

# 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 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

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

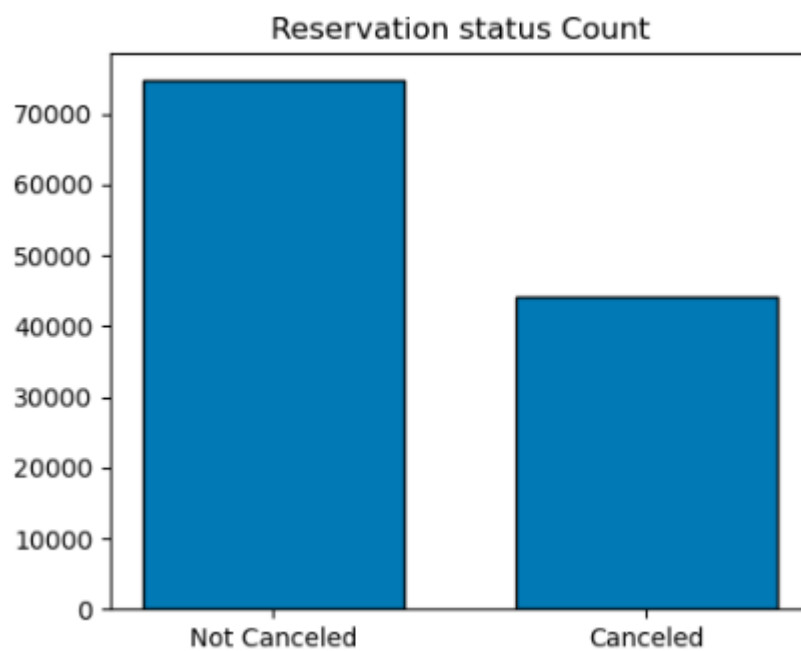
# Research Question

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

# Hypothesis

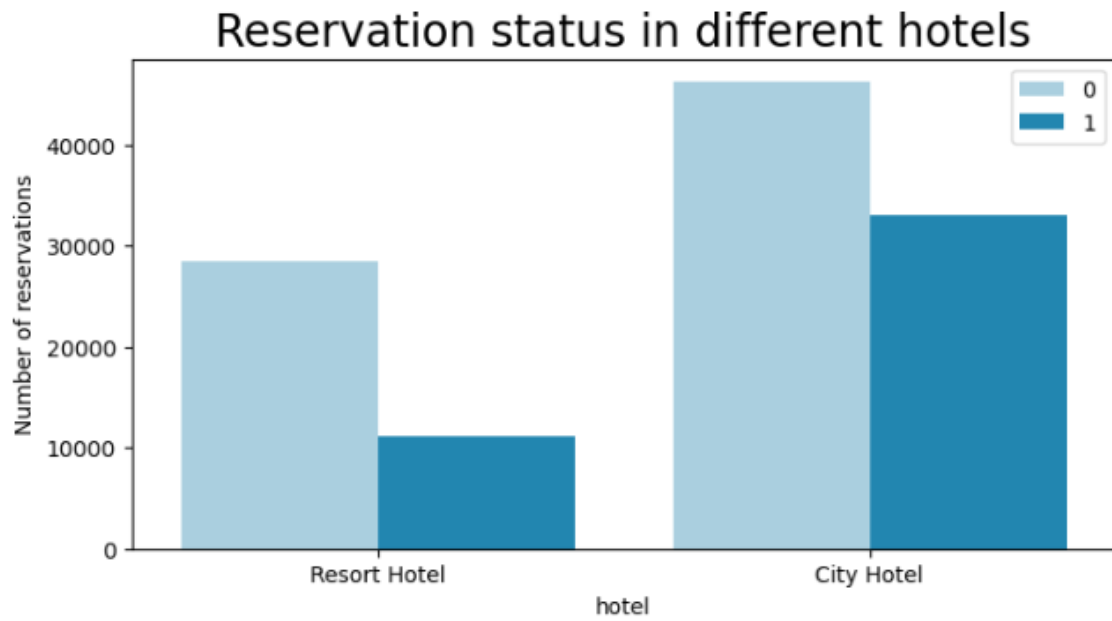
- More cancellations occur when prices are higher.
- When there is a longer waiting list, customers tend to cancel more frequently.
- The majority of clients are coming from offline travel agents to make their reservations.

