

HOTEL BOOKING CANCELLATION ANALYSIS

REPORT



Business Problem

In recent years, City Hotel and Resort Hotel have seen high cancellation rates. As a result, each hotel is now dealing with number of issues, including fewer revenues and less than ideal hotel room usage. Consequently, lowering cancellation rates is both hotels' primary goal in order to increase their efficiency in generating higher 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.



Research Questions

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

Assumptions

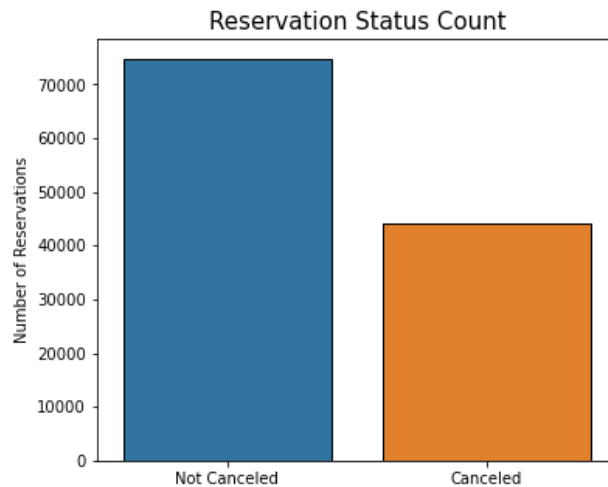
1. No unusual occurrences between 2015 to 2017 will have a substantial impact on the data used.
2. The information is still current and can be used to analyze a hotel's possible plan in an efficient manner.
3. There are no unanticipated negatives to the hotel employing any advised technique.
4. The hotels are not currently using any of the suggested solution.
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.

Hypothesis

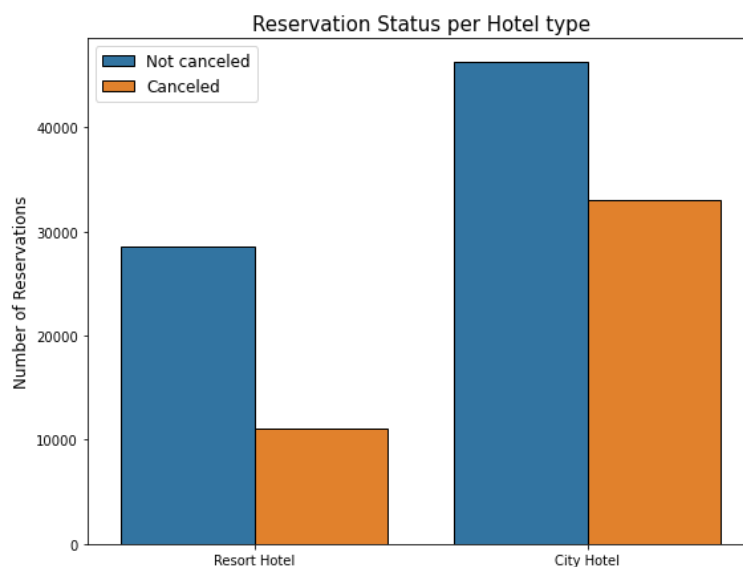
1. More cancellations occur when prices are more.
2. When there is a longer waiting list, customers cancel their reservations more frequently.
3. If customer assigned different room type than that of reserved, they prefer to cancel.

