**Business Problem**

In recent years, City Hotel and Resort Hotel Have Seen High Cancellation Rates. Including Fewer revenues and less than ideal hotel room use. Consequently, lowering cancellation rates in 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 no bearing on their business and yearly revenues generation are the main topics of this report.

**Assumptions:**

1. No unusual occurrence between 2015 and 2017 will have a substantial impact on data used.
2. The information is still current and can be used to analyze a hotel’s possible plans in efficient manner.
3. There is no unanticipated negative to the hotel employing any advice technique.
4. The hotels are not currently using 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:**

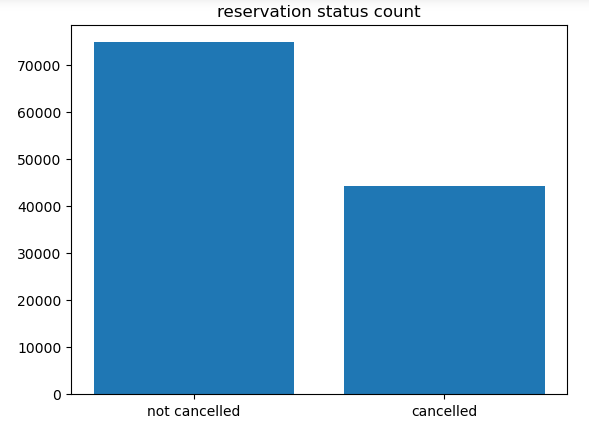
1. What are the variable that affect hotel reservation cancellations?
2. How can we make hotel reservations cancellations better?
3. How will hotels be assisted in making pricing and promotional decisions?

**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.

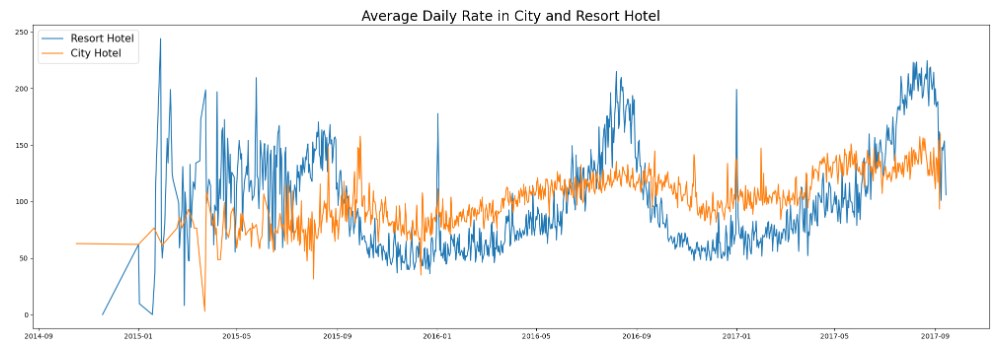
**Analysis and Findings:**

The accompanying bar graph shows 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 cancelled. There are still 37 % of clients who cancelled their reservation, which has a significant impact on the hotel’s earning.

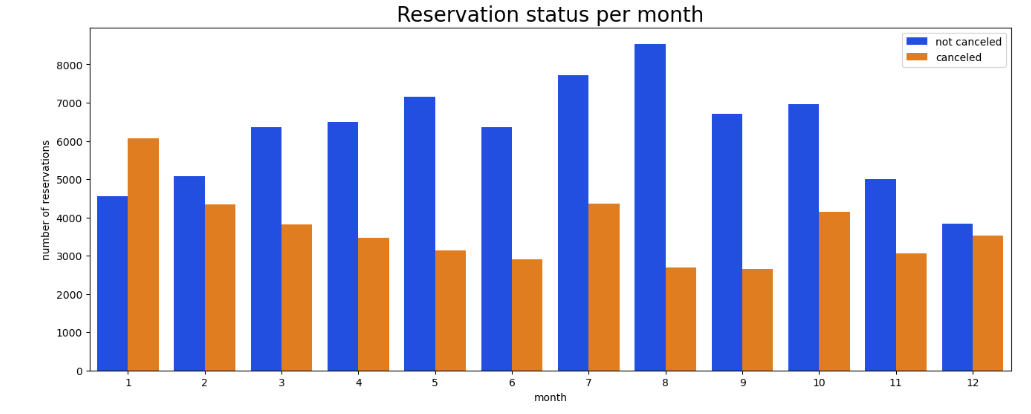


In comparison to resort hotels, city hotels have more booking. It’s possible that resort hotels are expensive than those in cities.

