

## **Business Problem**

In recent years, City Hotel and Resort Hotel have seen high cancellation rates. Each hotel is now dealing with 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 revenues, and for us to offer through business advice to address this problem.

The analysis of hotel booking cancellations as well as other factors that have to bearing on their business and yearly revenue generation are the main topics of this resort.

## **Assumption**

1. No unusual occurrence (Outliers) 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 hotels possible plans in an efficient manner.
3. The hotel faces no unexpected drawbacks from using any recommended technique.
4. The hotels are not currently using any of suggested solutions.
5. The biggest factor affecting the effective earnings 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.

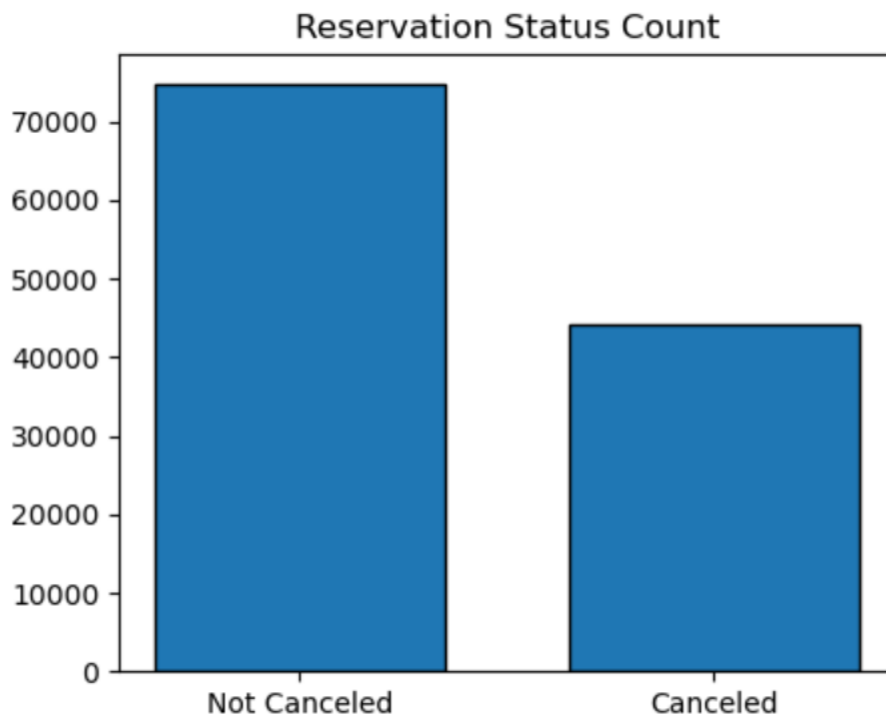
## **Research Questions**

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

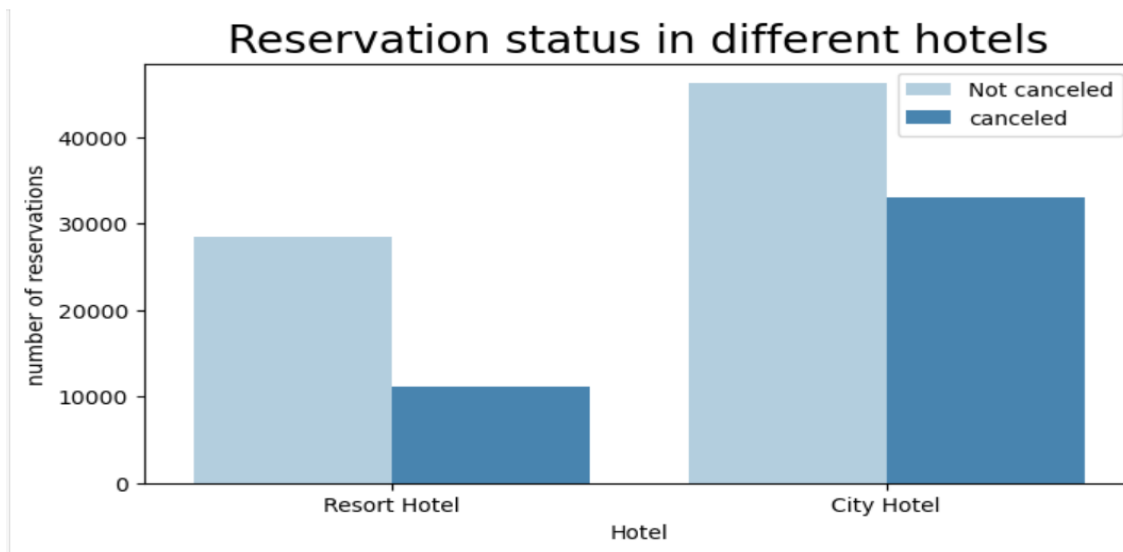
## **Hypothesis**

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.

