

DATA ANALYSIS

HOTEL MANAGEMENT PROJECT

REPORT

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 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 topic of this report.



ASSUMPTIONS :

1. No unusual occurrence between 2015 and 2017 will have a substantial impact on the data used.
2. The information is still current and can be used to analyse a hotel's possible plans in an efficient manner.
3. There are no unanticipated negatives to the hotel employing any advised technique.
4. The hotels are not currently using any of the 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. Clients make hotel reservations the same year they make cancellation.

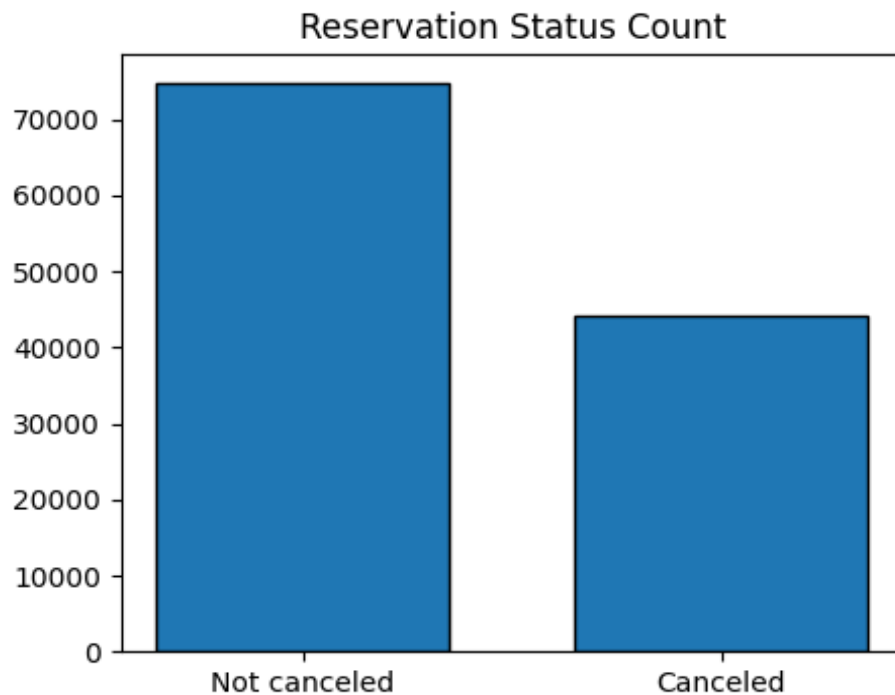
RESEARCH QUESTIONS :

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

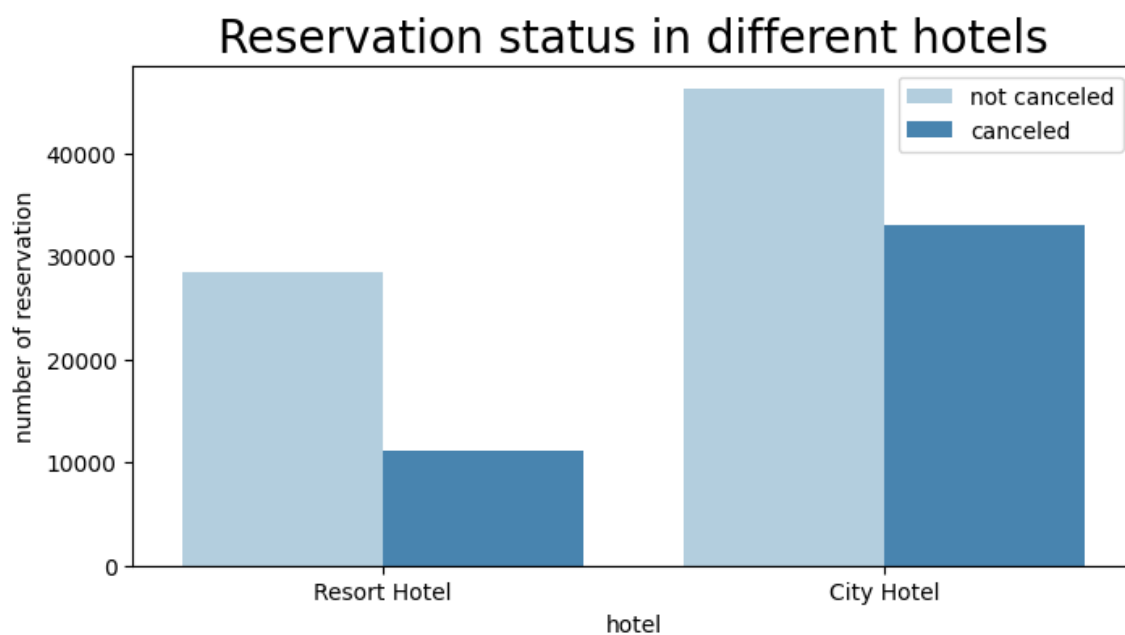
HYPOTHESIS:

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.

