

# **REPORT**

## **Business Problem**

In recent years, City Hotels and Resort Hotels 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 room use. Consequently, lowering cancellation rates is both hotels primary goal in order to increase their efficiency in generating revenue.

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 the 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 analyse a hotel's possible plans in an efficient manner.
3. There are no unanticipated negatives to the hotels employing any advised techniques.
4. The hotels are not currently using any of the advised suggestions from the analysis.
5. The biggest factor affecting the effectiveness of earning income is cancellation of booking.
6. Cancellations result in vacant rooms for the booked length of time which decreases the revenue of the hotels.
7. Clients make hotel reservations the same year and they make cancellations in the same year.

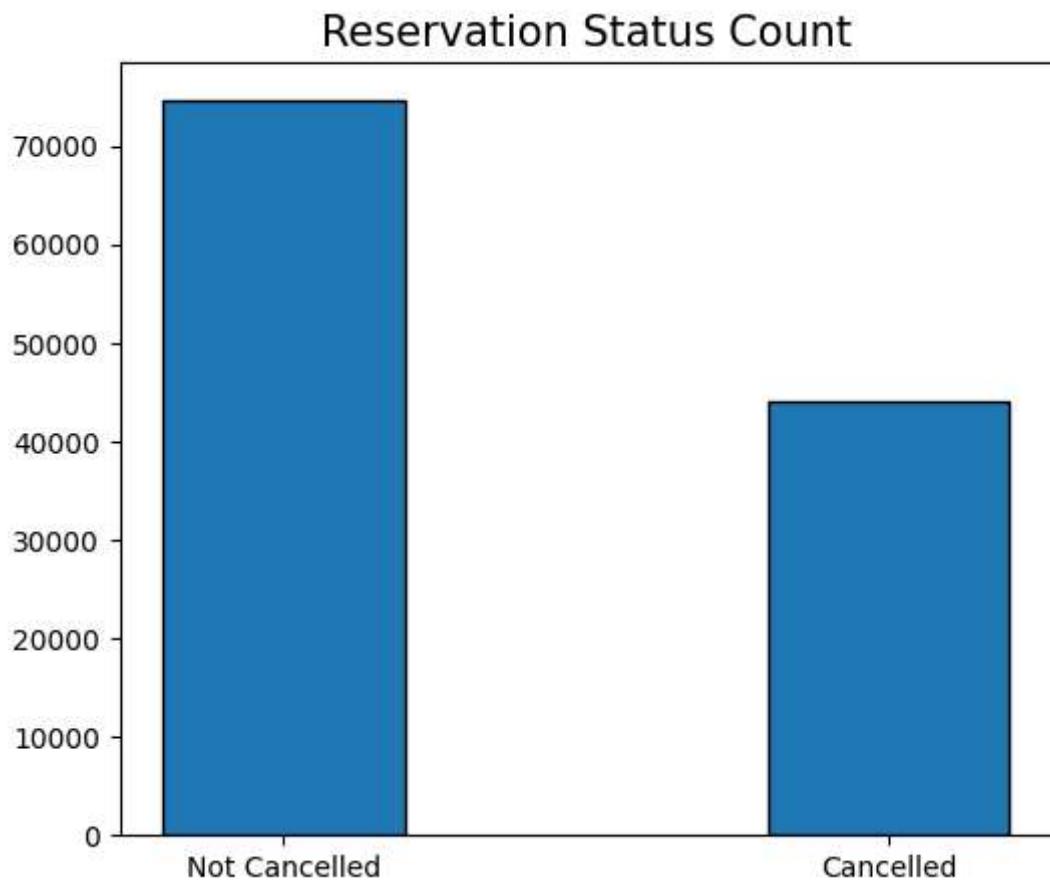
## **Research Questions**

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

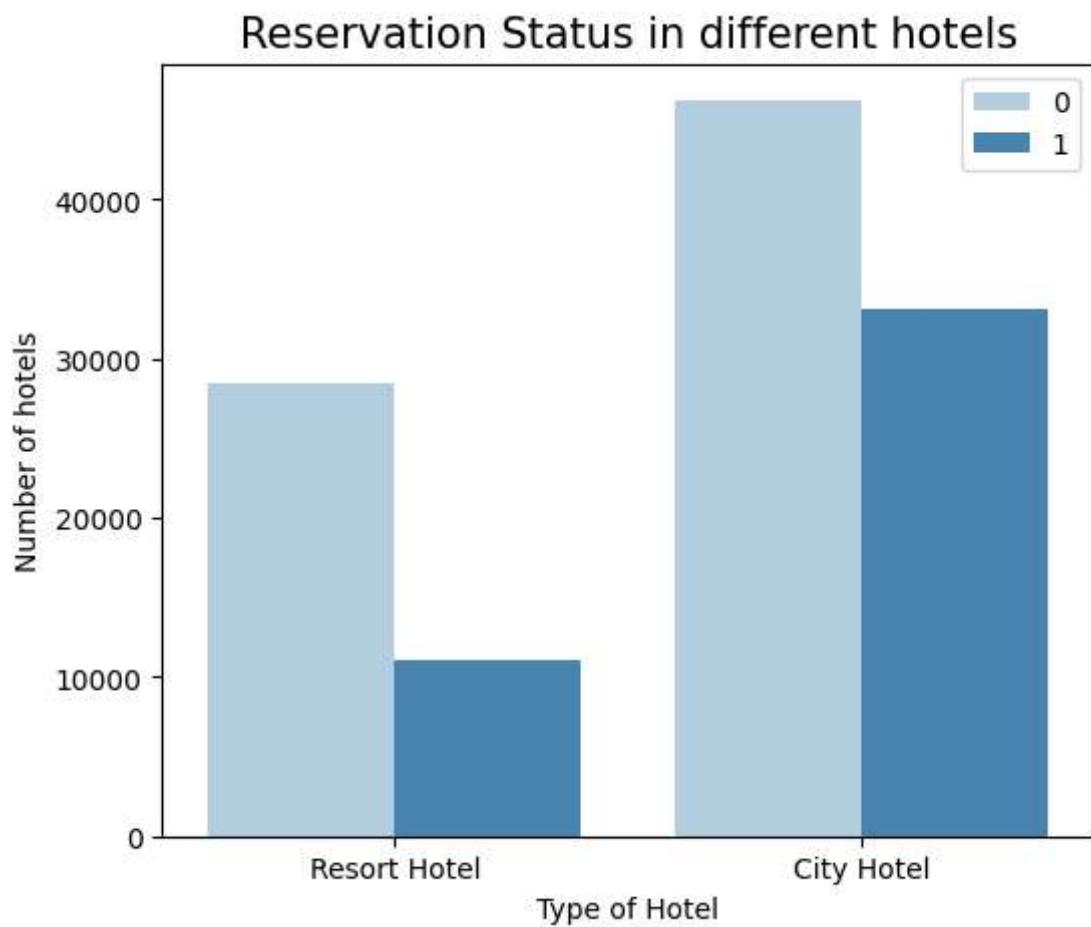
## **Hypothesis**

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.

