

# Business Problem

In recent years city hotel and resort hotel have seen high cancellation rates. Each hotel is dealing with a number of issues and as a result generating less revenue while spending a huge amount on maintenance of cancelled and un booked rooms. Lowering cancellation rate is main task of both the hotels.

The Analysis of hotel booking cancellation and various factors responsible for it are the main topics of this report.



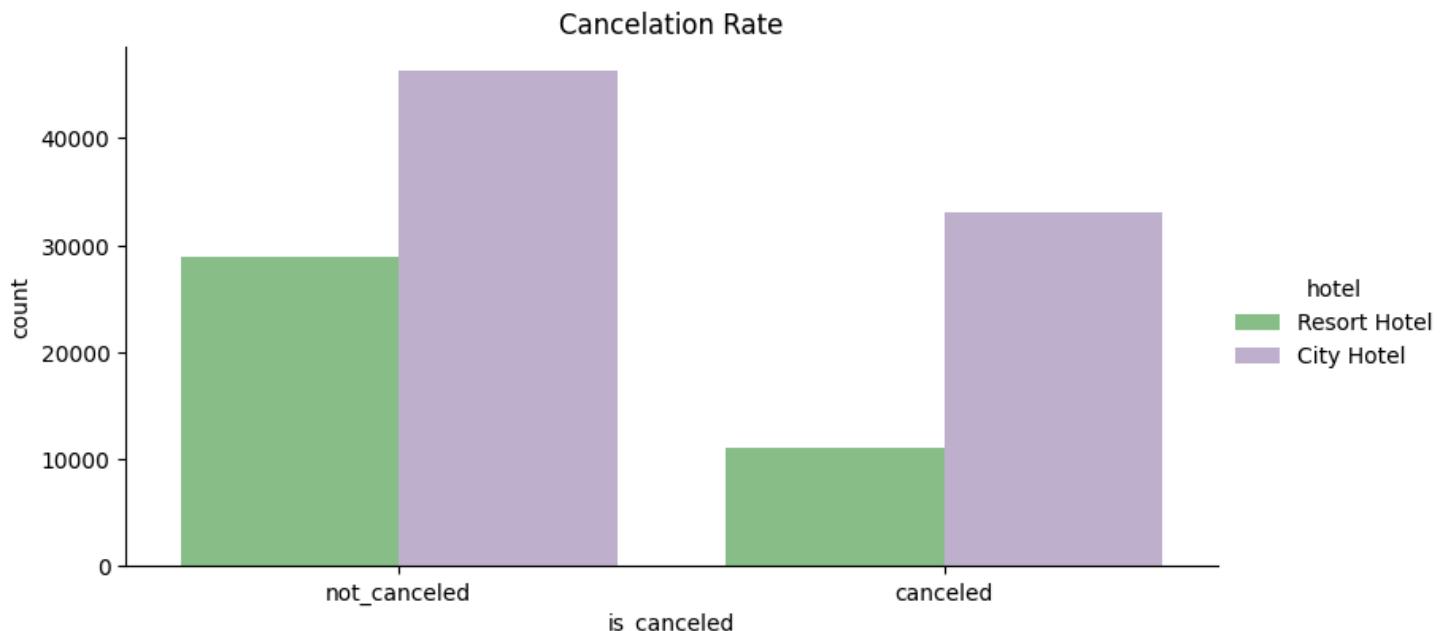
## Research Questions

- What are the variables that affect hotel reservation cancellation?
- How we can make hotel reservation cancellation better?
- How will hotel be assisted in making more profit?