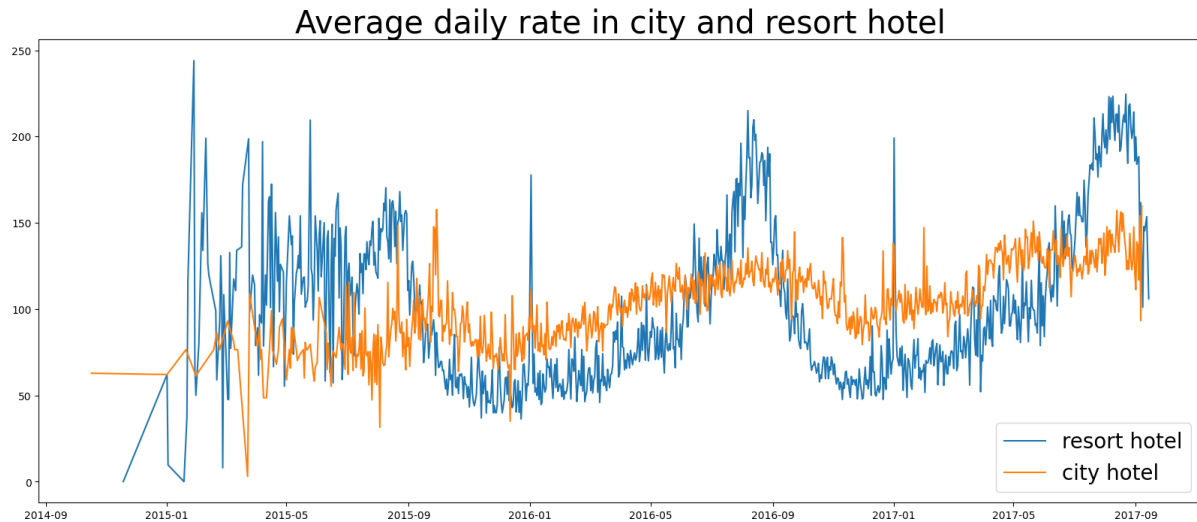
ANALYSIS AND FINDINGS :



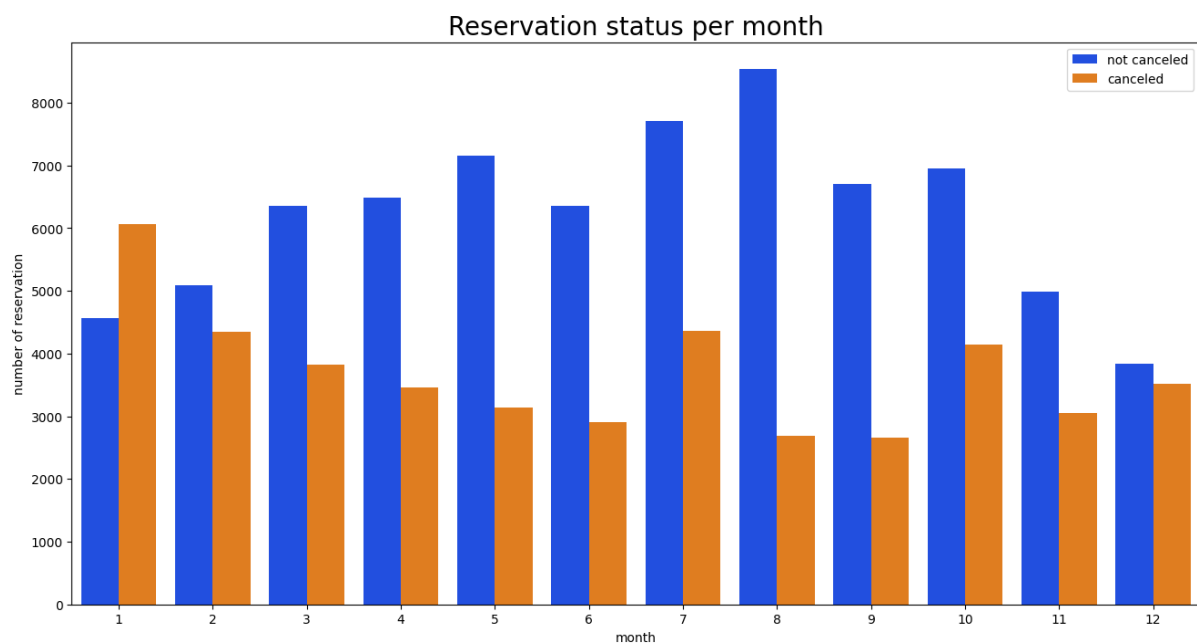
The accompanying bar graph shows the percentage of reservations that are cancelled and those that are not. It is obvious that there are still a significant number of reservations that have not been cancelled. There are still 37% of clients who cancelled their reservation, which has a significant impact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