## Analysis and Findings

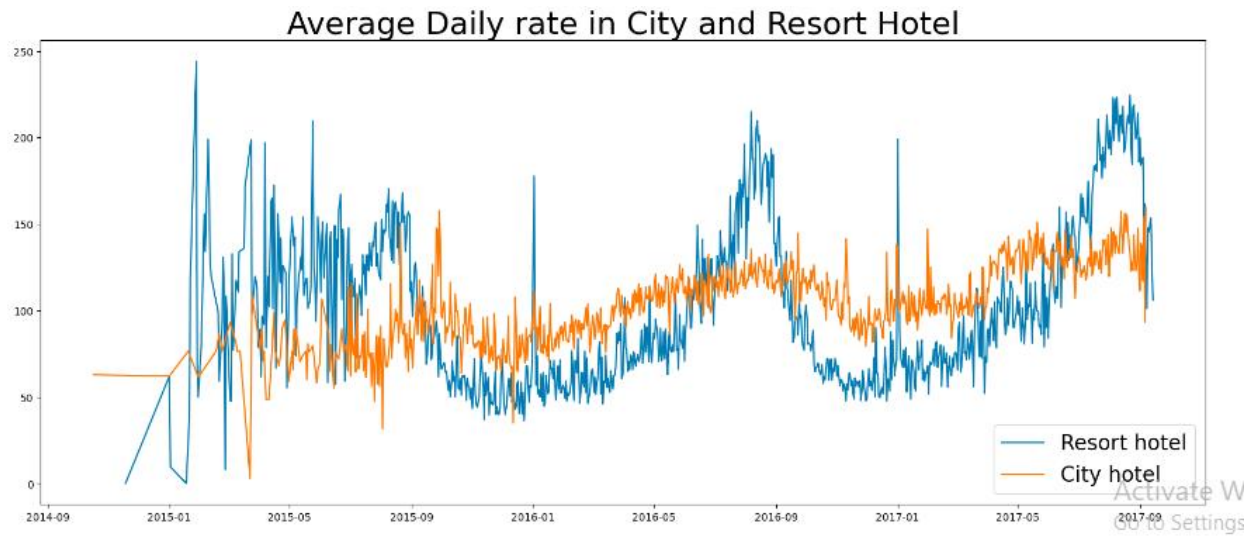


The number of bookings that are dropped and those that are not is shown in the bar graph below.

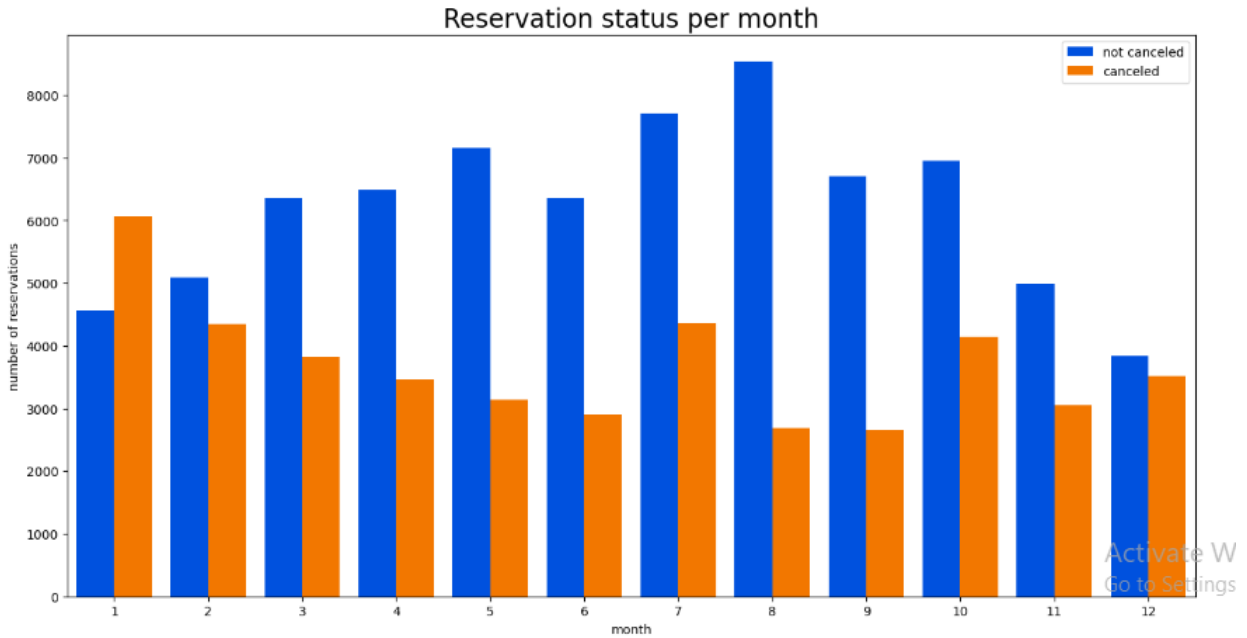
There are still a lot of bookings that haven't been canceled, that for sure. There are still 37% of customers who cancelled their ticket, which has a big effect on how much money the hotels make.



