

BUSINESS PROBLEM

City and Resort hotels are facing an increase in cancellation rate of the hotel bookings. Due to high cancellation rate, hotels are facing issues like reduced ROI and services. Both, City and Resort Hotels would like to reduce their cancellation rate, in order to increase their efficiency in generating revenue, and for us to offer thorough business advice to address this problem. We will be covering the analysis of Hotel reservation cancellations, factors contributing to the increased cancellation rate and that have no bearing on their business, along with the yearly revenue generation in this report.



Research Question

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

Assumptions

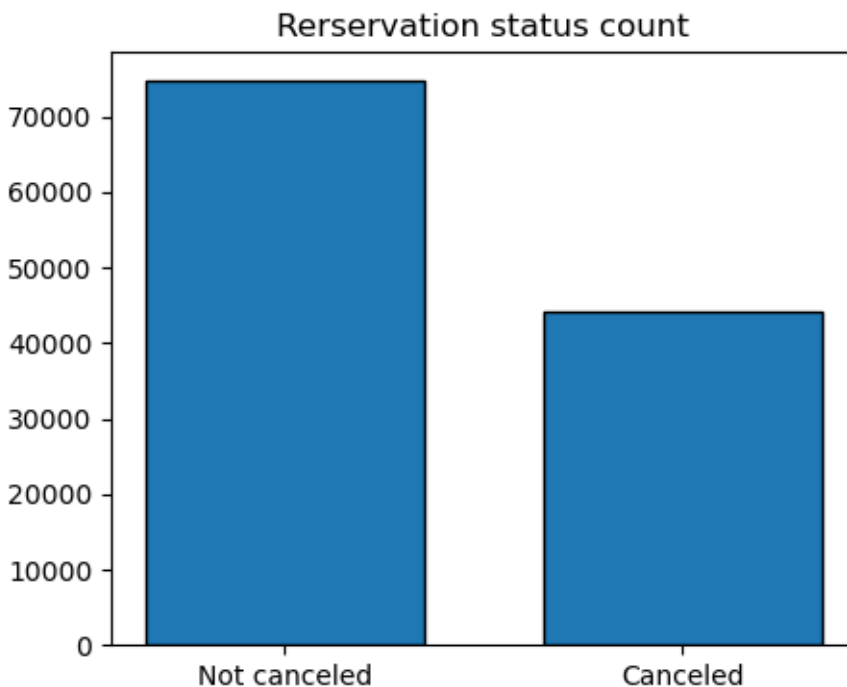
1. No unusual occurrences between 2015 and 2017 will have a substantial impact on the data used.

2. The information is still current and can be used to analyze a hotel's possible plans 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 solutions.
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.

