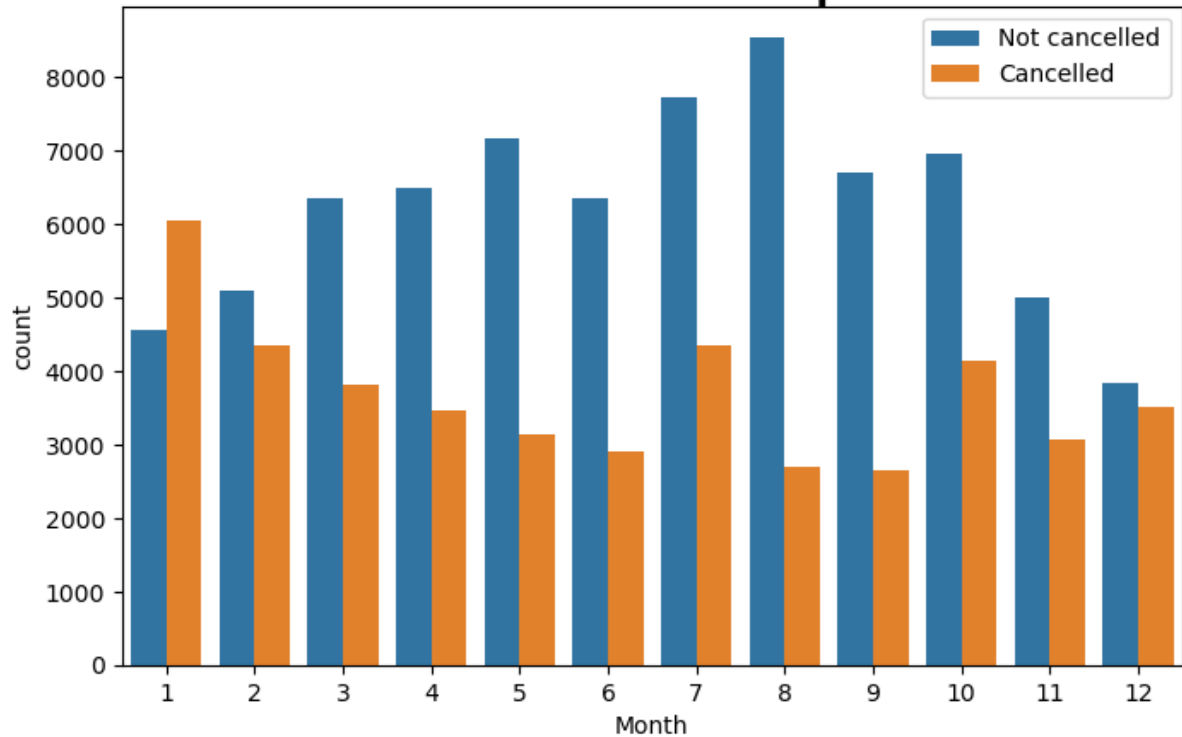
In comparison to resort hotels, City hotels have more bookings. It's possible that resort hotels are more expensive than city hotels in those cities.