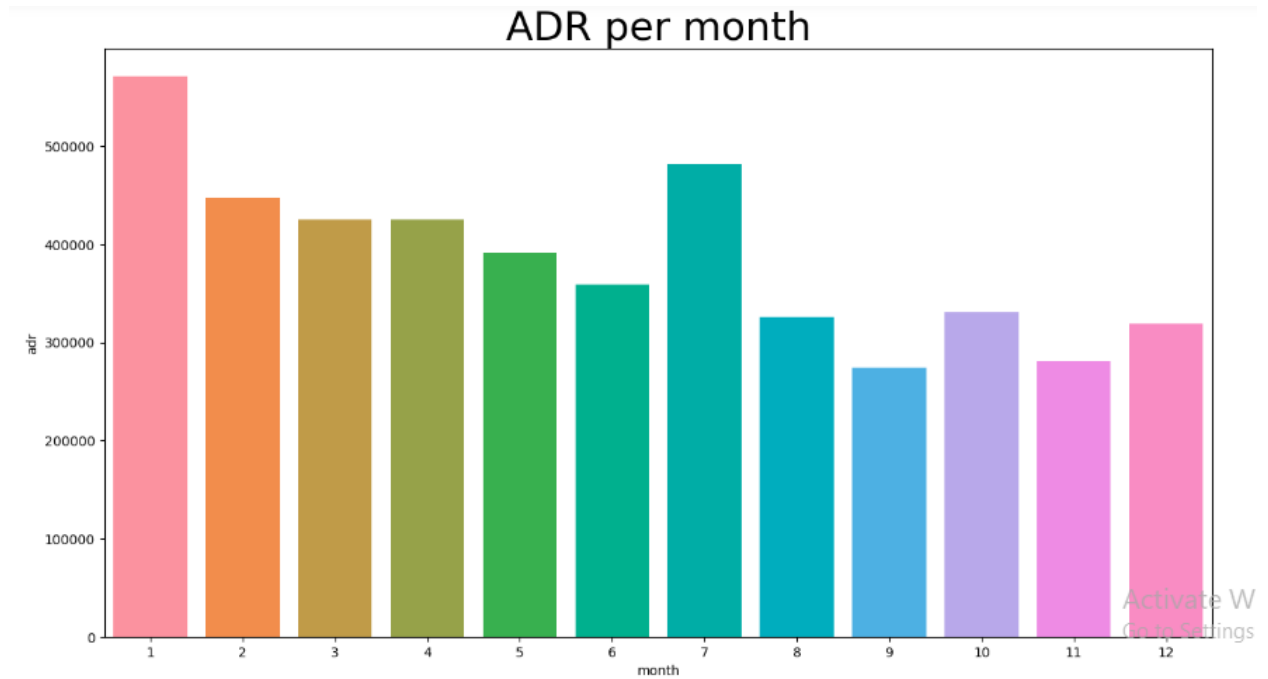
There are more reservations at city hotels than at vacation hotels. It's possible that hotels in resorts cost more than hotels in towns.



On some days, the line graph above shows that the average daily rate for a city hotel is less than that of a vacation hotel. On other days, it is even less. Resort hotel rates may go up on the weekends and during holidays, that much is clear.