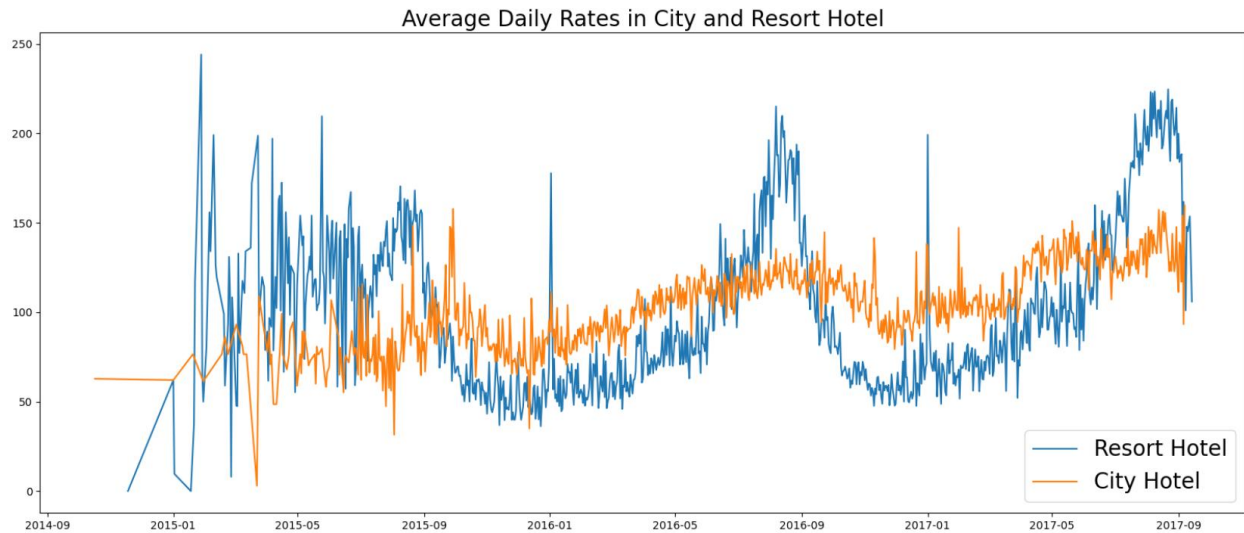
## Analysis and Findings



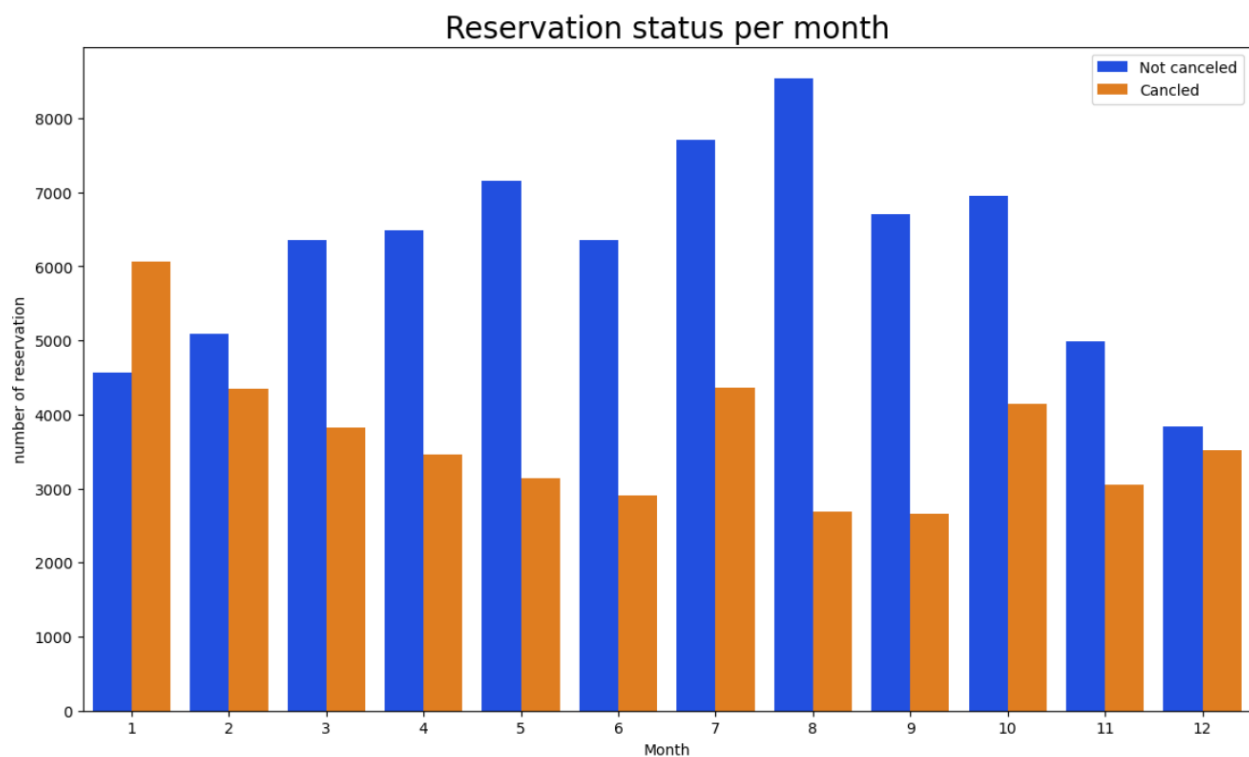
The accompanying bar graph shows the percentage of reservations that are canceled and those that are not. It is obvious that there are still a significant number of reservations that have not been canceled. A cancellation rate of 37% among clients continues to have a considerable effect on the hotel's revenue.