Average Daily rate in City and Resort hotel



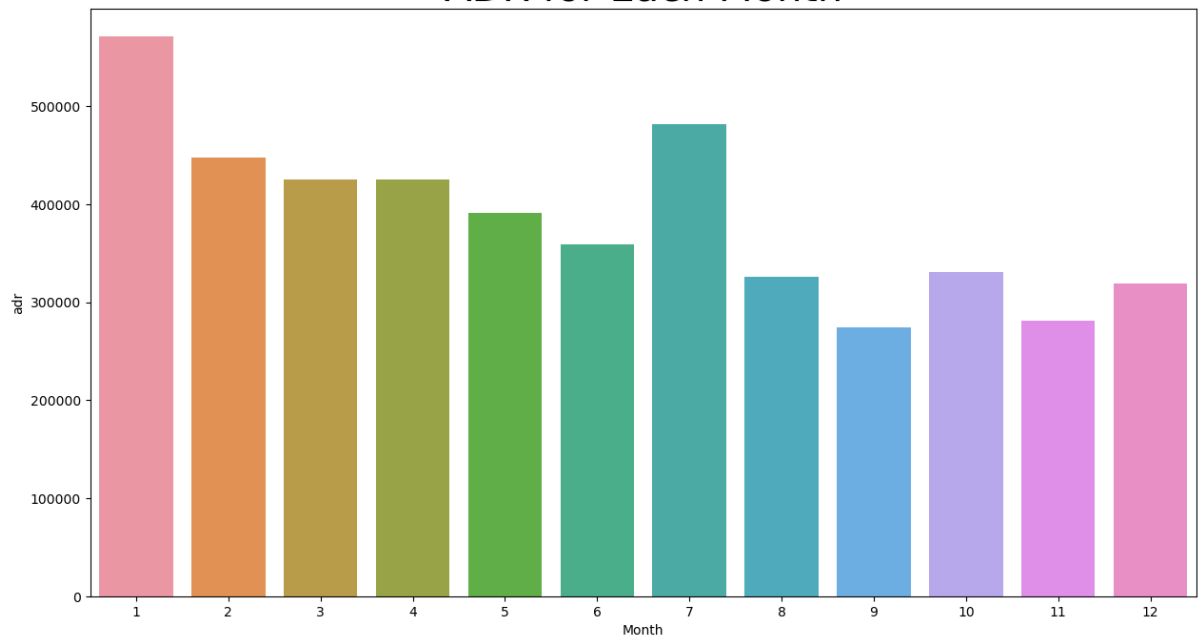
The above line graph shows that, on certain days the average daily rate for a city hotel is less than that of resort hotel, and on other days, it is even less. It goes without saying that weekends and holidays may see a rise in resort hotel rates.

Reservation status per Month



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, number of confirmed reservation are highest in the month of August, whereas more cancellations are in the month January.

