

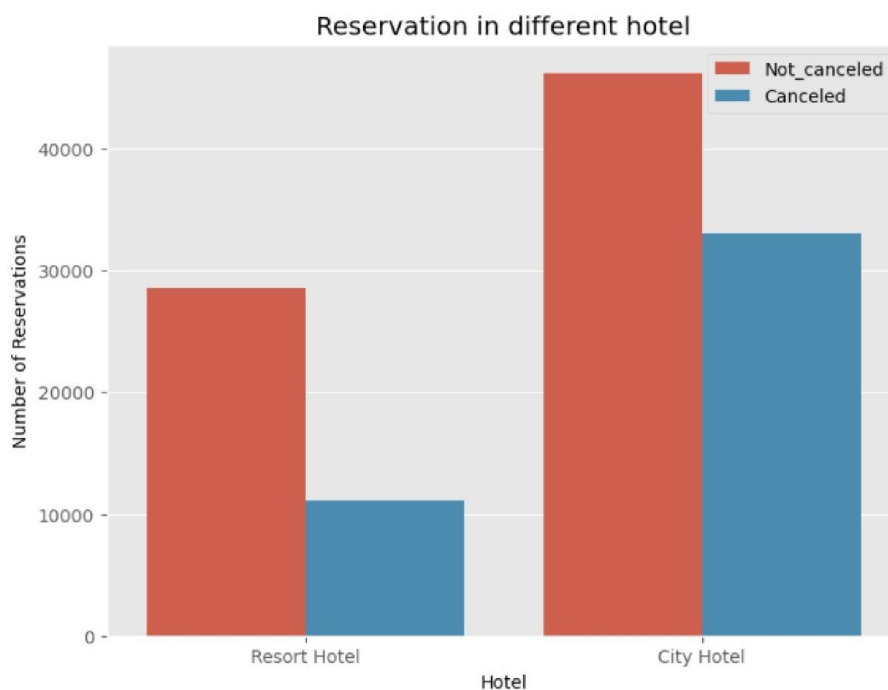
## Hotel Cancellation Analysis

Nowadays, when booking applications are more and more diverse, reservations become easier. Looking into the reservations booked in different hotels, we can understand why they booked or canceled their reservations. Using the data from Kaggle about City Hotel and Resort Hotel can help us to find out the possible reasons.

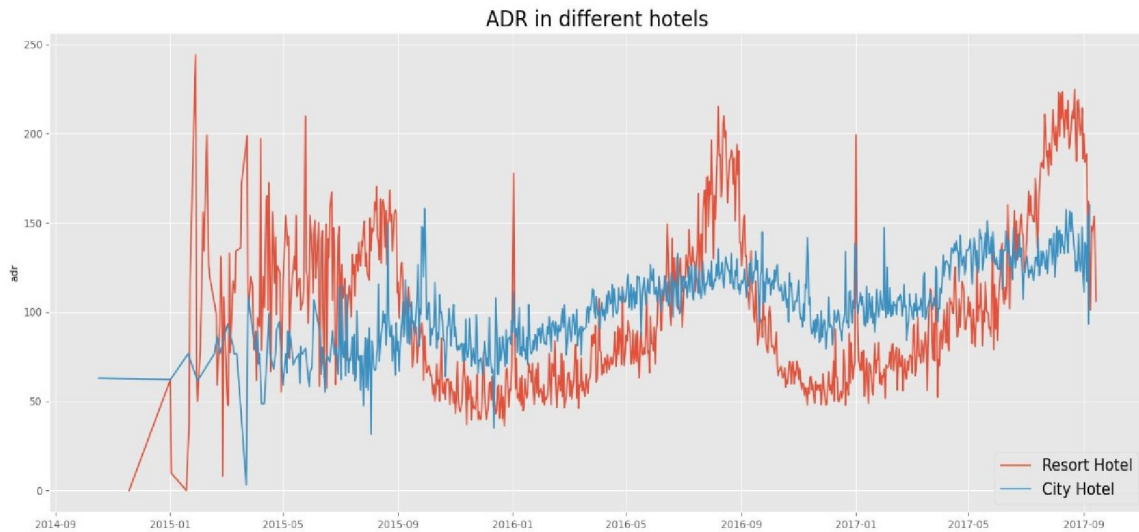
### Hypothesis

- Cancellation occurs when room rates are high.
- The longer the lead time, the lower the cancellation rate.
- Different deposit methods lead to different cancellation rates.

