Hotel Booking Cancelations

Business Problem

In the past few years, both City Hotel and Resort Hotel have experienced significant increases in cancellation rates. This has led to various challenges for the hotels, such as decreased revenues. As a result, the primary objective for both hotels is to reduce cancellation rates, aiming to improve revenue generation efficiency. Our focus in providing comprehensive business advice involves analyzing hotel booking cancellations along with unrelated factors that do not impact their business and annual revenue generation.

Assumptions

1. The data remains up-to-date and can be efficiently utilized to analyze potential plans for a hotel.

2. The suggested solutions are not currently implemented by the hotels.

3. The primary factor influencing income generation efficiency is the occurrence of booking cancellations.

4. Cancellations lead to rooms remaining unoccupied for the initially booked duration.

5. The hotels have the flexibility and resources to adopt new practices or make changes to existing processes to address the issue of high cancellation rates.

6. Customer satisfaction and experience are critical factors in reducing cancellation rates, and improvements in these areas will positively impact the overall success of the hotels.

Research Questions

1. What factors influence the cancellation of hotel reservations?

2. In what ways can we improve the process of hotel reservation cancellations?

3. How can hotels receive support in determining pricing and promotional strategies?

Hypothesis

1. Higher prices are associated with increased cancellation rates.

2. Longer waiting lists lead to higher cancellations among customers.

3. Most customers prefer booking through offline travel agents rather than online channels.

Analysis and Findings
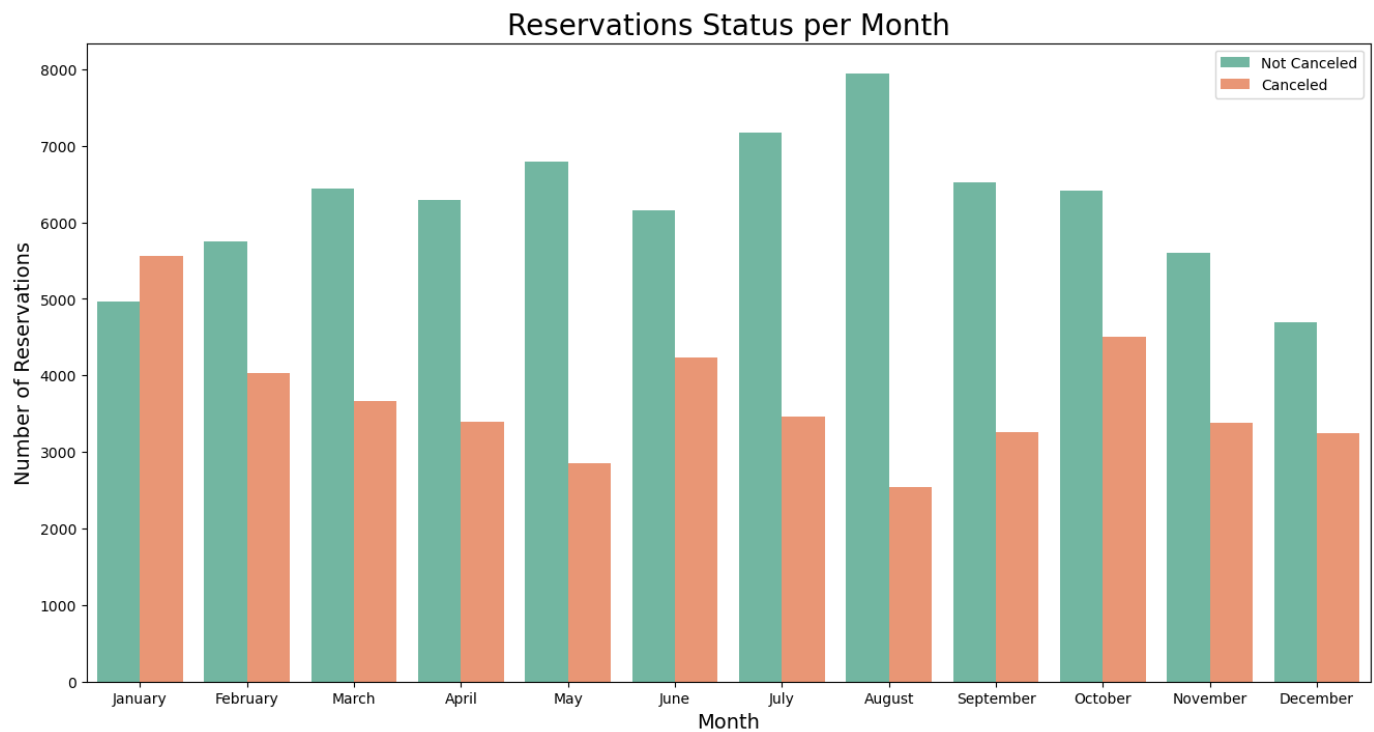
Reservation status count