Analysis & Findings

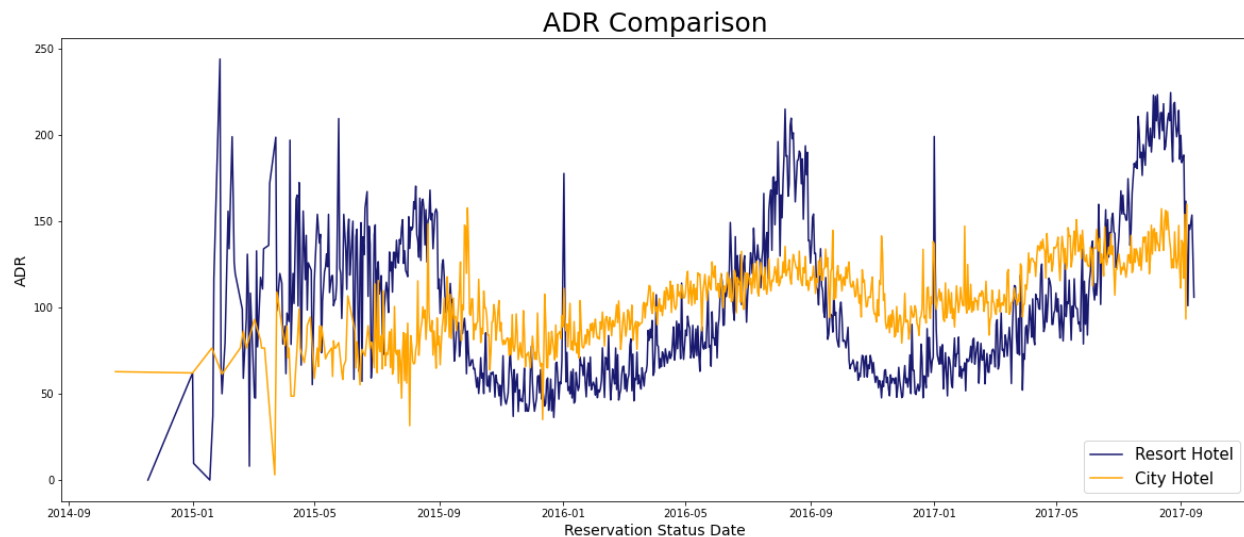
○ Reservations & Rates



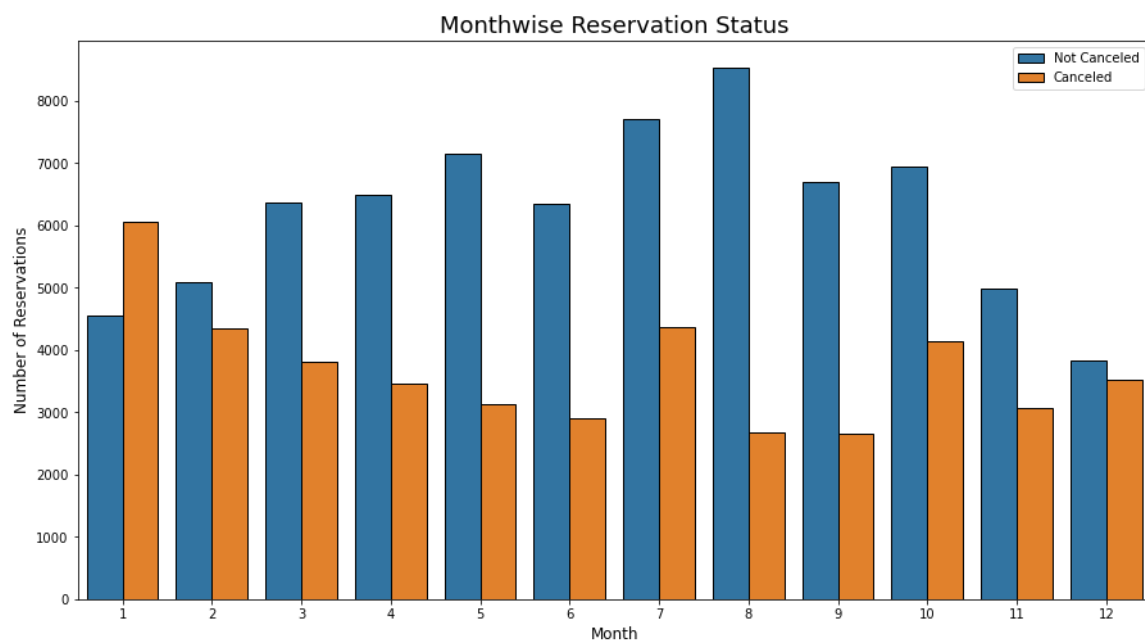
Above graph shows the percentage reservation that are canceled and those are not. It can be seen that there is still high number of reservations that not have been canceled, but the number 37% for canceled reservations, which has significant impact on the hotel's earnings, is definitely a worrying factor & needs to be given immediate attention.