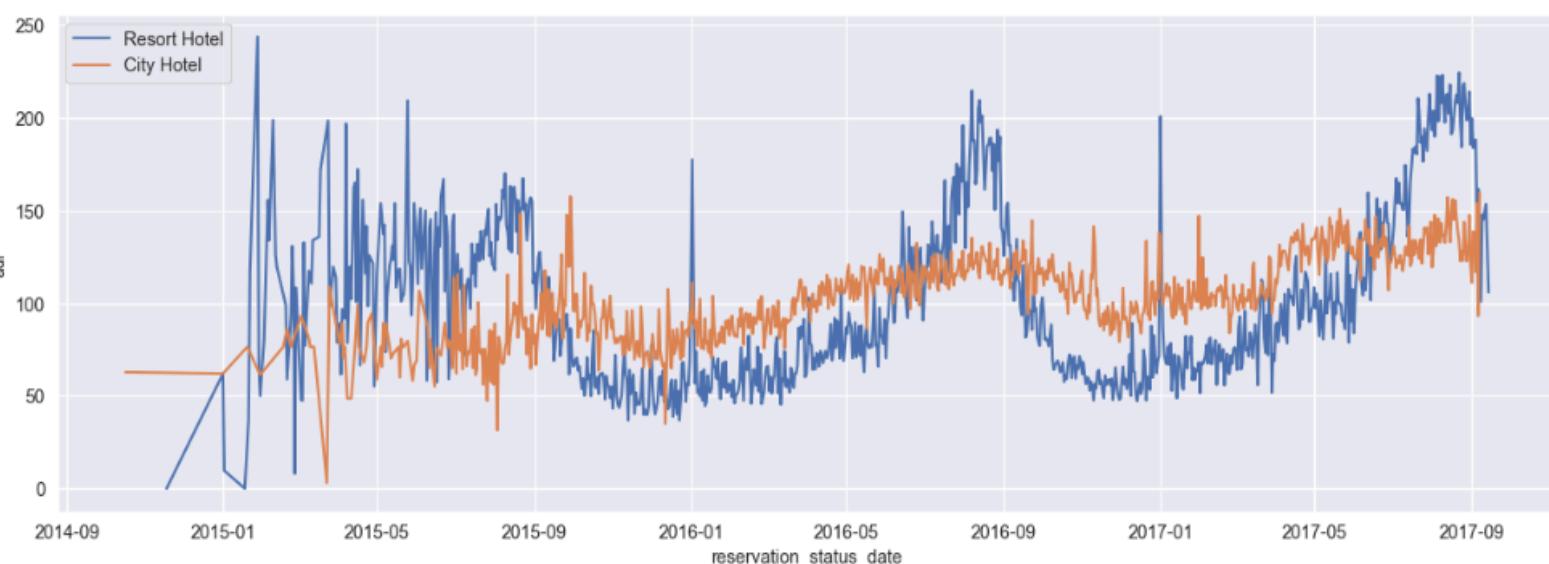
## Hypothesis

- More cancellations occur when prices are higher?
- When there is a long waiting list customer tend to cancel more frequently?
- Majority of the clients are coming from offline TA.

