

Capstone Project Submission

Instructions:

i) Please fill in all the required information.

ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:

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1. Data cleaning / Data Preparation
2. Data Analysis on Exploratory Questions
3. Finding Correlations between dependant feature and other numeric features
4. Presentation, Technical documentation.

Please paste the GitHub Repo link.

Github Link:- <https://github.com/rahool010/Hotel-Booking-Analysis>

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

The Hotel Industry is a very volatile Industry and the bookings depend on variety of factors such as type of hotel, seasonality, etc. It is solely concerned with the provision of guest accommodation and related services. The problem statement was to explore and analyze the data to discover the important factors that govern the bookings, dig insight and recommend some strategies to prevent booking cancellations and loss of revenue.

The first step in the analysis involved taking initial look at the data, understanding it and framing some significant questions from the business perspection. The second step involved cleaning the data by looking for any missing values and treating them and preparing the data for further analysis.

The third step involved performing exploratory data analysis to extract information from the data and answered exploratory questions. I have analyzed bookings cancellation rate, hotel type customer book in general, most preferred meal type, parking space and cancellation, mostly booked accommodation type, countries with highest reservation, deposit type and cancellation rate for market segment, market segment with lowest number of days on waiting list, how does adr varies with that of the seasons. Finding correlations between dependant variable and other numeric variables, finding the important features that had an impact on booking cancellation. For this I have used matplotlib and seaborn libraries of python to present the analysis graphically.

The final step was to point down the insights developed during the analysis of the data. Some observations drawn were; City hotel has highest booking as well as cancellation, couples visited hotel the most, there are no repeated guests, peak seasons are august, may & july whereas january and December seems to be the off season also adr fluctuates through these seasons, origin of guests was mostly from western Europe especially Portugal & they chose travel agents as the mode of booking. Aviation industry has the minimum number of days on waiting list.

Some strategies to prevent booking cancellation and loss of revenue would be, collect deposit, set non-refund rates, implement strict policies for booking cancellation, adding non refund option in festival and holiday seasons, advertisements, hosting events and improving hotel online reputation.