Hotel Booking

The Given dataset contains 119390 observations for a City Hotel and a Resort Hotel. Each observation represents a hotel booking between the 1st of July 2015 and 31st of August 2017, including booking that effectively arrived and booking that were cancelled.

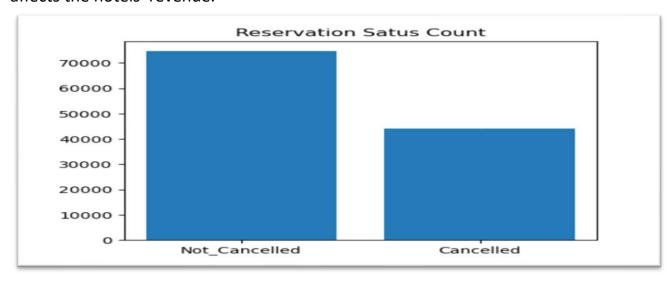
Business Problem

The City and Resort Hotel has had high cancellation rates recently. As a result, each hotel is currently coping with a variety of problems, such as decreased revenues and less than optimum hotel room usage.

Consequently, lowering cancellation rates in both hotels' primary goal in order to increase their efficiency in generating revenue, and for us to offer thorough business advice to address this problem.

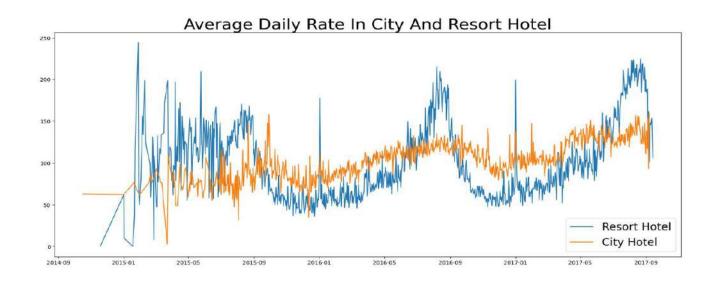
The primary focus of this research is an analysis of hotel booking cancellations together with other unrelated business and revenue-generating elements.

According to analysis and a bar graph, the rate of cancelled reservations is 37.13% for resort and city hotels together, which is a lot and significantly affects the hotels' revenue.





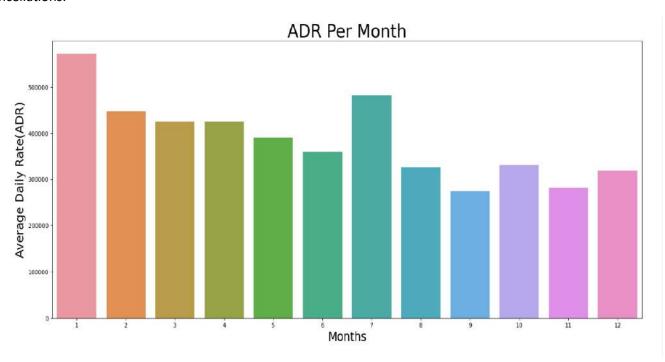
In comparison to resort hotels, city hotels have more bookings. It's possible that resort hotels are more expensive than those in cities. Here it shows the resort cancellation is 28% and that of city is 42%.



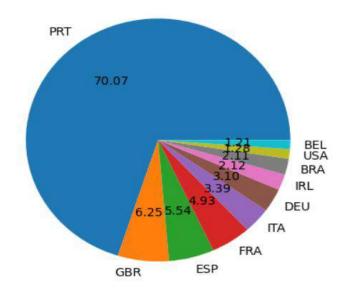
According to the line graph above, there are certain days when the average daily rate for a city hotel is less than that of a resort hotel, and there are days when it is more. It goes without saying that resort hotel rates may increase on weekends and during holidays.



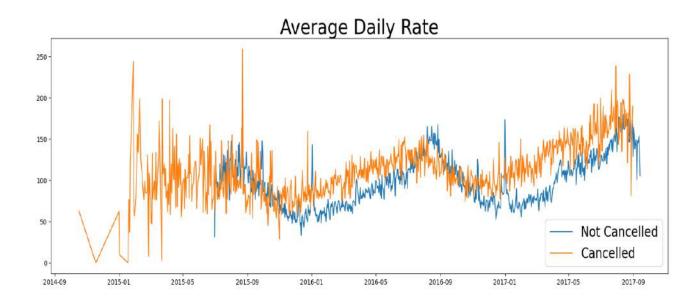
The months with the highest and lowest reservation levels have been analyzed based on reservation status in the grouped bar graph above. As can be seen, August has the most number of confirmed reservations as well as cancellations, while January has the highest amount of cancellations.



The bar graph shows that cancellations occur more frequently when prices are highest and less frequently when prices are lowest. Therefore, the only factor in the cancellation is the price of the accommodations.



This chart shows the top 10 countries' cancellation distribution out of which Portugal has the highest rate of cancellation.



As seen in the graph, reservations are cancelled when the average daily rate (ADR) is higher than when it is not cancelled. It Clearly proves all the above analysis, that the higher price leads to higher cancellation.

Suggestions

- 1. With rising pricing, cancellation rates rise. Hotels should improve their pricing tactics and attempt to cut the costs for particular hotels based on locations in order to prevent cancellations of reservations. The clients may also receive certain discounts from them.
- 2. Since resort hotels see more cancellations than city hotels do, they have a greater ratio of cancellations overall. Therefore, the hotels ought to offer a fair discount on the accommodation during the weekends and on holidays.
- 3. As cancellations are at their greatest in January, hotels might launch marketing campaigns or initiatives with a fair budget to boost profits.
- 4. To lower the cancellation rate, they might also raise the quality of their accommodations and services, particularly in Portugal.

Reference

This analysis done on data which is originally from the article Hotel Booking Demand Datasets, written by Nuno Antonio, Ana Almeida, and Luis Nunes for Data in Brief, Volume 22, February 2019.

Which is available on Kaggle website. Link for that is below.

Link→ https://www.kaggle.com/datasets/mojtaba142/hotel-booking