The bar graph displayed depicts the percentage of reservations that have been canceled compared to those that remain active. Notably, a significant portion of reservations remains unaffected. However, it is remarkable that that 37% of clients have opted to cancel their bookings, which has a considerable impact on the hotel's earnings.

### Reservation status in different hotels

The bar graph illustrates that city hotels typically experience higher booking rates compared to resort hotels. This difference may be linked to the possibility that resort accommodations are generally priced higher than those in cities.

Average daily rate in Resort and City hotel
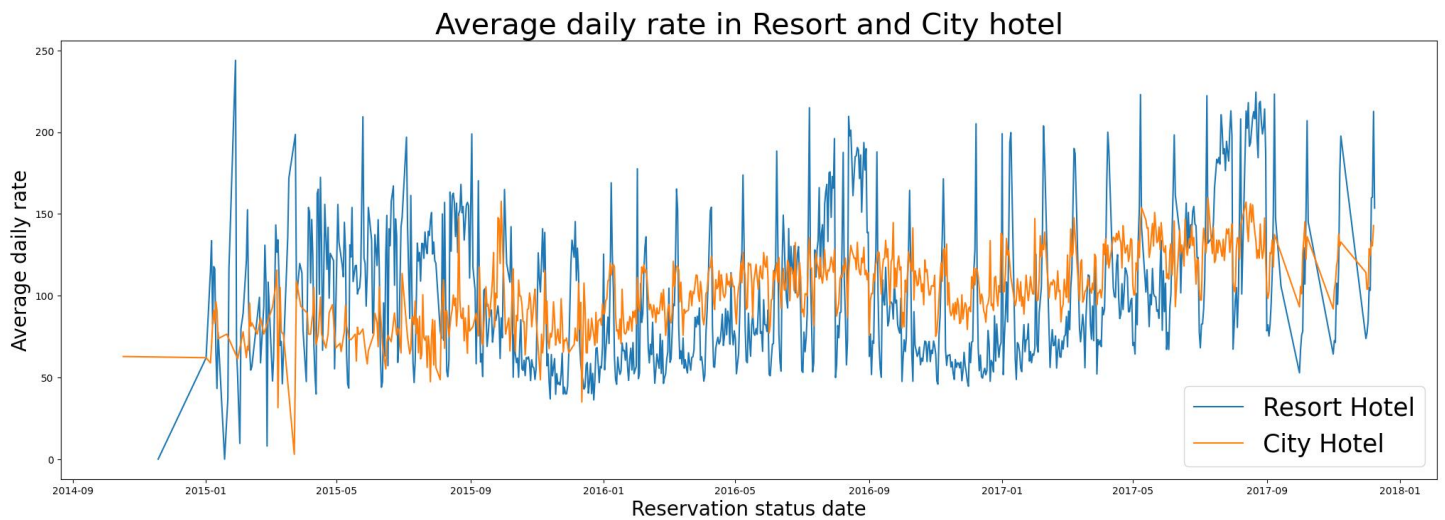
The line graph above shows fluctuations in the average daily rates between a city hotel and a resort hotel. Some days display lower rates for the city hotel compared to the resort hotel, and on certain occasions, the difference is even more clear. It's clear that weekends and holidays often witness an increase in rates for the resort hotel.


