In the past few years, City Hotel and Resort Hotel have been dealing with a lot of cancellations. This has led to problems like lower earnings and rooms not being used effectively. So, the main goal for both hotels is to reduce these cancellation rates to make more money efficiently.

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

- 1. No significant events occurred between 2015 and 2017 that would have a lasting impact on the data utilized.
- 2. The information remains current and can be effectively utilized to analyze the hotel's potential strategies.
- 3. There are no unexpected drawbacks to the hotel implementing any recommended techniques.
- 4. The suggested solutions are not currently being employed by the hotels.
- 5. The primary factor influencing revenue is the occurrence of booking cancellations.
- 6. Cancellations lead to rooms remaining vacant for the duration of the originally booked period.
- 7. Clients often make hotel reservations within the same year as their cancellations.

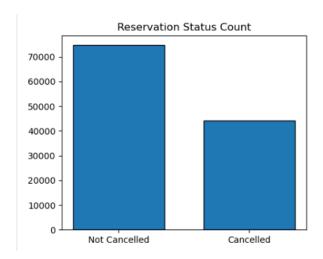
Research Questions

- 1. What variables influence hotel reservation cancellations?
- 2. How can we enhance the process of hotel reservation cancellations?
- 3. How will hotels receive support in making pricing and promotional determinations?

Hypothesis

- 1. Higher prices typically lead to increased cancellation rates.
- Customers are more likely to cancel their reservations when there is a lengthy waiting list.
- 3. The primary source of reservations for most clients is offline travel agents.

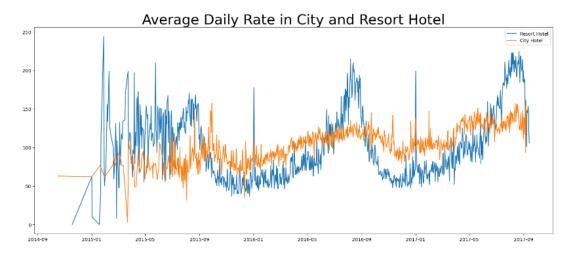
Analysis and Findings



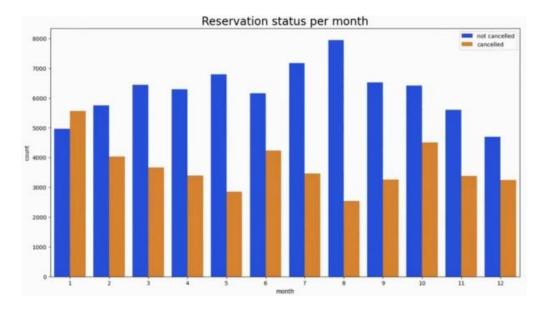
The attached bar graph illustrates the proportion of reservations that have been cancelled compared to those that remain active. Clearly, a considerable portion of reservations remain unaffected by cancellations. However, it's noteworthy that 37% of clients have cancelled their reservations, significantly impacting on hotel bookings.



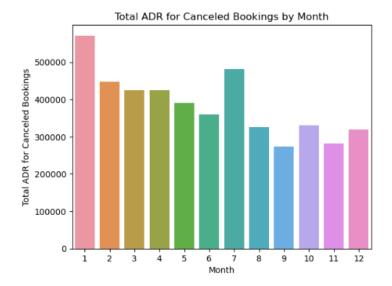
City Hotels tend to have more bookings compared to Resort Hotels. This could be attributed to the possibility that Resort Hotels are priced higher than those located in cities.



The line graph above indicates that, some days, the average daily rate for a City Hotel is lower than that of a Resort Hotel, and on other days, it's even lower. It's evident that weekends and holidays may witness an increase in Resort Hotel rates.



We created a grouped bar graph to study the months with the highest and lowest reservation levels based on reservation status. It's clear from the graph that August has the highest numbers of both confirmed and canceled reservations. Conversely, January stands out as the month with the highest number of cancellations.



This bar graph shows that cancellations occur more frequently when prices are high and less often when they are low. This indicates that the accommodation cost is the main factor influencing cancellations.

77.70

3.76

TA

5.46

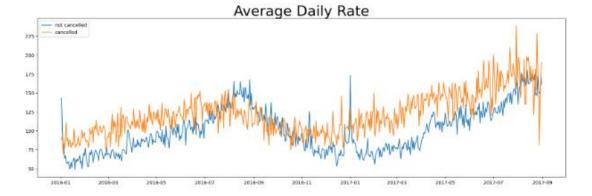
6.15

FRA

Top 5 countries with reservations canceled

We created a pie chart that represents which country has the highest reservation cancelled. The top country is Portugal with the highest number of cancellations.

Let's examine where guests are booking their hotel reservations from. Are they booking directly or through groups, online or offline travel agents? Approximately 46% of clients book through online travel agencies, while 27% book through groups. Only 4% of clients book directly by visiting the hotels.



As shown in the graph, reservations are more likely to be cancelled when the average daily rate is higher compared to when it's not cancelled. This confirms our analysis that higher prices lead to more cancellations.

Suggestions

- Cancellation rates increase as prices rise. To mitigate cancellations, hotels could adjust their
 pricing strategies by offering lower rates for certain locations or providing discounts to
 customers.
- 2. The ratio of cancellations to non-cancellations is higher for Resort Hotels compared to City Hotels. Therefore, hotels should consider offering discounts on room prices during weekends or holidays.
- 3. In January, hotels can launch marketing campaigns with reasonable discounts to boost revenue since cancellations are higher during this month.
- 4. To reduce cancellation rates, hotels can enhance the quality of their services, particularly in Portugal.