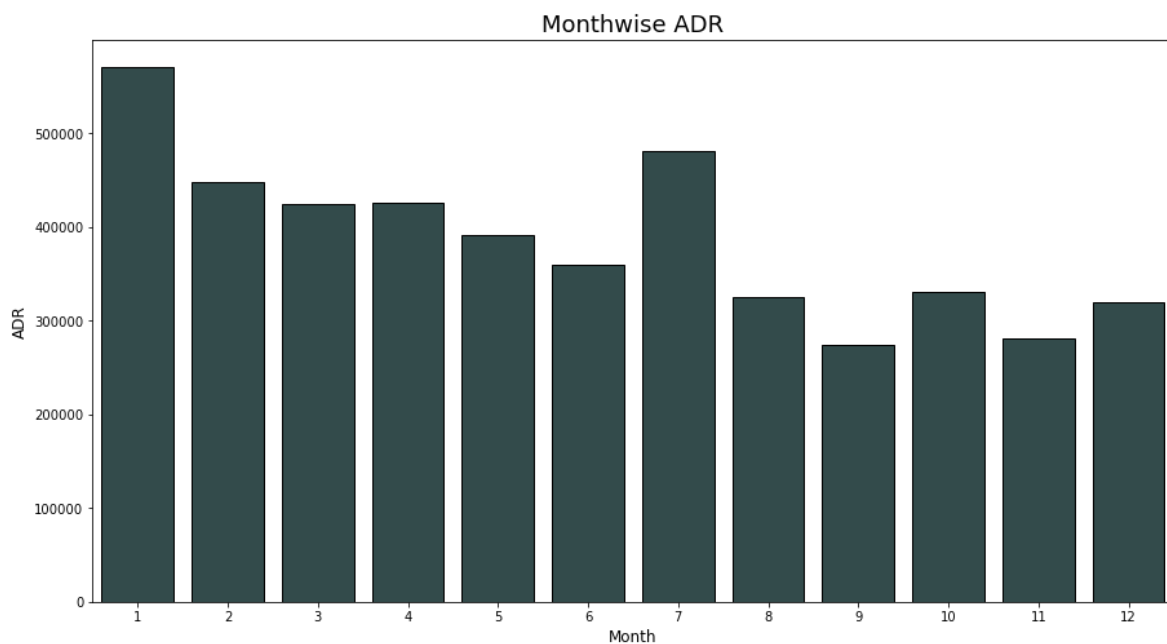
In comparison to resort hotels, city hotels have a greater number of bookings. It's possible that resort hotels are more expensive than that of city hotels.



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



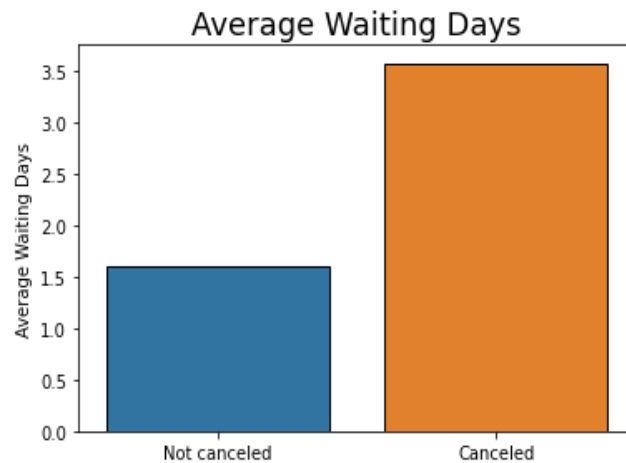
Further, we created a grouped bar graph to analyze months with highest and lowest reservations according to reservation status. It can be seen, both the number of confirmed reservation & number of canceled reservations is largest and lowest respectively for the month of August & September, whereas January, July are the months with the highest number of canceled reservations.