Reservations Status per Month

We have created a grouped bar graph to analyze the months with the highest and lowest reservation levels based on their status. It's clear from the graph that August has the highest number of confirmed reservations and the lowest number of cancelations, whereas January experiences the highest number of cancelations.
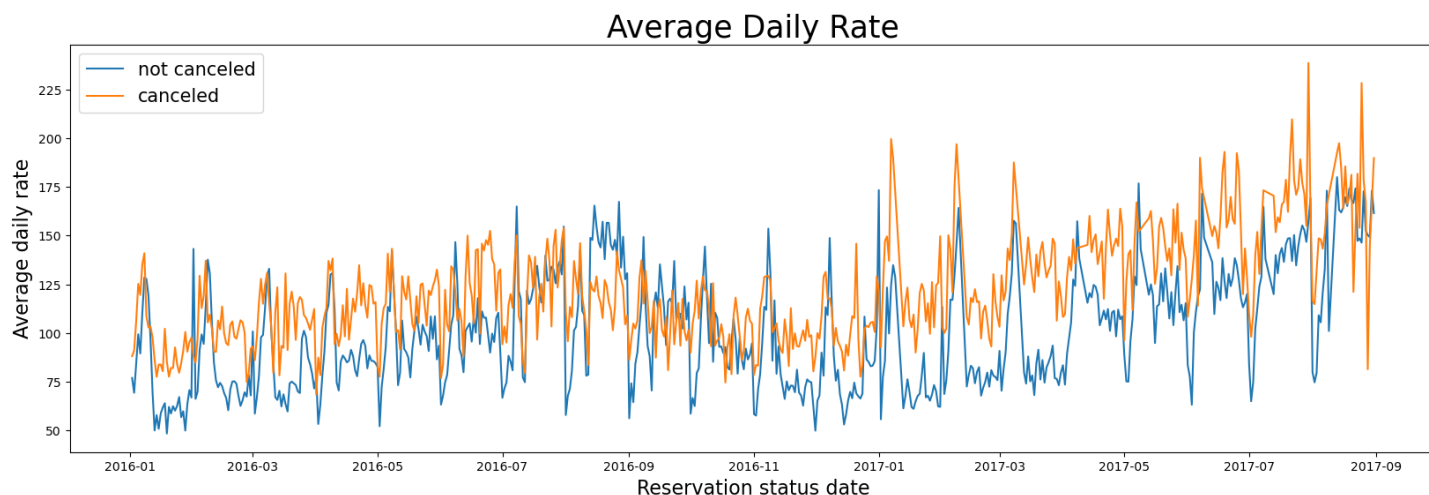
Average daily rate per month
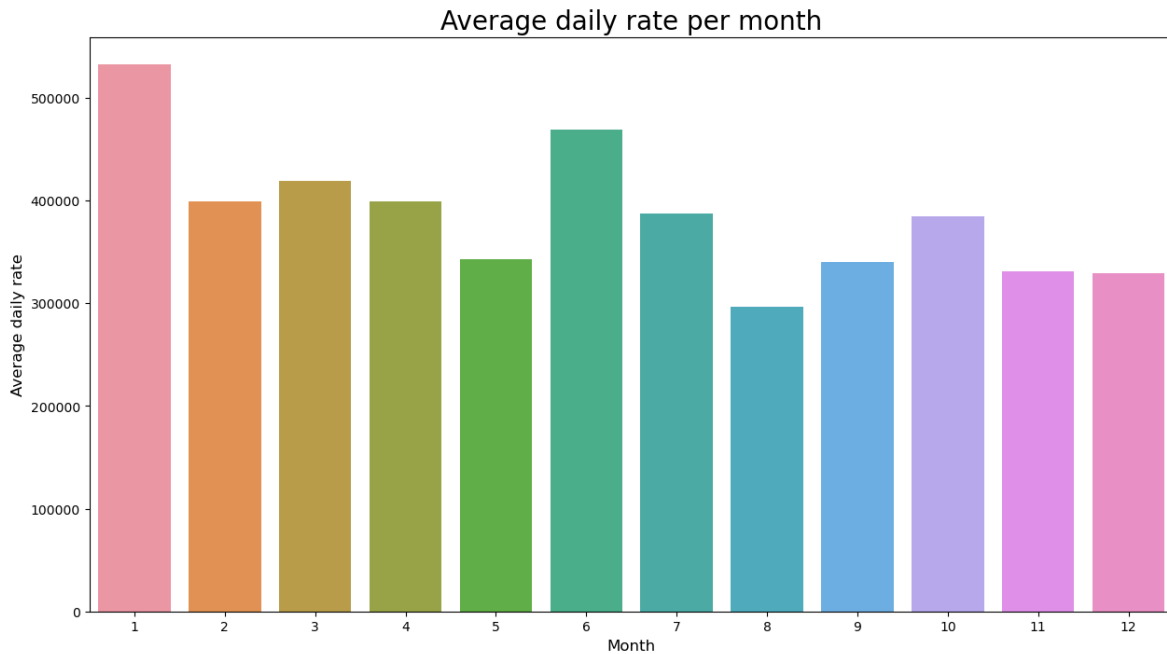
This bar graph shows that cancellations occur most frequently when prices are highest and are least frequent when prices are lowest. Hence, the accommodation cost appears to be the primary factor influencing cancellations. This indicates that lower prices result in fewer cancellations, while higher prices lead to more cancellations.

