Problem & background

The main aim of the project is to understand and visualize datasets from the hotel and customer point of view i.e.

- reasons for booking cancellations across various parameters
- best time to book a hotel
- peak season

Solution

- There is a relationship between lead time and cancellation in which cancellation lower for hotel reservation at 249 days, but increases as soon as it exceeds 249 days.
- Due to the proven correlation between deposit and cancellation, in the case of No Deposit of Money, 74947 people do not cancel hotel reservations, as opposed to 29694 persons who do. Bookings that are non-refundable have been cancelled by 14494 compared to 93 who have not. Refundable transactions have 126 who do not cancel and 36 who cancel hotel reservations.
- There is a correlation between market segment and cancellation: In the case of aviation, 185 people do not cancel hotel reservations, compared to 52 people. In the case of complimentary bookings, 646 consumers have not cancelled their reservations compared to 97 persons who did. In the case of corporate reservations, 4303 people have not cancelled their reservations, while 992 have done so. In the case of direct bookings, 10672 people have not cancelled their reservations, while 1934 have done so. In the case of group reservations, 7714 guests have not cancelled while 12097 have done so. When it comes to offline TA/TO bookings, 15908 people have not cancelled their reservations, while 8311 have.
- The number of cancellation days decreases as the number of previous cancellation days rises.

Methodology & Project scope

- The scope of this project encompasses the analysis of the hotel booking dataset to extract valuable information and patterns.
- we will create new Excel worksheets within the same file utilising pivot tables and a variety of Excel functions.
- Create insightful visualizations such as bar charts, pie charts, line plots, and box plots to present findings effectively.
- we'll produce a dashboard that provides all the suggested analysis in a simple to understand manner.

Goals & KPIs

- What is the relationship between lead time and cancellation?
- What is the relationship between deposit type and cancellation?
- What is the relationship between market segment and cancellation?
- What is the relationship between previous cancellations and cancellations?
- How much does the price in hotels vary over the year?

Concepts Used

A pivot table is used to quickly summaries and interact with data. A bar graph is used to display findings Count, Average, Pivot table, VLOOKUP, Max, Min, filter etc.

Conclusion

The analysis of the hotel booking data has illuminated several critical insights that can significantly impact the hotel's operational strategies and customer experience. Booking Trends, Booking Channels, Cancellation Patterns, Revenue Optimization etc.

Project owner

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Date: Aug 30, 2023