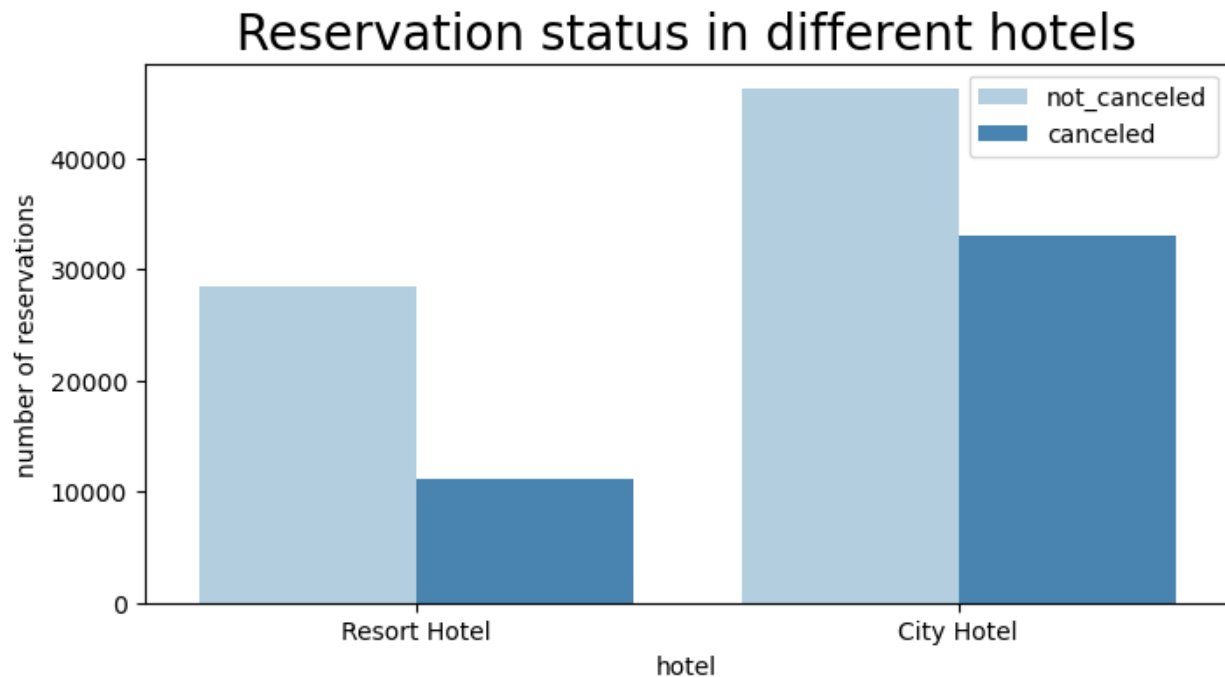
Hypothesis

1. More cancellations occur when prices are 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 and Findings



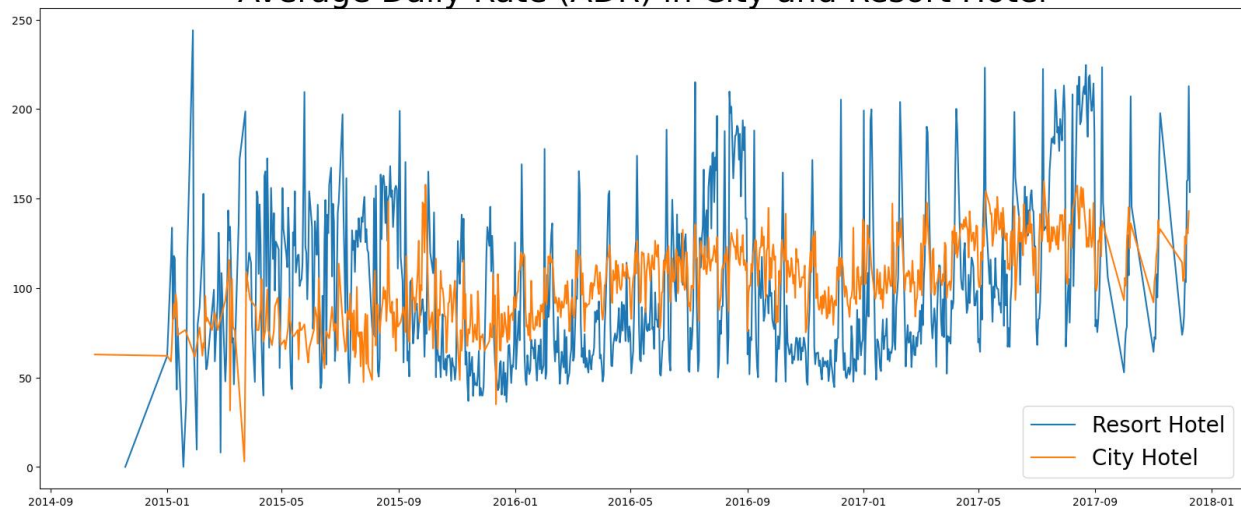
From the bar graph, the percentage of the reservations that are canceled and not-cancelled can be determined. It is clearly visible from the graph that there are still a significant number of reservations, approx. 63%, that have not been canceled. Hotels are facing 37% of cancellation rate which has a significant impact on their earnings.



Based on the above graph, we found that:

1. Cancellations are low in Resort Hotels (with 27% cancellation rate) and high in City Hotels (with 41% of cancellation rate), along with high reservations.
2. Ratio of not-cancelled to cancelled bookings is low for City hotels but it is high for Resort Hotels. Reason for this could be, the price of the Resort hotels is higher than the price of City Hotels (this is will be proved later in this project using ADR (Average daily rate) column).
3. More focus should be laid on City hotels, along with more maintenance, in order to remove the reasons for cancellation of the city hotels booking.
4. In resort Hotels, ADR might the major case of cancellations. But, in city hotels, maintenance and other facilities can be the reason of cancellation.