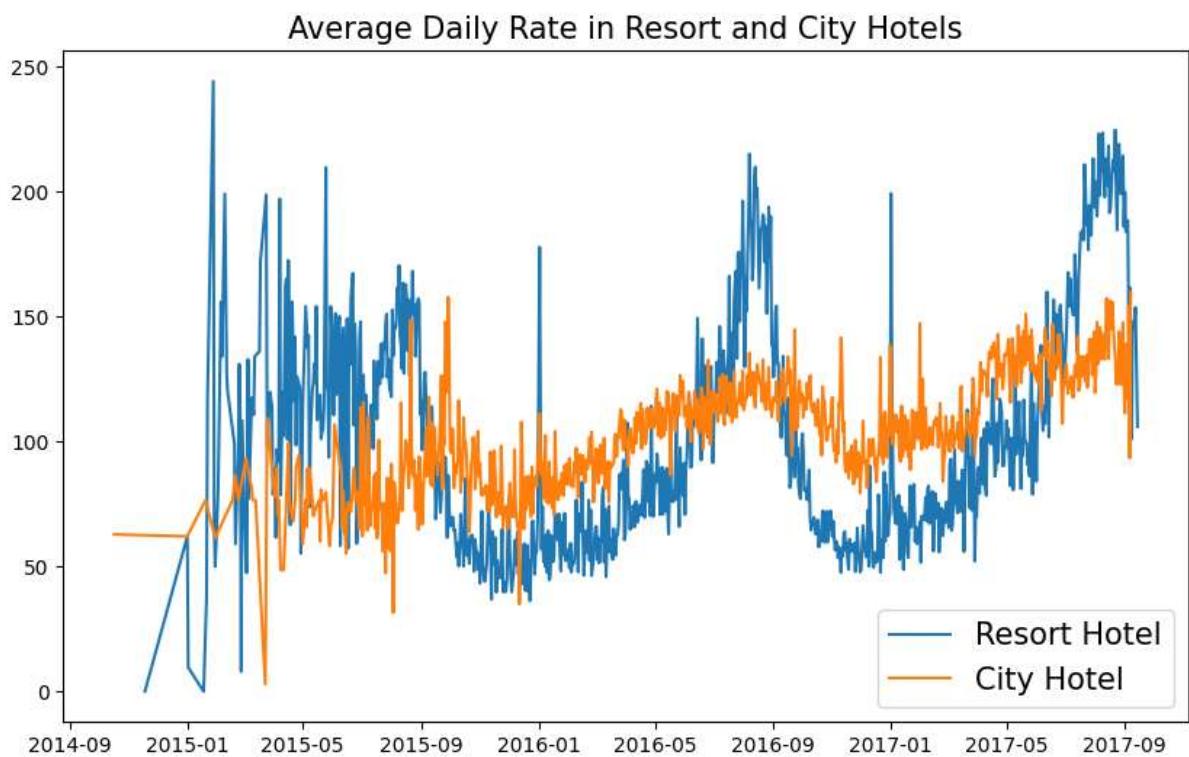
# Analysis



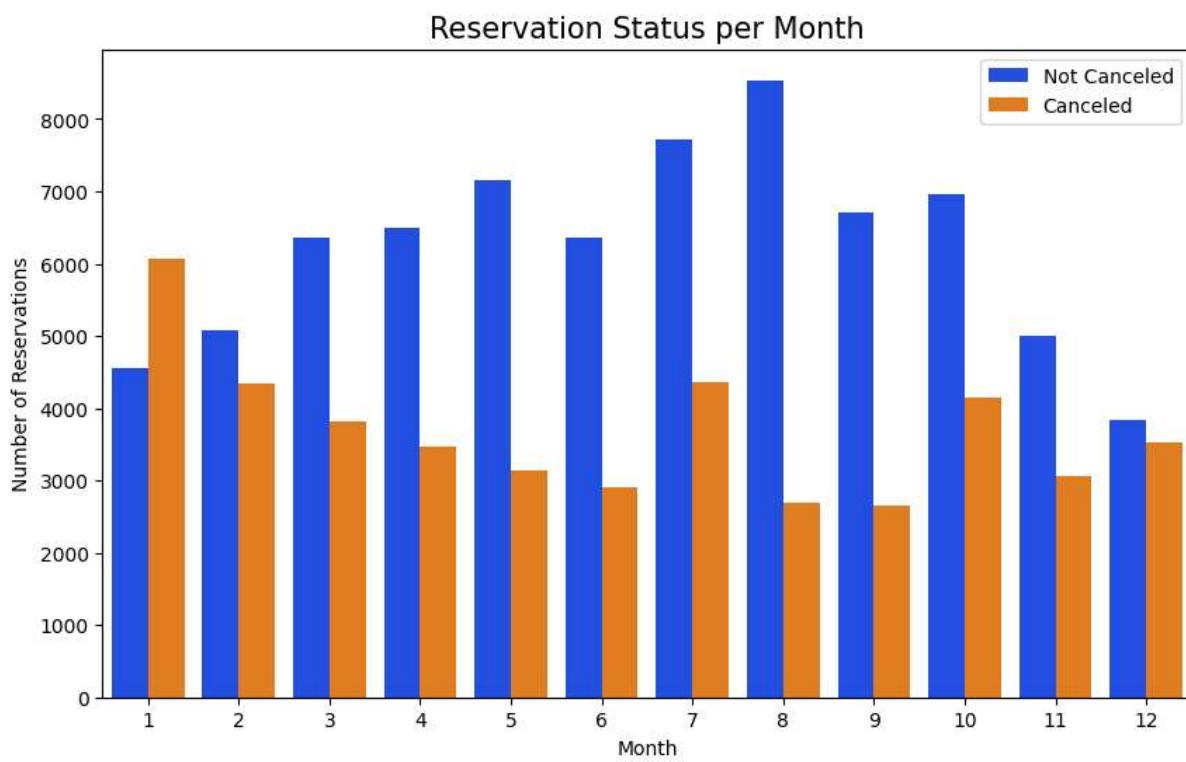
The graph shows the number of reservations that were cancelled and those that are not. It is showing that a significant number of reservations have not been cancelled. There are 44152 which is about 37% of clients who cancelled their reservations, which would have a significant impact on the hotels revenue.



In comparison to Resort Hotels, Number of bookings in City Hotels is high. It is possible that the expenses in Resort hotels is more compared to that of City hotels. In addition, Cancellation of bookings is high in City hotels compared to Resort hotels.