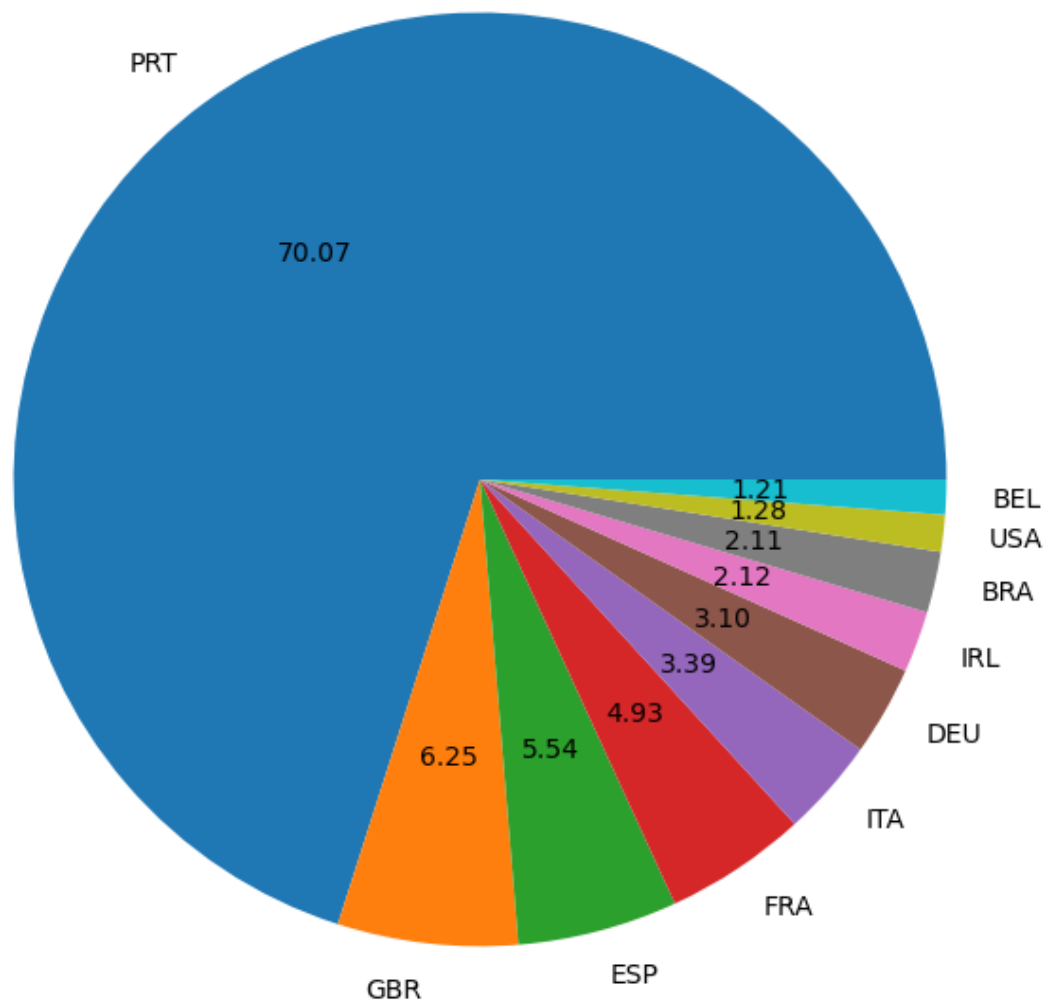
ADR for Each Month



The bar graph shows that cancellations are most common when prices are higher and least common when they are lower. Therefore the cost of accommodation is solely responsible for the cancellation.

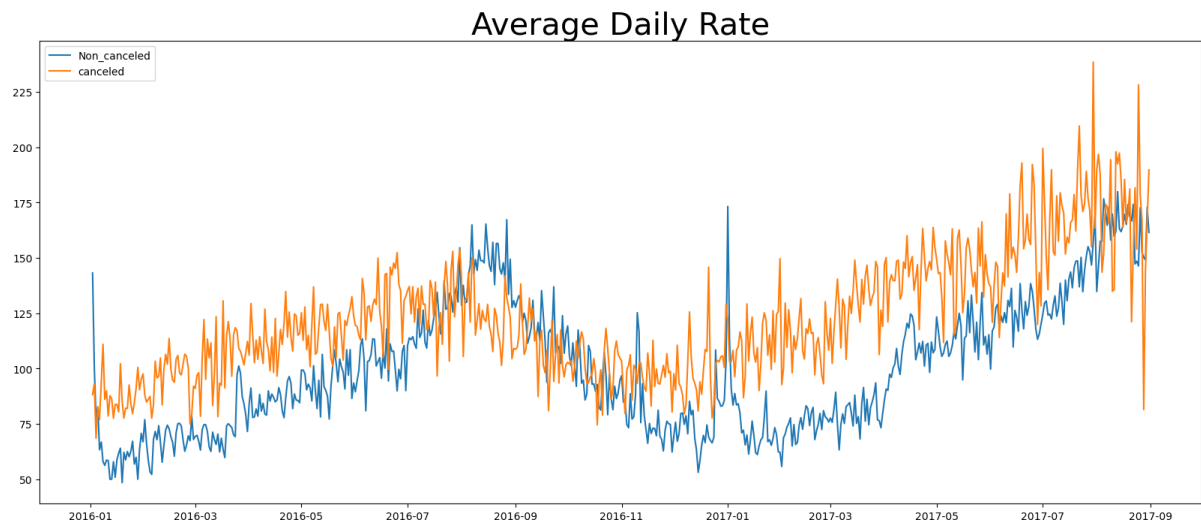
Now let's see which countries have the highest reservation cancelled. The top country is Portugal with the highest number of cancellations.

Top 10 countries with reservation cancelled



Now 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 47% of the clients comes from online travel agencies, whereas 16% comes from groups. Only 10% of clients book hotels directly by visiting and making reservations



As we can see in the graph, Reservations are cancelled when average daily rate is higher than when it is not cancelled. The above analysis clearly proves, the higher prices leads to higher cancellations.

Suggestions

1. Cancellation rates rise as the price does. In order to prevent cancellations, Hotels could work on their pricing strategies and try to lower the rates for specific hotels based on location. They can also provide discounts to the customers.
2. As the ratio of the cancellation and non- cancellation of the Resort hotels is higher than City hotels. So the Resort hotels should provide reasonable discounts on the room 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 revenue as the cancellations are highest in this month.
4. They can improve the quality of services mainly in Portugal to reduce cancelation rate.