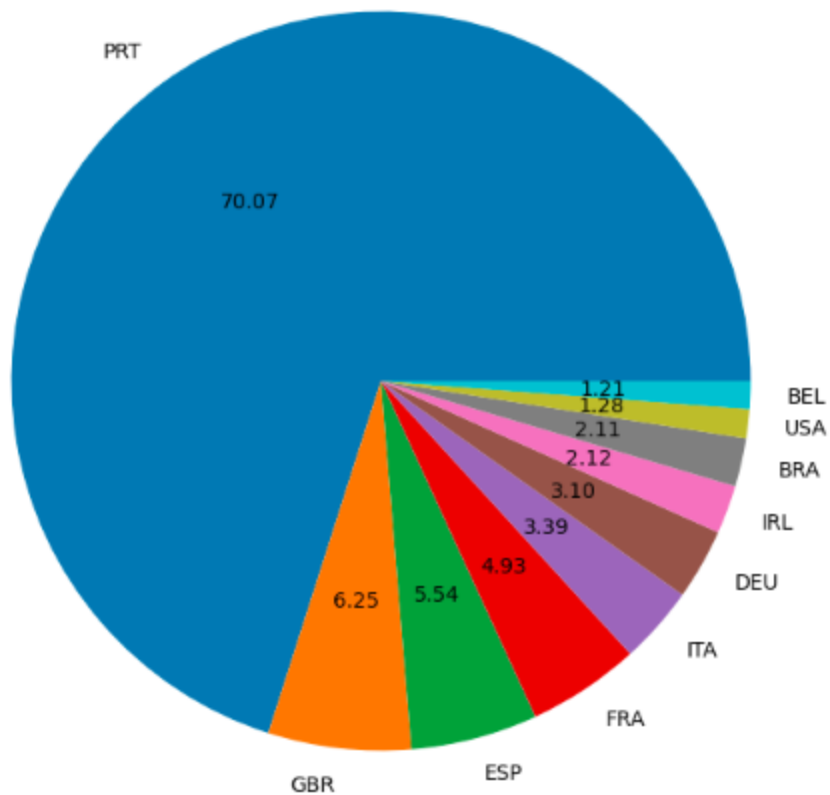
For the purpose of analyzing the months with the greatest and lowest reservation levels according to reservation status, we have created the grouped bar graph. There is a clear trend showing that August has the highest volume of both confirmed and canceled bookings. on the other hand, January has the highest number of reservation cancellations.



The cancellation rate is highest when prices are high and lowest when prices are low, as seen in the bar graph. That being the case, the cancellation will only affect the cost of the lodging.

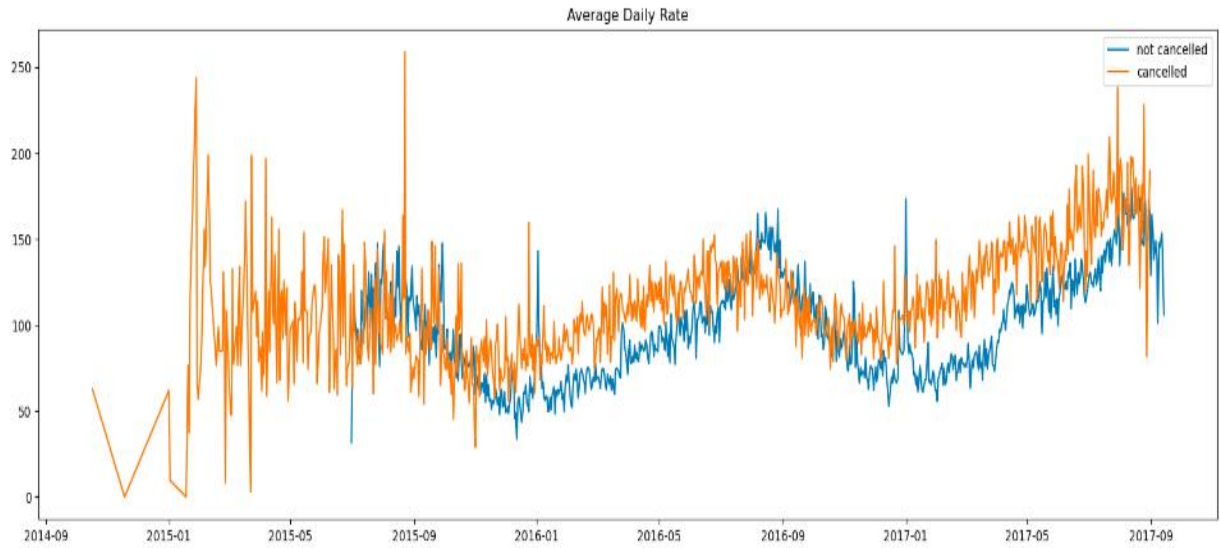
Finding out which nation has the most canceled reservations is our next task. The nation with the most cancellations is Portugal.

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. Only 4% of clients book hotels directly by visiting them and making reservations.





Cancellations occur when the average daily rate is greater than the non-cancellation state, as seen in the graph. The results corroborate all of the previous research showing that a greater price causes more cancellations.

# Suggestions

1. When prices go up, fewer people cancel their orders. Hotels should reevaluate their pricing tactics and look at offering discounted prices for certain areas in an effort to reduce reservation cancellations. Customers may also take advantage of sales.
2. For the simple reason that resort hotels have a greater cancellation rate compared to city hotels. Hotels should, therefore, provide acceptable weekend and holiday accommodation discounts.
3. Since hotel cancellations are at their peak in January, this is a good time for businesses to launch marketing efforts with realistic budgets in order to boost income.
4. They might also enhance the quality of their hotels and services, particularly in Portugal, to decrease the number of cancellations.