Now, let's identify the country with the highest number of canceled reservations. Portugal ranks at the top with 70.07% of cancelations, followed by Great Britain at 6.25% and Spain at 5.54%.

Top 10 countries with canceled reservations
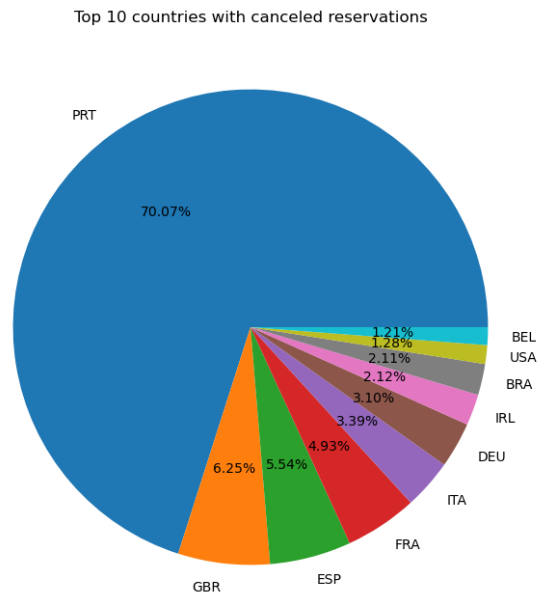
Based on the hypothesis, let's examine the sources from which guests are booking their reservations at the hotels. Are they booking directly or through groups? Are they booking online or through offline travel agents?

Based on the data analysis, approximately 48% of customers comes from online travel agencies, while 20% comes from offline travel agencies. Group reservations include 16% of bookings, indicating bookings made collectively for events, conferences, or other group-related activities. Additionally, 10% of clients make reservations directly by visiting the hotels.

Average Daily Rate

As we observe in the graph, cancellations occur more frequently. When the average daily rate is higher, reservations are more likely to be canceled compared to when the average daily rate is lower. This observation aligns with the analysis, indicating that higher prices tend to result in more cancellations.

This relationship indicates that customers may be more sensitive to price when making their booking decisions. When the price is perceived as too high, they may be more inclined to cancel their reservation. This behavior could be influenced by factors such as budget constraints, changing preferences, or finding a better deal elsewhere.

Suggestions

1. Cancellation rates increase as prices rise. To reduce reservation cancellations, hotels could refine their pricing strategies and consider lowering rates for specific hotels based on locations. Additionally, offering discounts to consumers may help mitigate cancellations.

2. Since the ratio of cancellations and non-cancellations is higher in the city hotel compared to resort hotels, it would be beneficial for hotels to offer reasonable discounts on room prices during weekends or holidays.

3. During January, hotels can initiate marketing campaigns or promotions with moderate budgets to boost their revenue, considering that cancellations are highest during this month.

4. To decrease the cancellation rate, they could enhance the quality of their hotels and services, particularly in Portugal.

5. Analyze customer feedback and reviews to identify areas for improvement and address common reasons for cancellations.