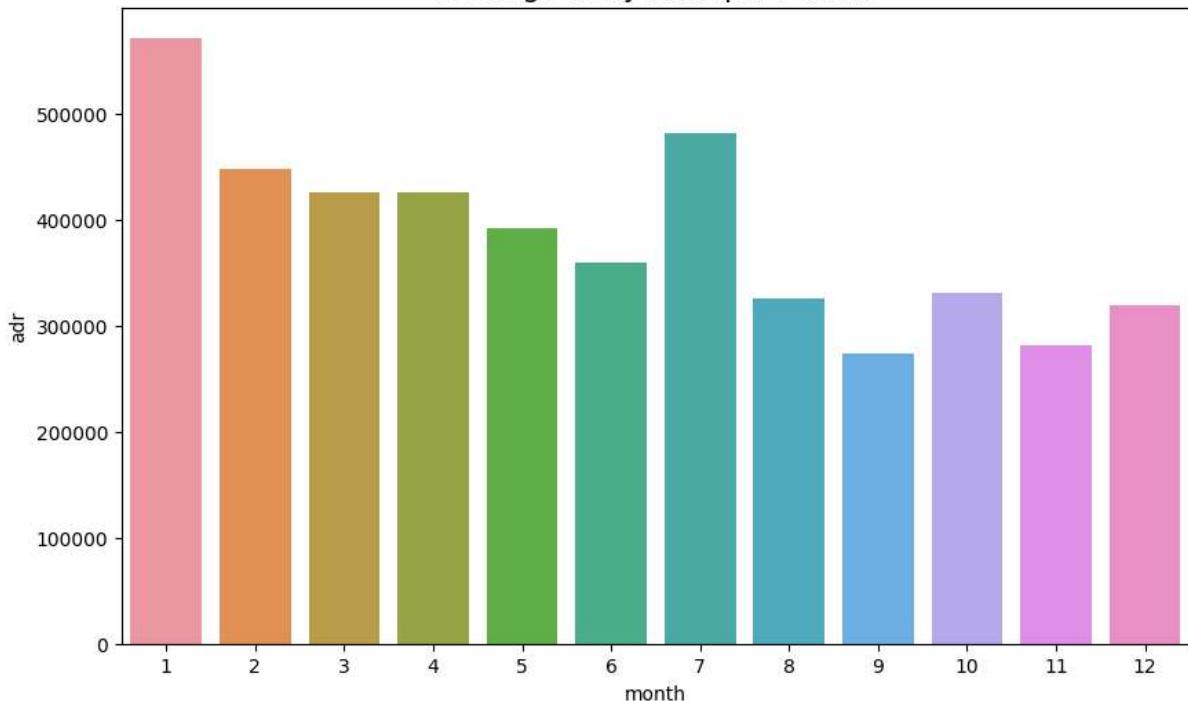


The line graph shows that, on certain days, the Average Daily Rates for a City hotel is higher than Resort Hotels. On some other days especially in the months of May - September, Average Daily Rates of Resort Hotels is higher than City hotels. During weekends the Average Daily Rates are higher than the Weekdays.



The above grouped bar graph is to analyse the months with highest and lowest reservation levels according to the reservation status. As it is shown that the number of reservations and confirmed reservations are higher in the month of August. Highest number of cancelled reservations were seen in the month of January.

