

Business Problem

In recent years, City Hotel and Resort Hotel have seen high cancellation rates. Each hotel is now dealing with a number of issues as a result, including fewer revenues and less than ideal hotel room use. Consequently, lowering cancellation rates is 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 analysis of hotel booking cancellations as well as other factors that have no bearing on their business generation are the main topics of this report.

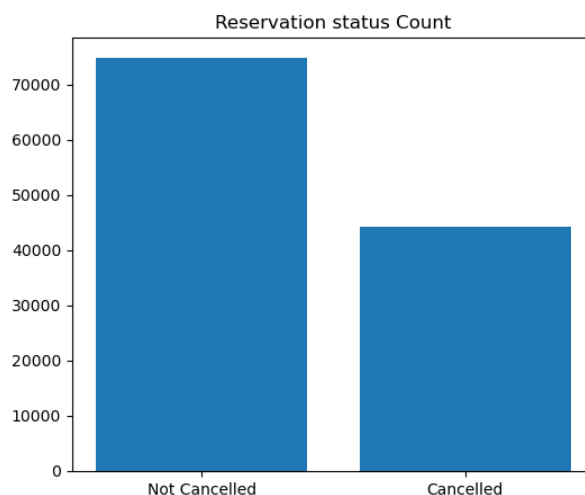


Research Question

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

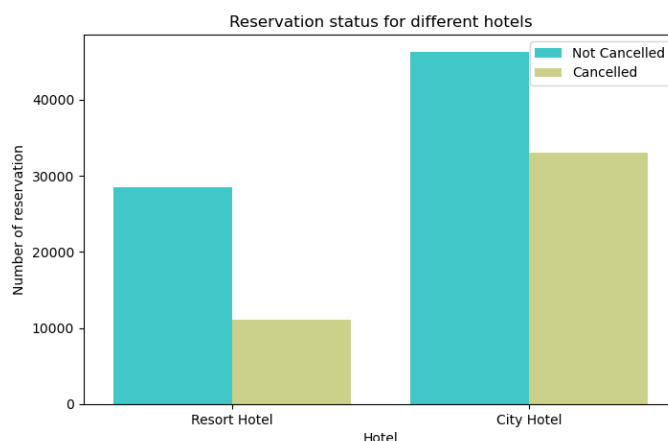
Analysis and Findings

Figure 1: Total Reservation Status

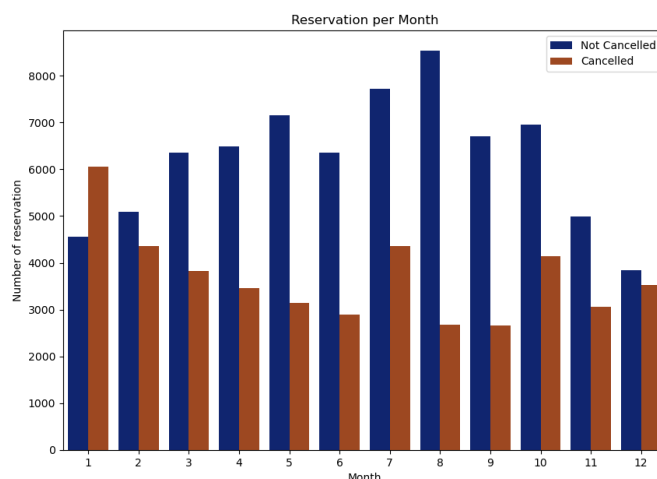


The bar graph illustrates the overall reservation status, highlighting the proportion of reservations that were cancelled versus those that were not. A significant majority of reservations were not cancelled, indicating strong booking commitments. However, 37% of reservations were cancelled, which has a substantial impact on the hotel's revenue.

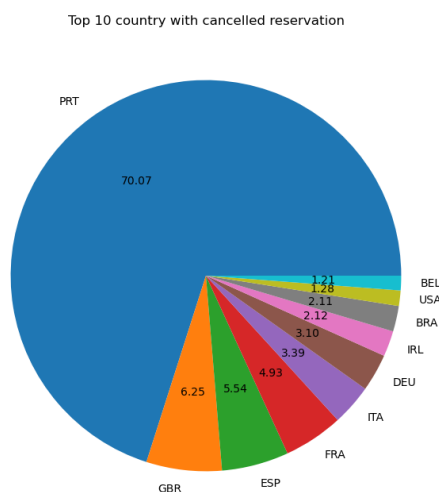
Figure 2: Reservation status for different hotels



In comparison to Resort Hotel, City Hotels have more bookings. It's possible that the Resort Hotels are more Expensive than the cities.

Figure 3: Reservation per Month

The grouped bar chart illustrates the monthly distribution of hotel reservations, distinguishing between cancelled and not-cancelled bookings. It is evident that August records the highest number of overall reservations, indicating peak travel or holiday season. Whereas, January shows the highest proportion of cancellations, suggesting potential seasonality effects or customer indecision at the beginning of the year.

Figure 4: Top 10 Countries with Cancellations

The pie chart illustrates the distribution of booking cancellations across the top 10 countries. It is evident that Portugal accounts for the highest proportion of cancellations at approximately 70%, which is significantly higher than any other country. This is followed by the United Kingdom (6.25%), Spain (5.54%), and France (4.93%).

Let's check the area from where customers are visiting and making reservations. Is it from Direct or Groups, Online or Offline Travel Agents? Around 47% of customers are coming from the Online Travel agencies. Whereas, 16% of customers are coming by Groups. Only 10% of customers are coming Direct by visiting and making reservation.

Purpose of Cancellations:

Cancellations are higher primarily due to seasonality, booking channels, and customer behaviour. Around 47% of bookings come through Online Travel Agents (OTAs), where customers often make flexible reservations with minimal commitment. This leads to an overall cancellation rate of 46%, often driven by misleading photos, inadequate information, or mismatched expectations. Additionally, City Hotels and customers from Portugal exhibit higher cancellation rates, possibly due to price sensitivity or changes in travel plans. January records the highest cancellations, typically due to post-holiday adjustments or financial constraints.

Suggestions

- **Reduce Cancellations:** Since 37% of reservations are cancelled, hotels should introduce flexible policies or offer incentives (discounts, free upgrades) to encourage commitment and reduce cancellations.
- **Optimize for Seasonal Trends:** August has the highest bookings while January experiences the highest cancellations. Launch targeted promotions during low seasons (January) to improve occupancy and reduce cancellations.
- **Country-Specific Strategies:** Portugal accounts for 70% of cancellations. Hotels should investigate the reasons, such as payment issues, booking policies, or customer preferences and address these with region-specific strategies.
- **Channel Optimization:** Since 47% of reservations originate from Online Travel Agents (OTAs), hotels should diversify their booking channels by enhancing their direct booking platforms through exclusive discounts, loyalty programs, proper information and personalized offers. This strategy can reduce dependency on OTAs, improve profit margins, and build stronger customer relationships while still maintaining strategic OTA partnerships to capture broader audiences.
- **Pricing Strategy for Resort Hotels:** As resort hotels have fewer bookings compared to city hotels, assess and potentially revise pricing or marketing strategies to attract more customers, especially from international markets.