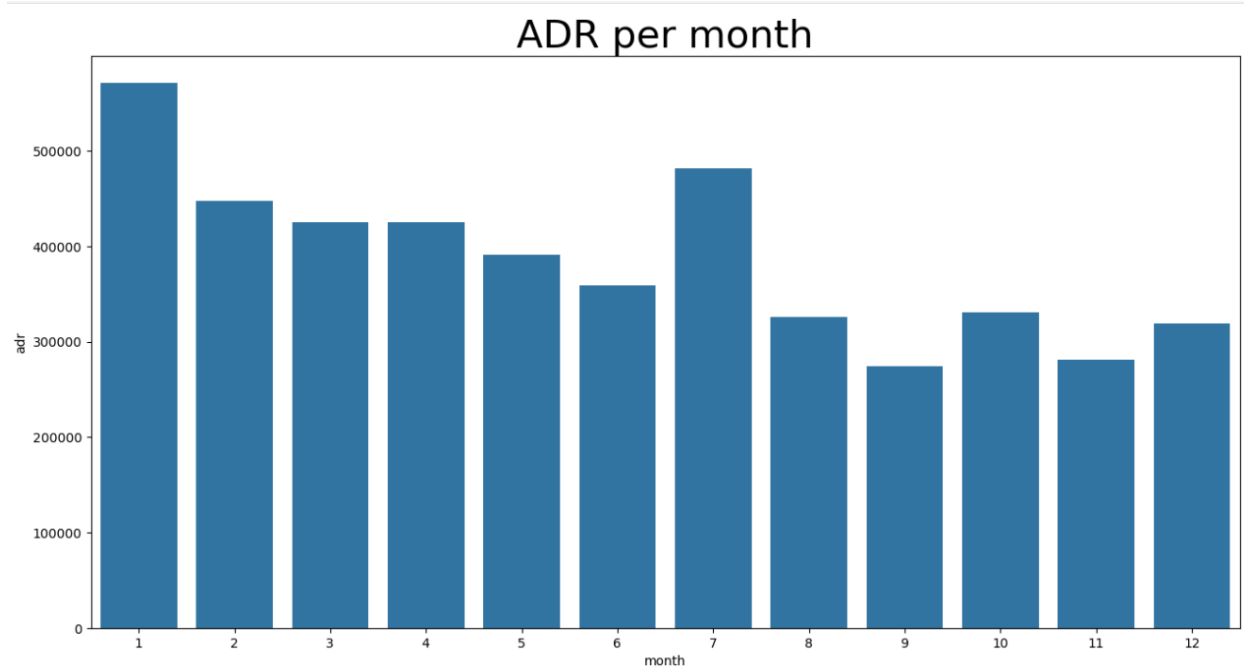
In Comparison to resort hotel, city hotels have more bookings. Its possible that resort hotels are more expensive than those in cities.