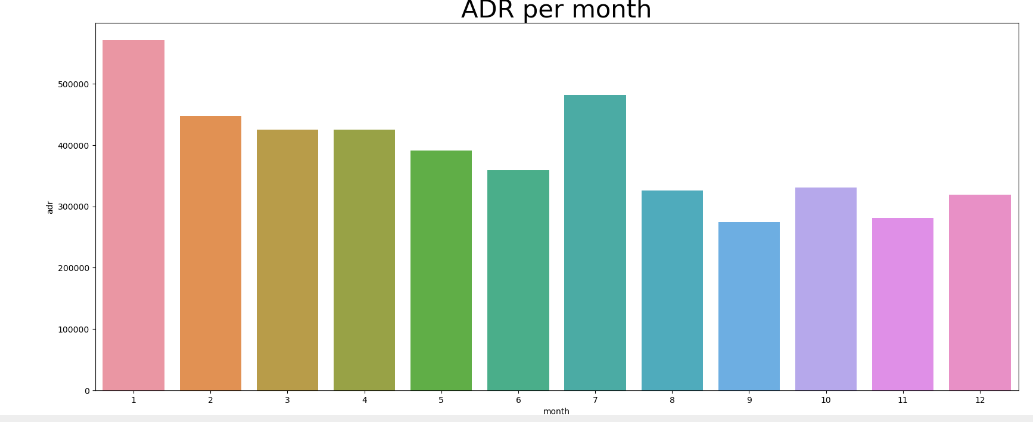




The line graph above shows that, on certain days, the average daily rate for a city hotel is less than that of a resort hotel, and on other days, it is even less. It goes without saying that weekends and holidays may see a rise in resort hotel rates.

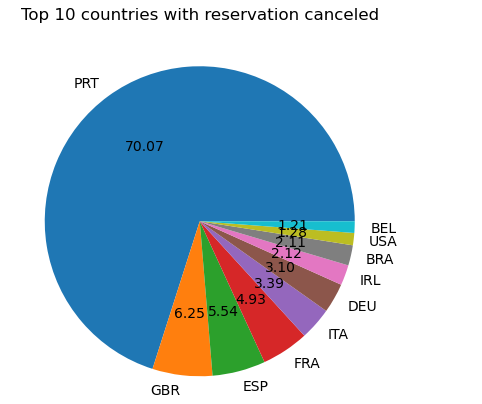


We have developed the grouped bar graph to analyze the months with the highest and lowest reservation levels according to reservation status. As can be seen, both the number of confirmed reservations and the number of cancelled reservations are largest in the month of august whereas January is the month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

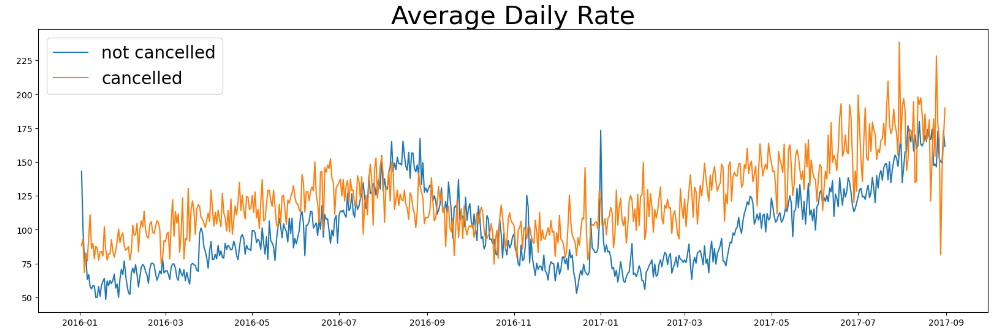


This bar graph demonstrate that cancellations are most common when prices are greatest and are least common when they are lowest. Therefore, the cost of the accommodation is solely responsible for the cancellation.

Now, let’s see which country has the highest reservation cancelled. Top country is the 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 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 client’s book hotel directly by vising 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 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 discounts to the consumers.
2. As the ratio of the cancellations and not cancellation of the resort hotel is higher in the resort hotel than the 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 cancellations is the highest in this month.
4. They can also increase the quality of their hotels and their services mainly in Portugal to reduce the cancellation rate.