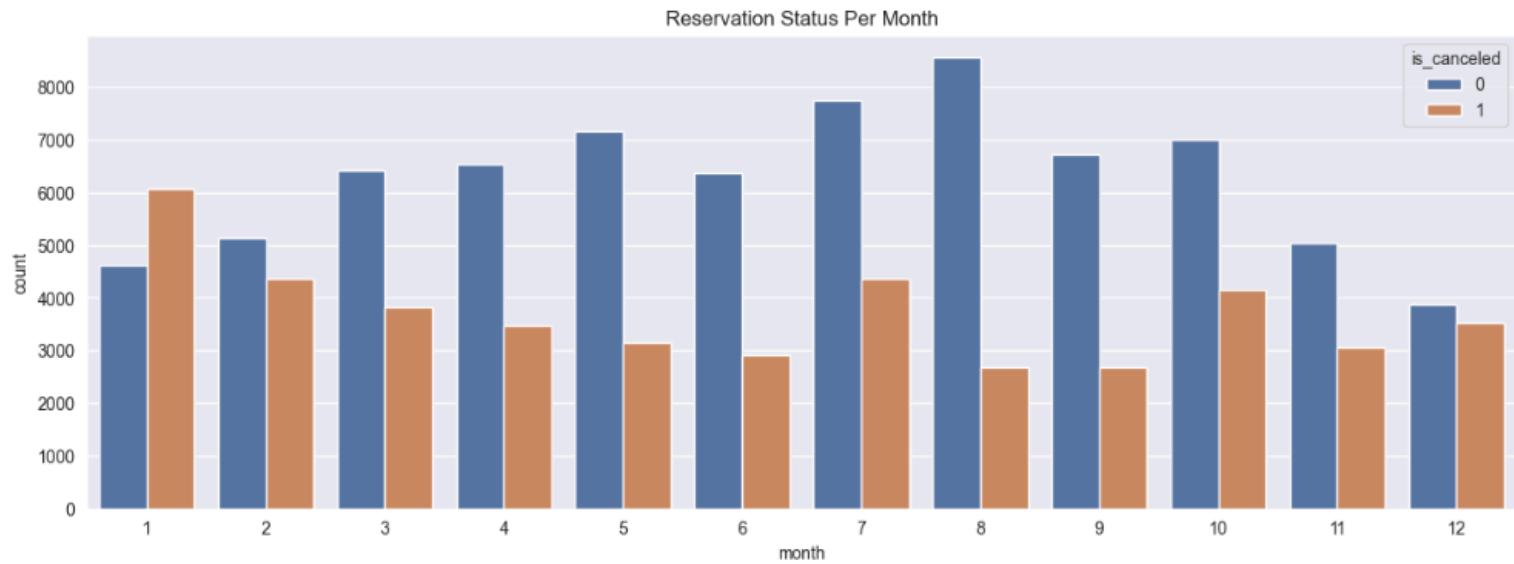
# Analysis And Findings



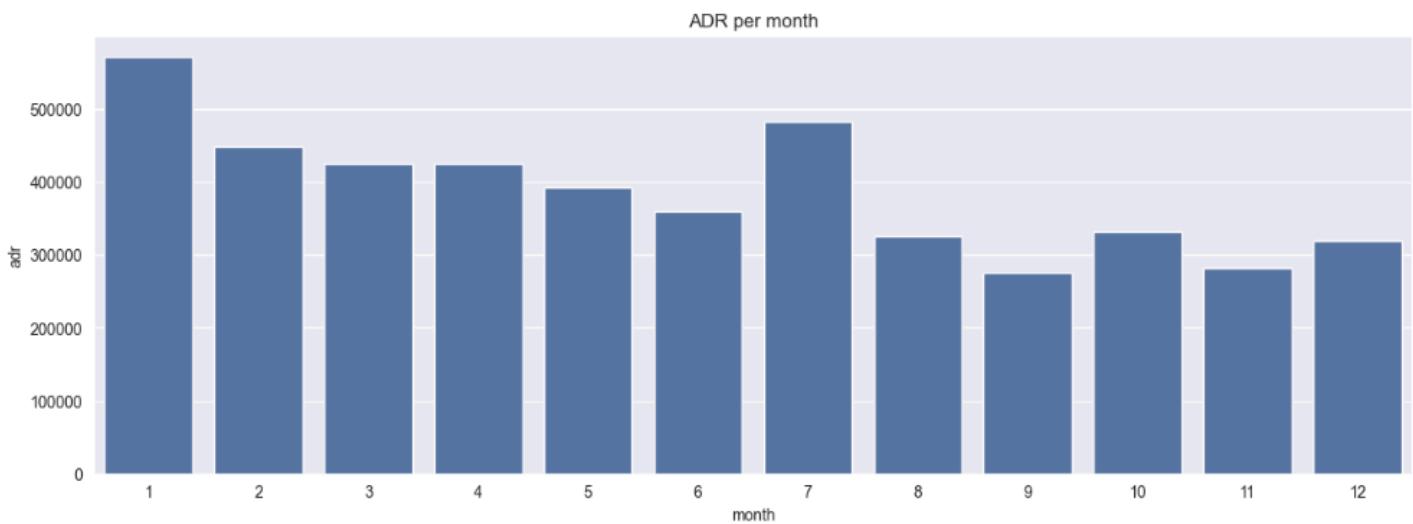
As per the above visualization cancellation rate is around 37% while not cancellation rate is around 63%. Hotel cancellation is much higher in City hotel as compared to resort hotels. Around 42% bookings are cancelled in City hotels while Around 28% bookings are cancelled in Resort hotels.



ADR in City hotels is much higher than Resort hotels. This visualization confirmed that more ADR leads to more cancellation. This plots have some spikes that show that during weekends or festive seasons ADR is more high for both the hotels.