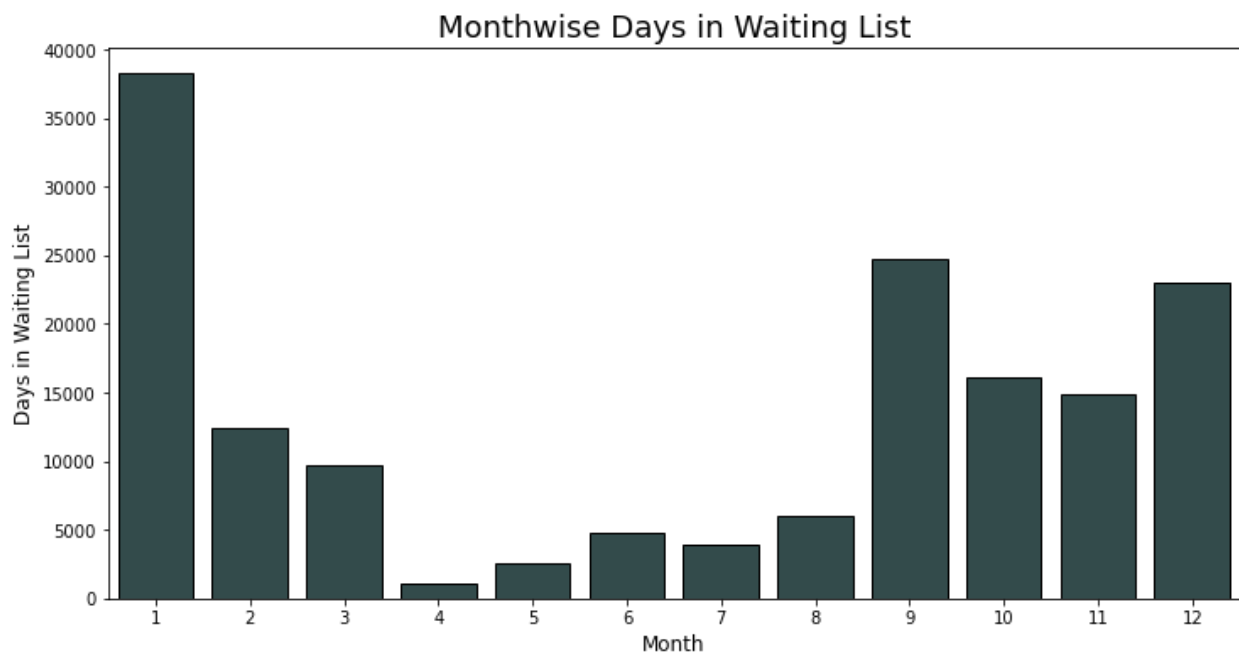
Highest ADR is in the month of January & July where the cancellation rates are also highest, while the month of August & September, where lowest cancellations occur, have comparatively much lower rates. This demonstrates that cost of accommodation plays crucial role in booking cancellations.

○ Days in Waiting List

Average time in waiting list is greater than 3 and ½ days when the reservation status is 'Canceled' and it is around 1 and ½ days when it is 'Not Canceled', which is again pointing towards a cause of cancellation of the reservation, especially in case of city hotel.



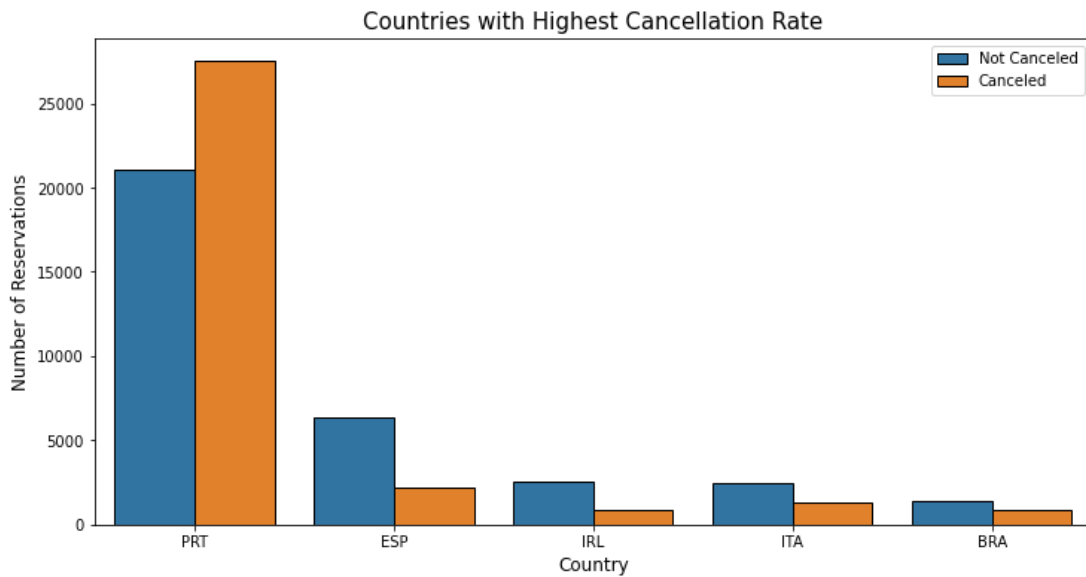
Below bar chart shows month wise days in waiting list and it can be concluded that months with high canceled reservations have higher days in waiting list.