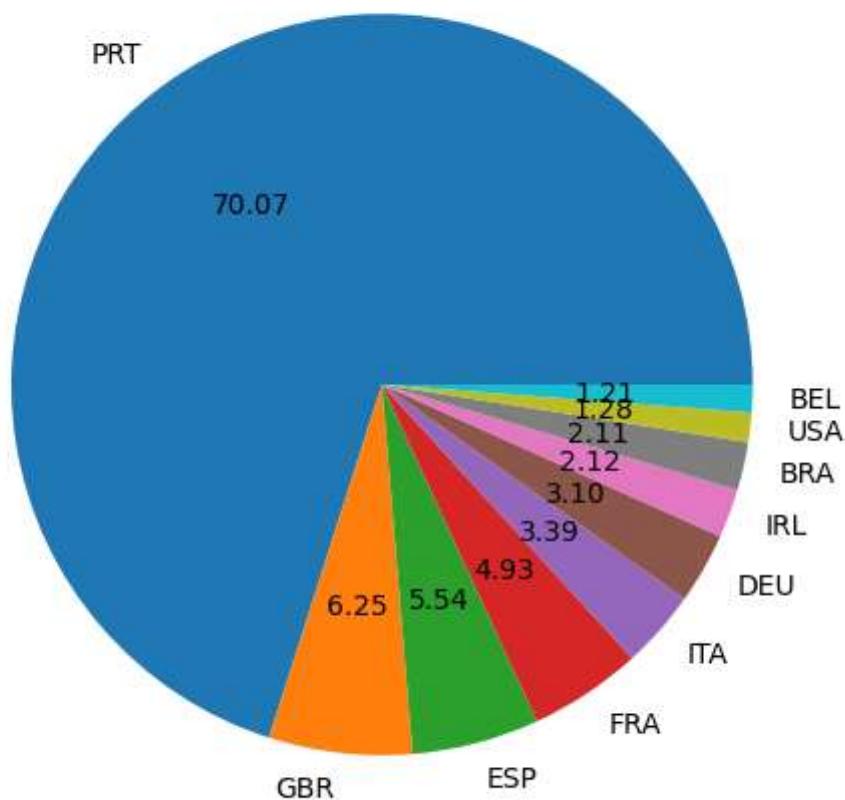
Average Daily Rate per Month



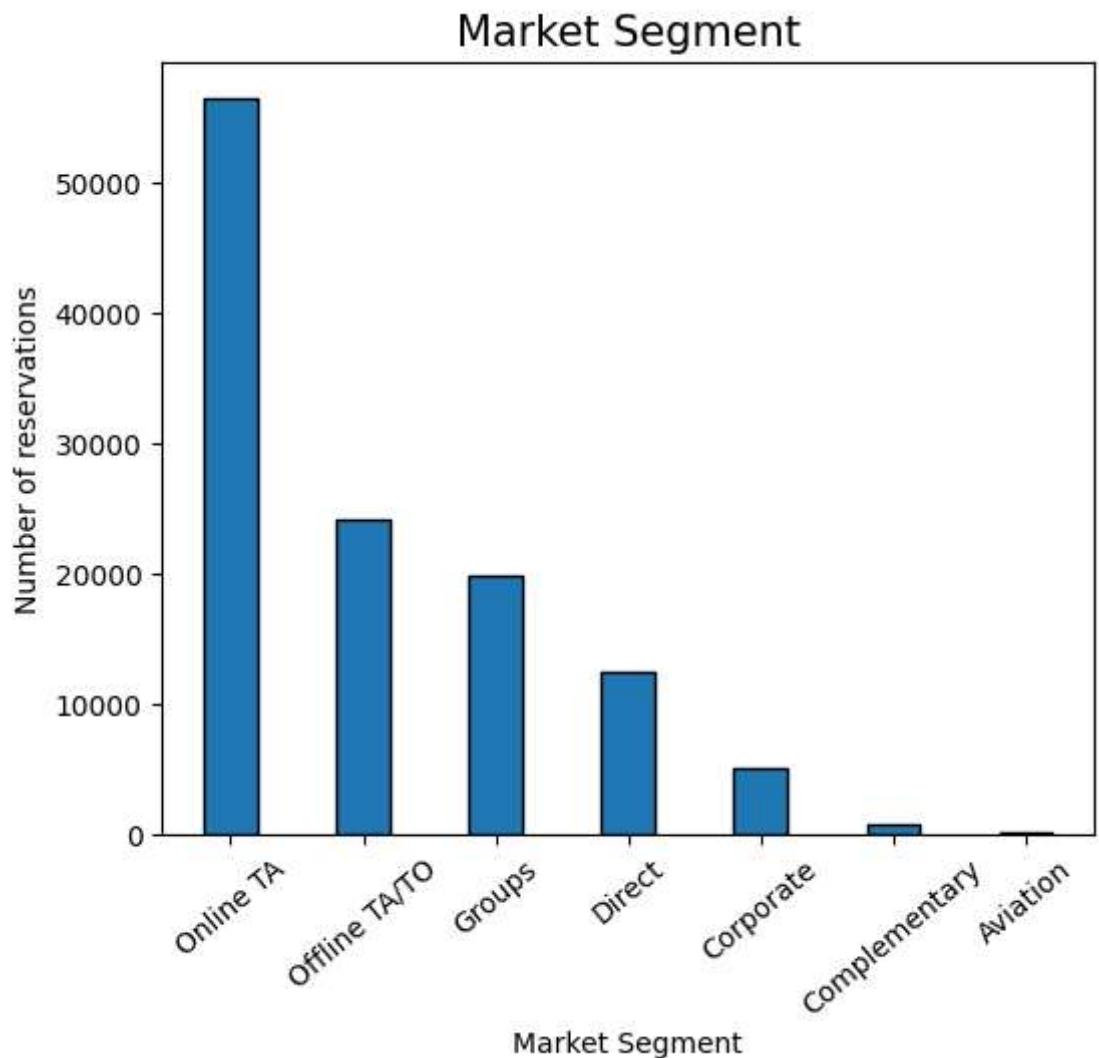
The above plot demonstrates that cancellations are most common when prices are high and are least common when the prices are low. In the month of January, prices are high, hence the cancellation is high and vice versa in the month of August.