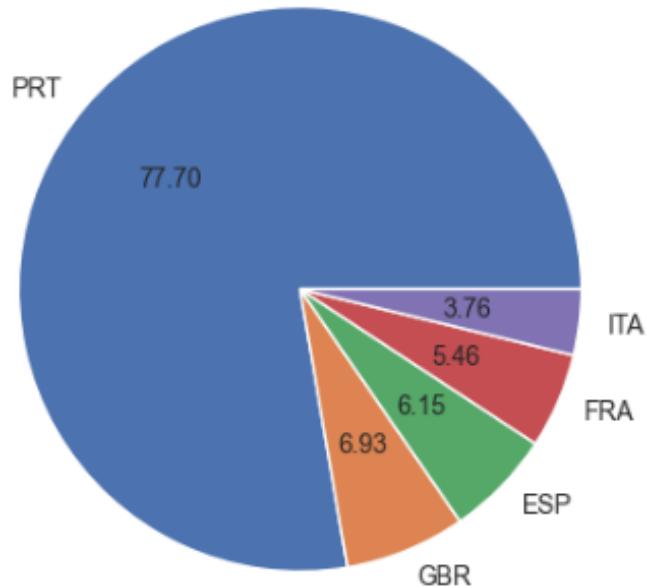


This visualization indicates reservation status per month. As per this diagram higher reservation is in August month and lower reservations in December and January month. As well as we can see that higher cancellation in January as well as lower cancellation in August. This indicates higher the reservation lower the cancellation and lower the reservation higher the cancellation.

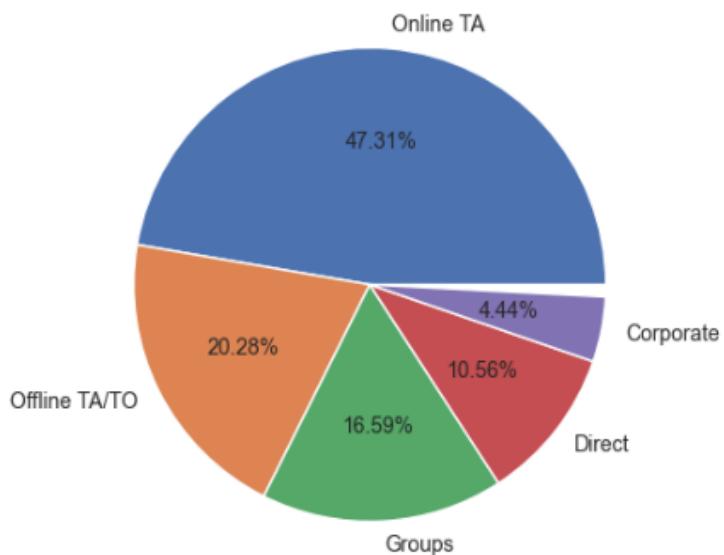


This visualization indicates month wise ADR generation. This shows that January has higher ADR while September as lower. This visualization proves the hypothesis that higher cancellation is find where higher ADR is.

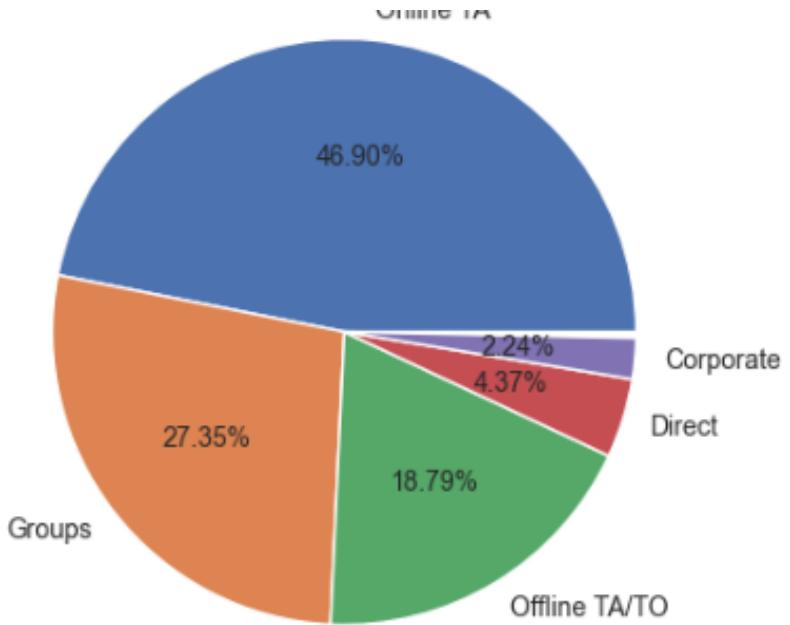
### Highest Cancelled Reservation In Countries