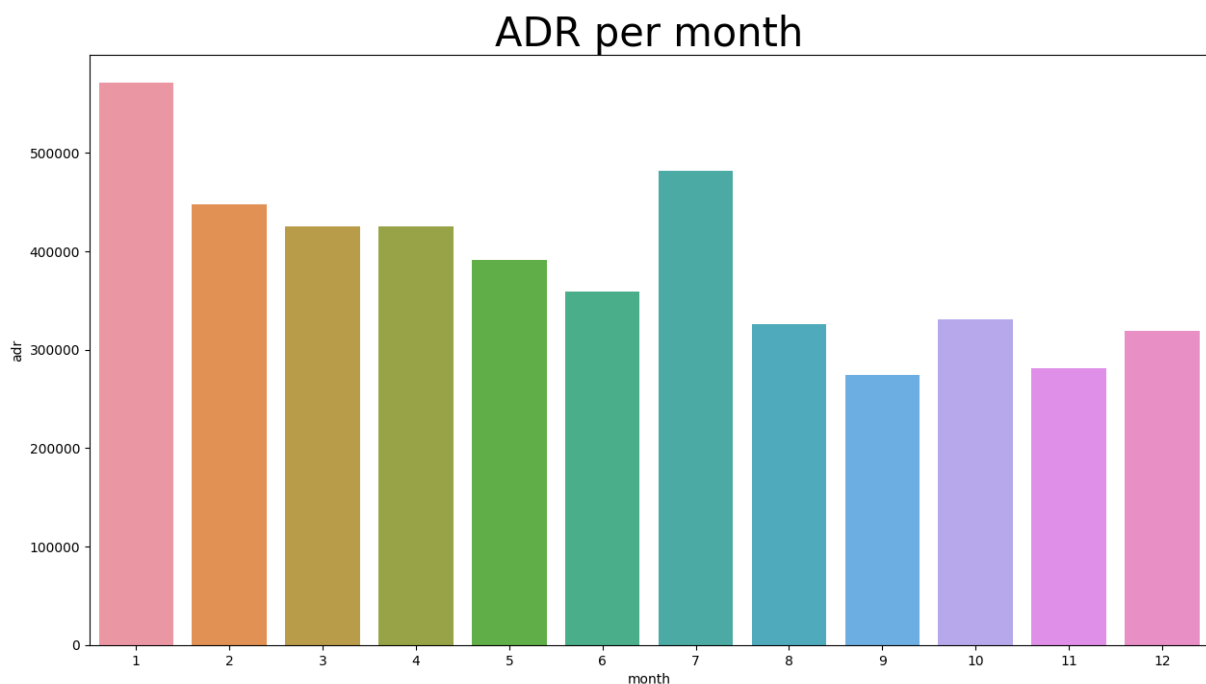
Incomparasion to resort hotels,city hotels have more bookings.it's possible that resort hotels are more expensive than those in cities.