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. It goes without saying that weekends and holidays may see a rise in resort hotel rates.

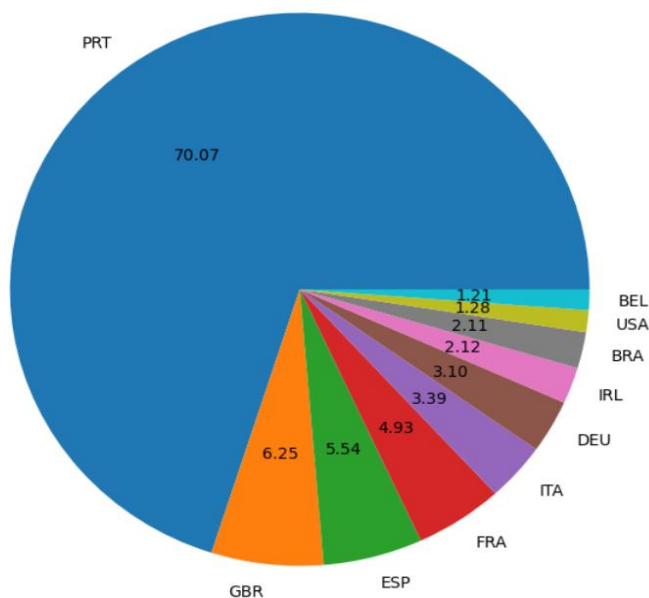


We have developed the grouped bar graph to analyze the months with the highest and lowest reservations levels according to reservations status. As can be seen, both the number of confirmed reservations and the number of cancelled reservations are largest in the month of august, whereas January is the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

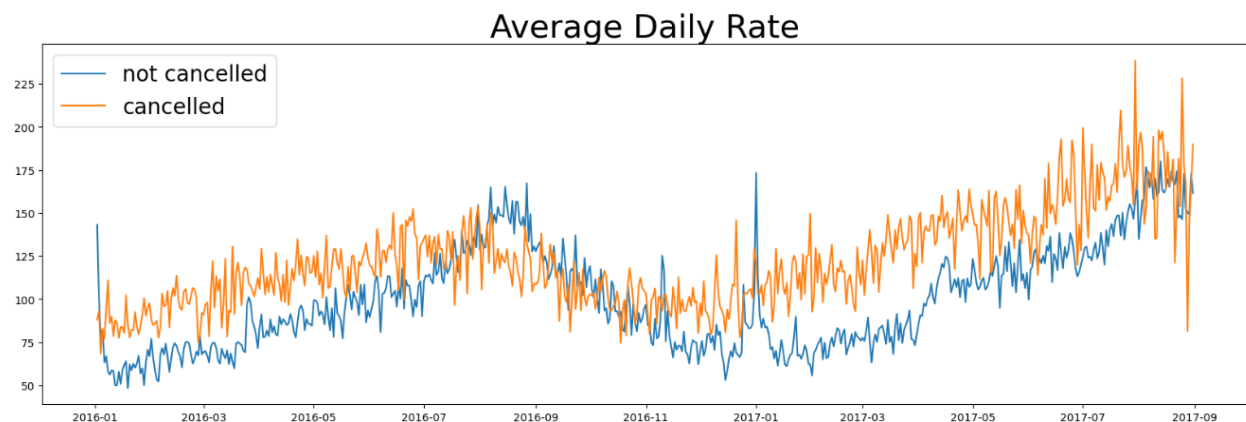


Above bar graph demonstrates that cancellations are most common when **prices** are **greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.**

Now, Let's see which country has the highest reservation canceled. The top country is Portugal with the highest number of cancellations.



Let's check the area from where guests are visiting the hotels and making reservations. Is it coming 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 above, reservation are cancelled when the average daily rate is higher than when it is not canceled. It clearly proves all the above analysis, that the higher process leads to higher cancellation.

## Recommendations:

1. Cancellation rates rise as the price does. To prevent cancellations 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 promotional discounts to the customers.
2. As the ratio of the cancellation and not cancellation of the resort hotel is higher in the resort hotel is higher in the resort hotel than city hotels. 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 or marketing with a reasonable amount to increase their revenue as the cancellation id the highest in this month.
4. They can also increase the quality of their hotels and their hospitality services mainly in Portugal to reduce the cancellation rate.