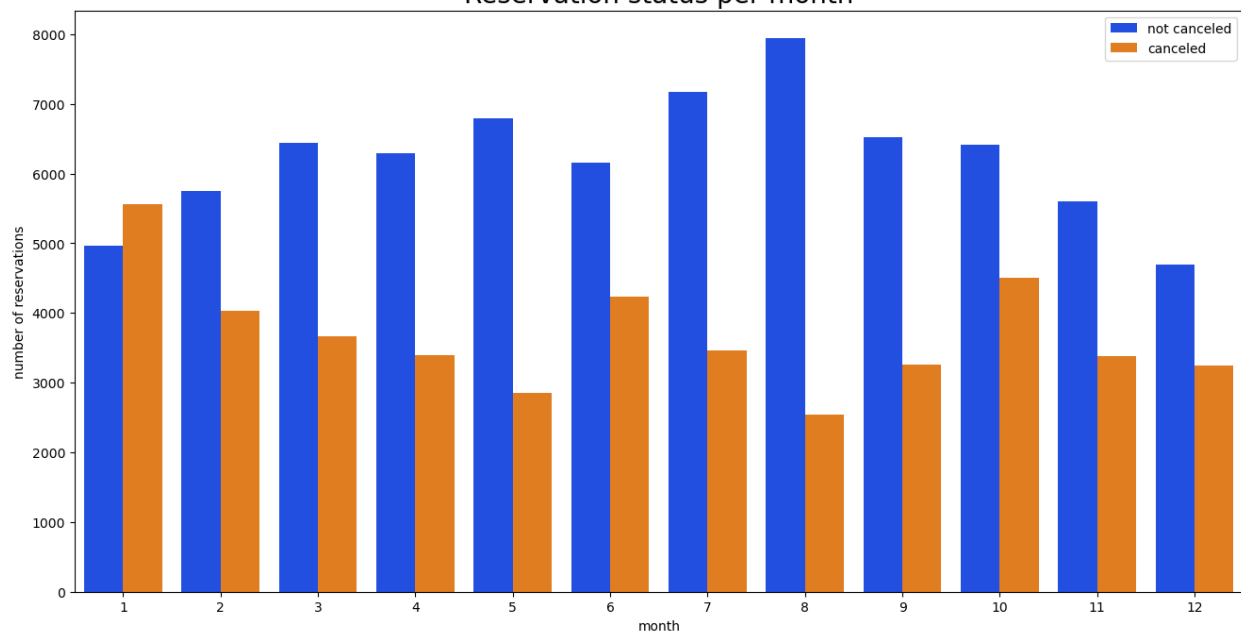
Average Daily Rate (ADR) in City and Resort Hotel



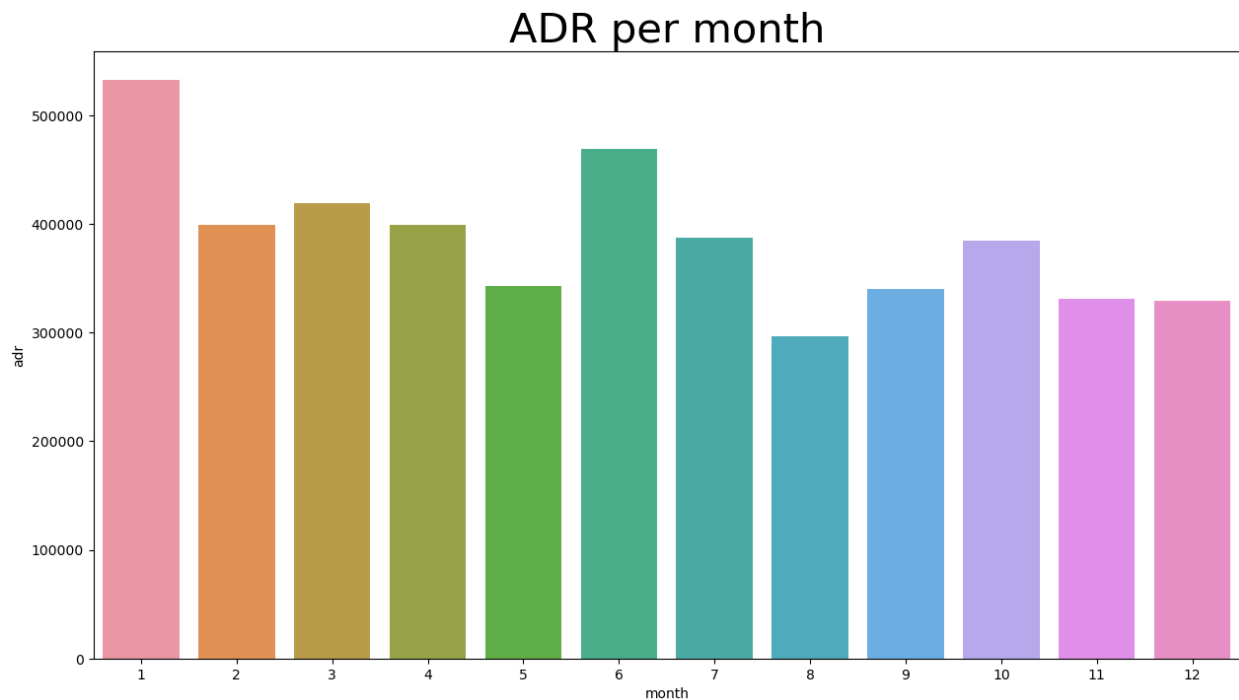
Findings based on the line graph constructed above:

On certain days, the ADR for a resort hotel is high than that of a city hotel and on some other days, it is even higher. It goes without saying that weekends and holidays may see a rise in resort hotel rates. Spikes on the graph can be seen on the weekends, which represents that on weekends and holidays, the price of the Resorts Hotels is higher.

Reservation status per month



Based on the grouped bar graph we constructed for analyzing the months with the highest and lowest reservation levels according to reservation status, it is clearly visible that the highest number of cancellations occurred in January along with lowest number of reservations. Whereas, the lowest number of cancellations occurred in August along with highest number of reservations.

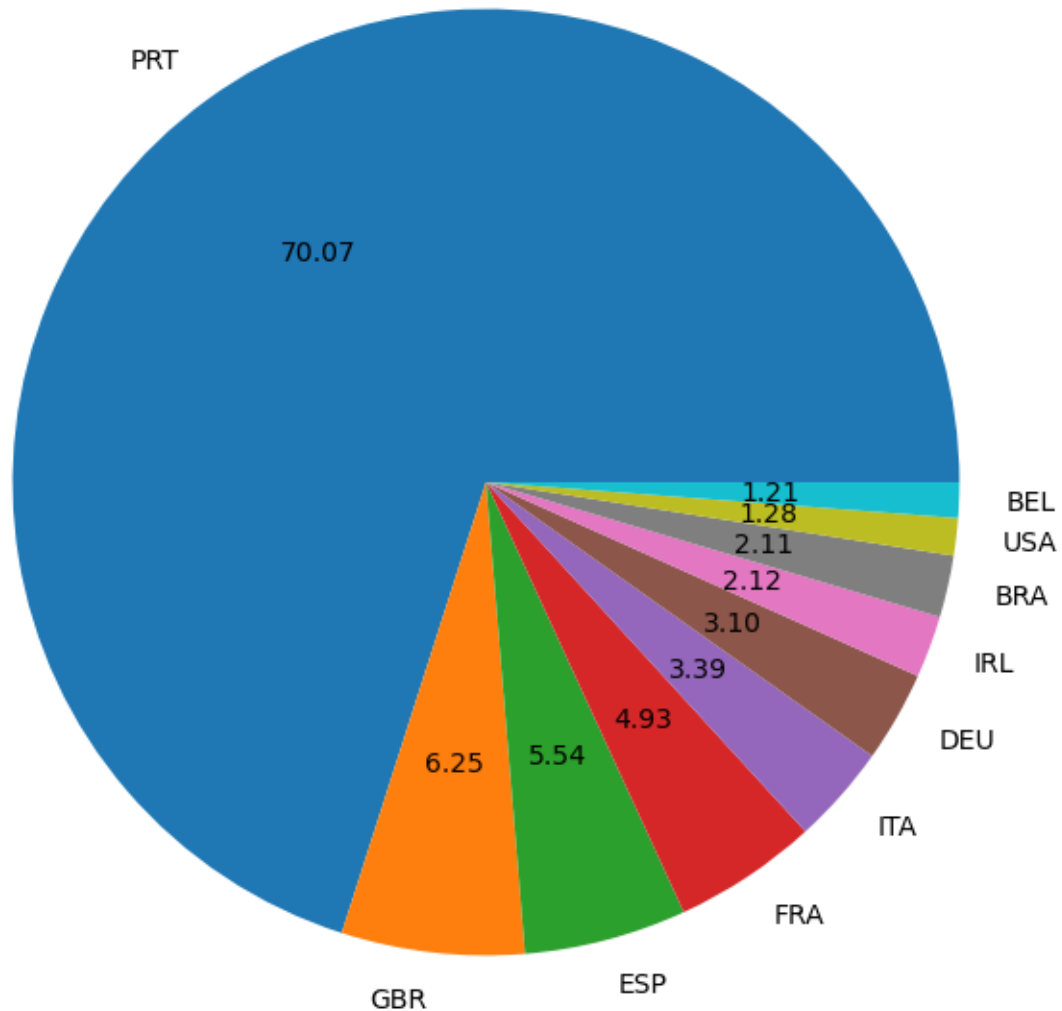


Findings from the above-mentioned bar graph:

1. ADR (Average Daily rate) is lowest in August as per 'ADR per month' bar graph. Also, as per 'Reservation status per month' graph, August has the least number of cancellations.
2. ADR is highest in January as per 'ADR per month' bar graph. Also, as per 'Reservation status per month' graph, January has the highest number of cancellations.