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



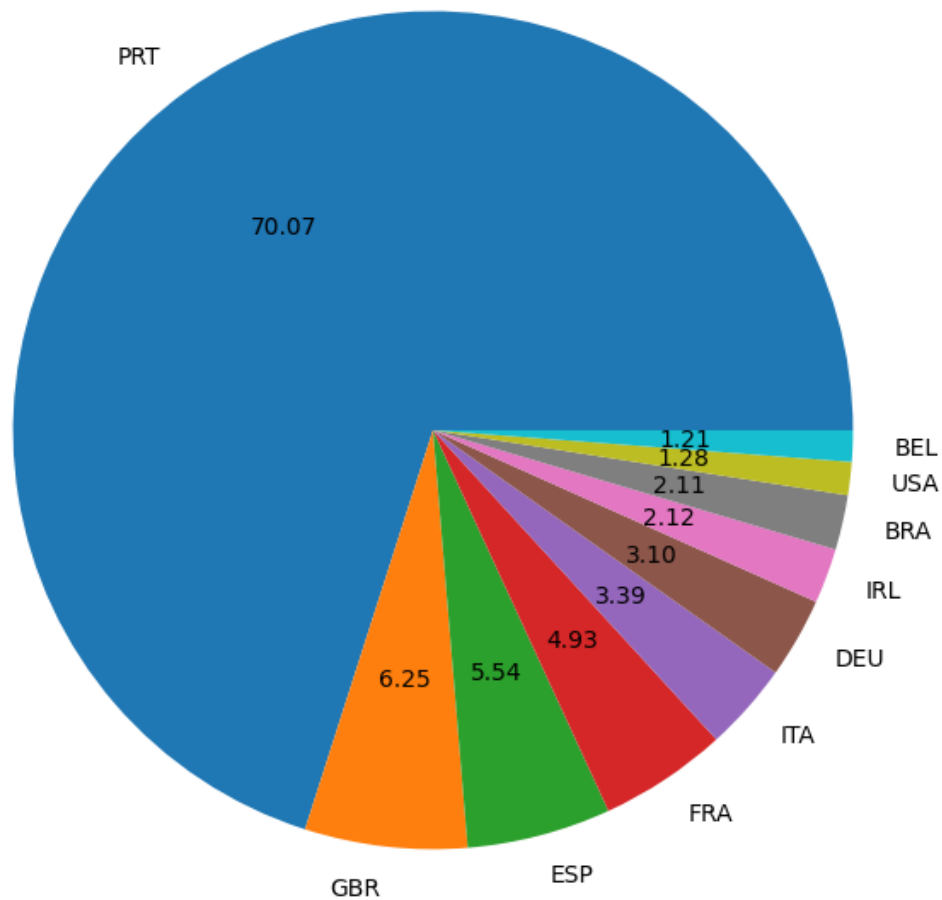
We have developed the grouped bar graph to analyse the months with the highest and lowest reservation levels according to reservation status. it can be seen, both the number of confirmed reservations and the number of cancelled reservations are largest in the month of august, whereas January is the month with the most cancelled reservations.



This 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.

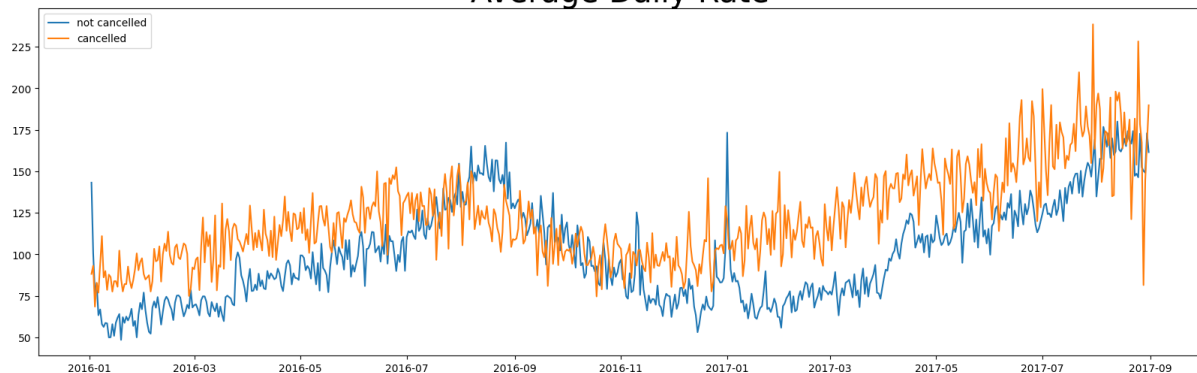
Now, let's see which country has the highest reservation cancelled. The top country is Portugal with the highest number of cancellation.

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 and 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 rise as the price does.In order to prevent cancellation of reservations,hotels would 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 cancellation and not cancellation of the resort hotel is higher in the resort hotel than city hotel'.So the hotels should provide a reasonable discount on the room prices on weekends or on holidays.
3. In the month of january ,hotels can start campaigns and marketing with a reasonable amount of increase their revenue as the cancellation is the highest ibn this month.
4. They can also increase the quality of their hotels and their services mainly in Portugal to reduce the cancellation rate.