The Analysis of the countries with the highest cancellation of reservations is as follows:

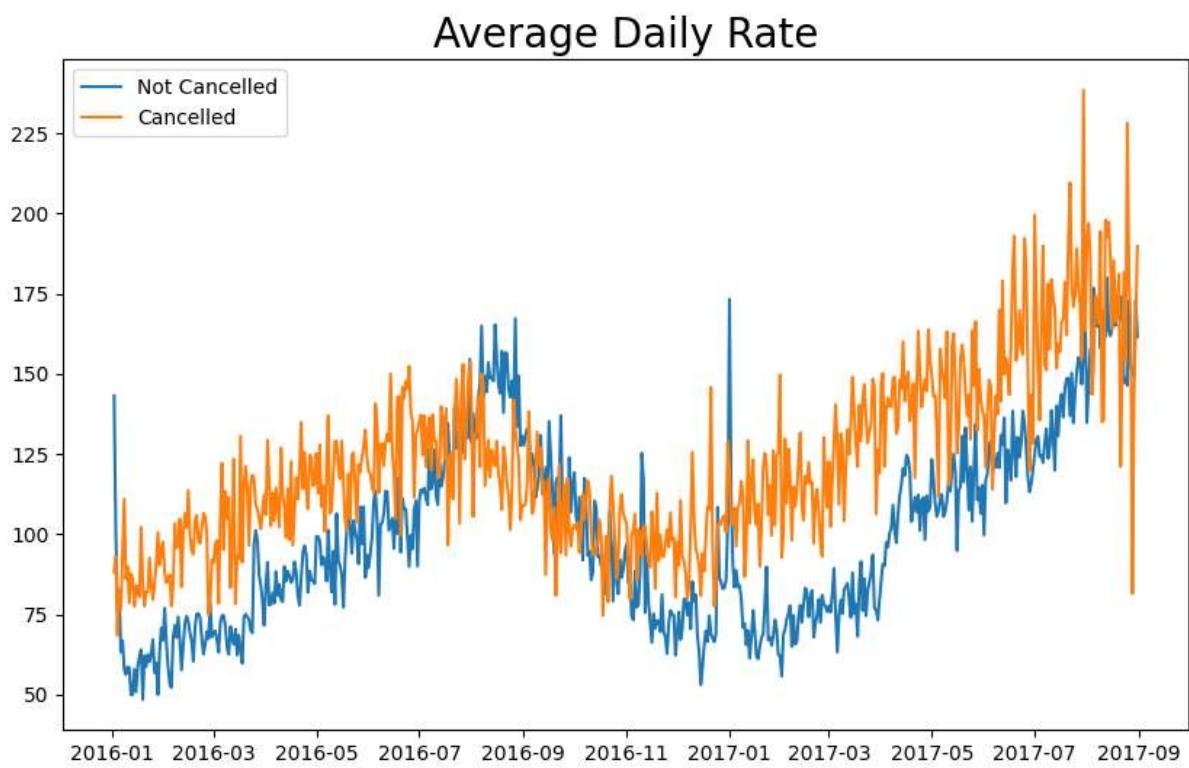
### Top 10 Countries with canceled Reservations



From the above pie chart, it is observed that Portugal has the highest number of cancellations.



It is observed that around 47% of reservations are from Online Travel Agencies, whereas 20% is through Offline Travel Agencies and 16% & 10% through Groups and Direct Reservations. Only 4% clients book hotels directly by visiting them and booking reservations.



As seen in the graph, reservations are cancelled when the Average Daily Rate is higher than when it is not cancelled.

Hence, the above analysis proved that the **higher price leads to the higher cancellation.**

## **Suggestions**

1. Number of cancellations increases as the price increases. In order to prevent cancellation of reservations, hotels could work on the pricing strategies and try to lower the rates for specific hotels based on locations. Hotels can also provide some discounts to its customers.
2. The ratio of cancellation and not cancellation is higher in the Resort hotels than City hotels. Resort hotels should provide reasonable discounts especially during weekends and holidays.
3. The cancellations are higher during the month of January, Hotels should start campaigns and marketing with a reasonable amount to decrease the cancellation of the reservations.
4. The quality & services of the hotels should be increased mainly in Portugal where highest cancellations is existing to reduce cancellations.