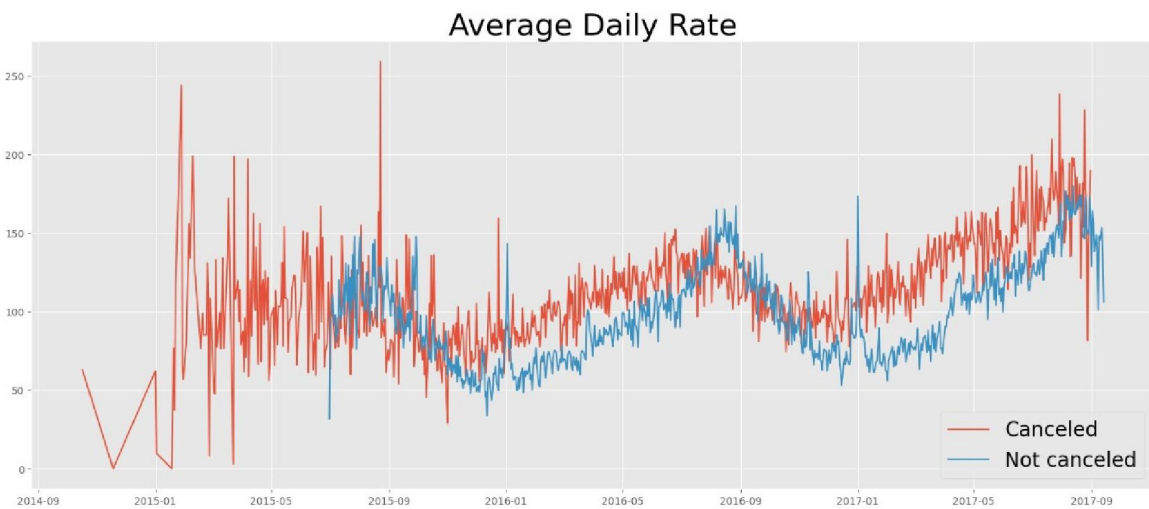
### Analysis and Finding



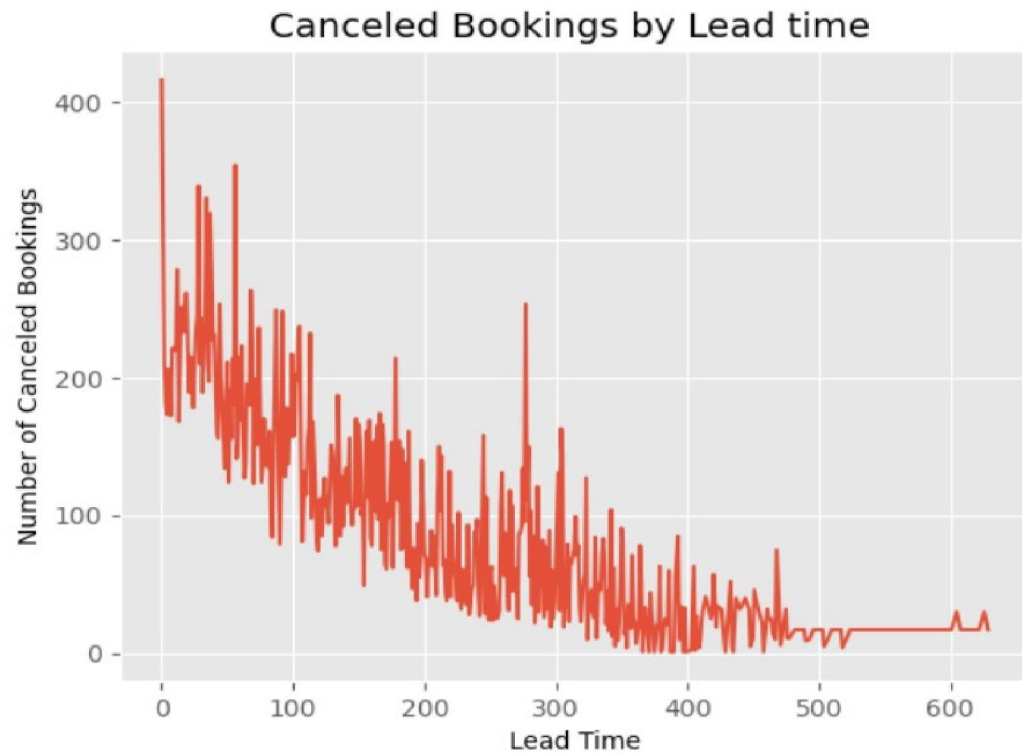
In comparison to Resort Hotel, City Hotel has more reservation bookings, so it's possible that the price of the Resort Hotel is higher than that of the City Hotel.



The line graph shows that on certain days, the average daily rate for Resort Hotel is more than that of the City Hotel and on other days, it's even more.



In this graph, we can see the reservations are canceled when the average daily rate is higher than when it's not canceled. This proves my hypothesis that cancellation occurs when the price is high.



The line graph shows that lead time and number of cancellations are inversely proportional which means the longer the lead time, the less likely people are to cancel. Looking at 0, representing the same-day cancellations, we can see a high cancellation rate of 416. This suggests that the more in advance a hotel is booked, the less likely guests are to cancel.



The bar chart shows that the majority of canceled bookings lie in the “No Deposit” section (67,1%) when the “Refundable” section is the least (<1%). That makes things obvious that hotel guests are more likely to cancel their reservation when they did not deposit a certain amount of money in advance.



In addition, the number of bookings at both hotels is highest in the summer and mid-year months, but the cancellation rate in these months is also very high, especially in the first 2 months of the year.

## **Suggestions**

- Hotels need to come up with reasonable pricing strategies to minimize cancellations. Especially in January and February, it is necessary to have promotions or vouchers to stimulate customers to book more.
- The hotel can encourage customers to deposit in advance and give them a discount code to reduce the cancellation rate.
- Create visual campaigns to grab customers' attention, and get them to book in advance.