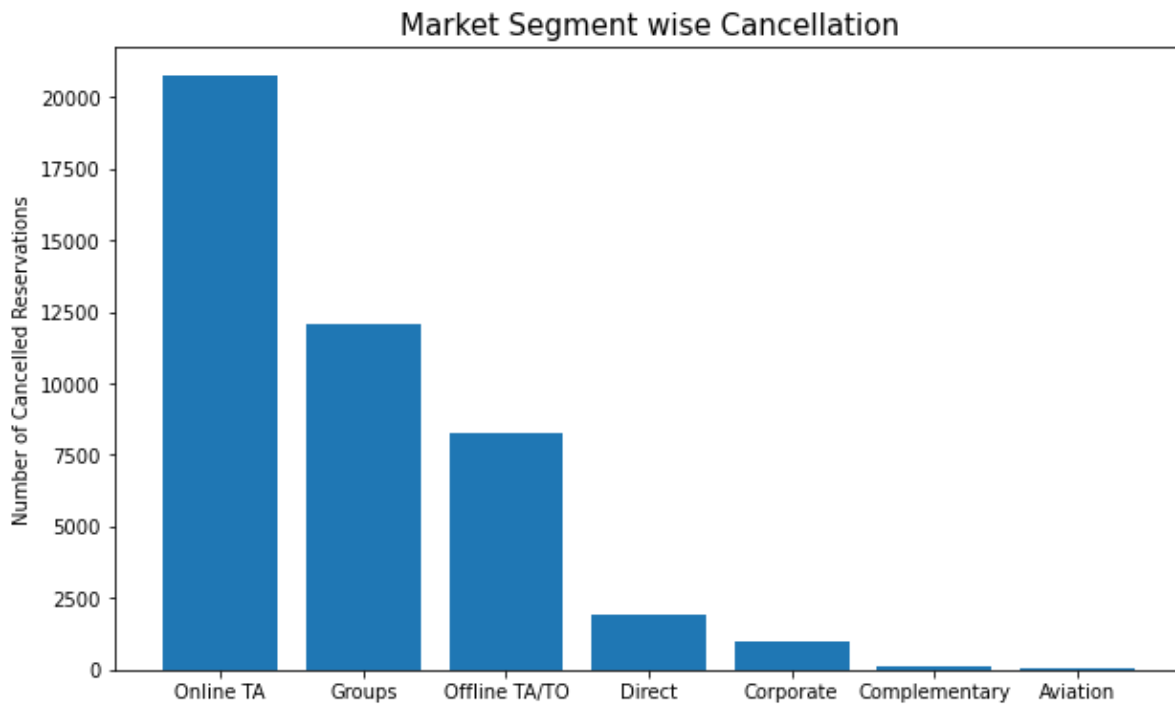
○ Assigned Room Type

As per the analysis, the cancellation rate, when assigned room type is different than reserved room type, is around 5%. Which doesn't go with our third hypothesis, and hence, proves it wrong.

○ Country and Market Segment



Portugal is the country with highest cancellation rate. More than 56% of the reservations had been canceled in Portugal, between July 2015 and August 2017, followed by Brazil (37.3%), Italy (35.3%), Spain (25.4%) & Ireland (24.6%) respectively, amongst top 5 countries with highest cancellation rate.



If we look at Market Segment wise numbers, 'Online TA' (online travel agent) category brings 47.4% of the total reservations, but at the same time, their cancellation rate is around 47% and highest amongst all the segments.

Conclusion & Suggestions

1. Considering role of prices, hotels should offer attractive discounts, festive & seasonal offers and promote them at enough level in order to grab customer's attention. Along with it, making the deal 'Value for Money' can make positive impact on booking cancellations.
2. No one loves to stay in ques for long. Reducing the waiting period makes the client experience smooth and satisfying. Increasing number of rooms, especially in the peak period, and continuously optimizing the processes, based on feedbacks and data will help to reduce this issue. Point of availing premium services to clients with extra charges can also be considered.
3. It's been proven, that continuous communication with the customers, keeps them updated & engaged.
4. Online booking is widely preferred, but giving clear description, keeping it closer to the reality and avoiding false promises is important, in order to avoid cancellations.