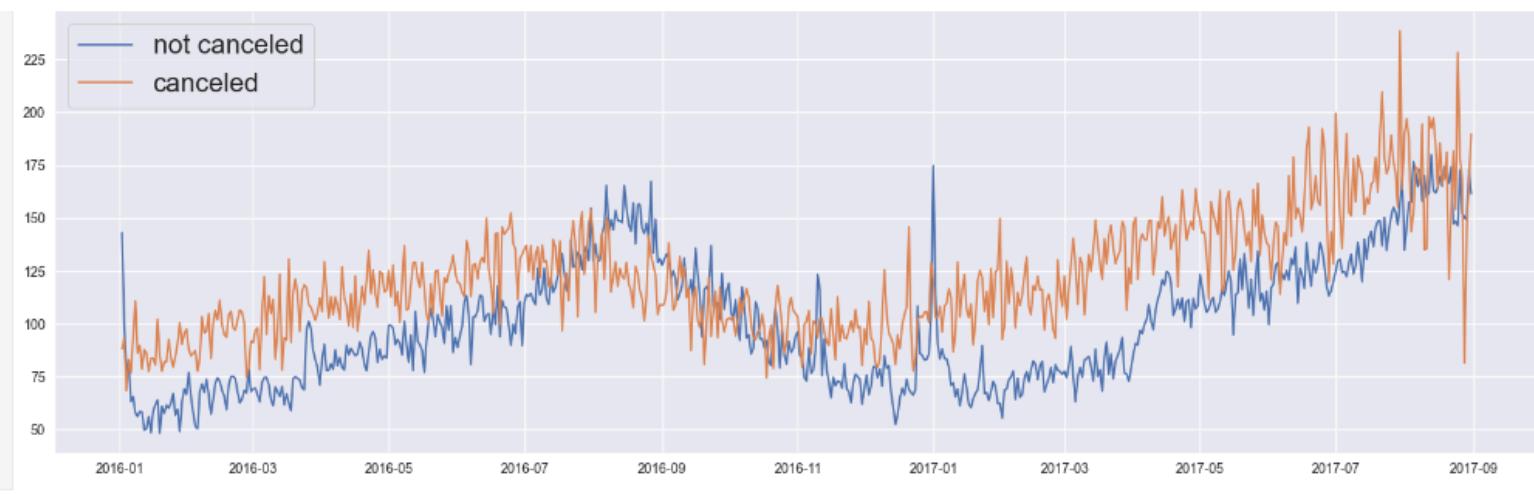
This visualization indicates Reservation Cancelled Country Wise. As per this Pie chart PRT occupies higher share approximately 78% in reservation cancellation. GBR and ESP occupies the second and third position.



This visualization indicates that around 48% clients are coming from online travel agents then around 21% are coming from Offline Ta/To, around 17% clients are coming in Groups. 11% are direct comers and around 5% are coming from Corporate.



This visualization indicates that Higher the reservation, higher the cancellation.  
Approximately 47% reservation are cancelled from online.



This visualization indicates that ADR is much higher for cancelled bookings.

## Suggestions

- Cancellation increases as the price of the hotel increases. Hotels need to work on their pricing strategy and should offer a competitive price based on location. They can also provide some discount to customers.
- As the ratio of reservation and cancellation is higher in city hotel so hotels should provide a competitive price or lower price on weekends.
- In the month of January hotels should start campaign or give some new year or group discount to decrease the cancellation.
- They can also increase the quality of their hotel and advertise same as exists on online platforms as cancellation is higher in online reservation.