This proves that when the price is higher, cancellation will also be higher. Reason being, as most of the people might not be able to afford the reservation rates. Therefore, the cost of the accommodation is solely responsible for the increased cancellation rate in hotels.

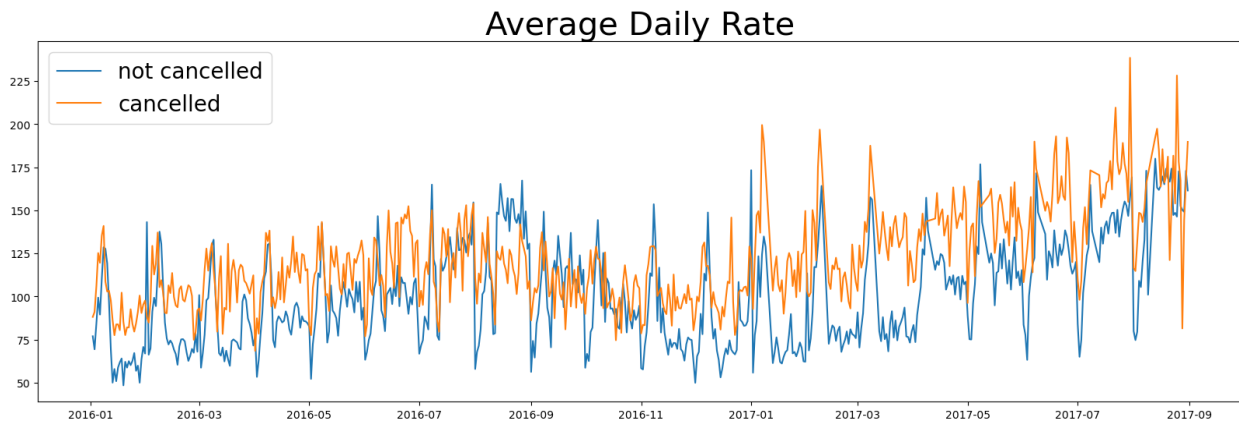
Top 10 countries with reservation canceled



Using the pie chart, we will see which country has the highest reservation canceled. The top country is Portugal with the highest number of cancellations i.e., 70%.

Also, we have analyzed the platform from where guests are making their reservations for the hotels, and found that the Maximum number of clients are not coming from the offline travel agents. From Offline TA, only 18% of bookings are coming. However, around 46% of the clients (which is the majority of the reservations) are using Online Travel agent (TA), as it is much more easier and time saving to use online platforms for making any reservations. Also, 27% come from groups and only 4% of clients book hotels directly by visiting them and making reservations.

Additionally, the maximum cancellation rate is coming from the online Travel agent.



As seen in the graph, price has clear effect on the cancellation rate of the reservations in the hotels. Hotel reservations are more canceled when the average daily rate is higher than when the reservations are not canceled. Thus, average daily rate is the factor, which is mostly influencing the cancellation rate and this proves all the above analysis, that the higher price leads to higher cancellation.

Suggestions

1. Cancellation rate is directly proportional to the booking price, that means with increasing prices, cancellation also increases. In order to reduce the cancellation rate, hotels can work on their pricing strategies and try to lower the rates for specific hotels based on locations. Additionally, hotels can also introduce some schemes like promotional discounts, combo offers or gift vouchers to attract the customers.
2. Based on the analysis, the ratio of the canceled and not canceled booking is higher in the resort hotel than the city hotels. So, the hotels should provide a reasonable discount on the room prices on weekends or on holidays, as there was a spike in price on weekends and holidays.
3. Since, the cancellations are highest in Portugal, the facilities and services should be improved in all the Hotels in Portugal and in other countries too, along with the reservation pricing.
4. Also, Hotels in Portugal along with other countries' hotels can run some campaigns or advertisements in order to improve their reservation rate and reduce the cancellation rate, especially in the month of January because the cancellations are highest during this period.