

Capstone Project Submission

Instructions:

- i) Please fill in all the required information.
- ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:

1. Name : Sarath Soman

Email : sarathsoman14@upesalumni.upes.ac.in

Contribution:

- Data wrangling
- Finding out the most preferred hotel.
- Finding the peak and least bookings month.
 - Analysis based on year
 - Analysis based on month
- Hotel cancellation analysis.
 - Overall analysis of segment
 - Analysis based on year
 - Analysis based on month
 - Analysis based on hotel type

2. Name : Shrikant Kute

Email : kuteshshrikant@gmail.com

Contribution:

- Data wrangling
- Top five countries making bookings
- Analysing the trend of bookings for weekend days and week days
 - Analysis based on hotel type
- Understanding the type of room booked the most by the customers.
 - Analysis based on room type cancellation

3. Name : Hariharapanda Deepak

Email : hdeepak93@gmail.com

Contribution:

- Data wrangling
- Analysis of meal type preferred by the customer
- Understanding the lead time and waiting time of the reservations done country-wise
 - Analysis based on hotel type
 - Analysis based on country
- Revenue study of the hotels based on the parameter ADR to increase the revenue.
 - Analysis based on year
 - Analysis based on month

4. Name : Shyam Gadekar

Email : shyam.gadekar82@gmail.com

Contribution:

- Data wrangling
- Finding cancellation analysis of the rooms which are assigned and reserved
 - Overall analysis of segment
 - Analysis based on year
 - Analysis based on month
 - Analysis based on hotel type
- Understanding the total number of bookings based on market segment
- Analysis on customers on basis of customer type?

Please paste the GitHub Repo link.

Github Link:- <https://github.com/sarathsoman14/sarathsoman14-Hotel-Booking-Exploratory-Data-Analysis-EDA-.git>

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 hospitality industry is highly competitive in nature and the key to maintain competitive advantage lies with how hotels manage and analyse the data. To understand the business context of the hotel industry we need to understand the effect of different parameters affecting the hotel performance like when the booking was made, length of stay, number of persons staying, etc.

We have performed, uni-variate, hotel, distribution channel, lead & waiting time analysis and booking cancellation analysis for the data and found the key factors that are driving the hotel booking trends and decisions are made based on the observed trends.

We have made a detail analysis on hotel booking trends by finding the yearly, monthly and country wise bookings trend. An analysis of market segment and trend analysis on week days and weekend days stayed by the guests are made to understand the nature of bookings of the two types of hotels.

Guest experience is a main indicator of quality service in hotel industry. To adapt and meet the expectations of guests we performed an analysis on the finding the preferred meal types of the guests.

Lead time and Waiting time analysis is made to estimate the preparedness of the guests and helps the hotel departments like restaurant service, lodging and other facilities to be prepared for the guests.

We have performed an analysis on ADR which is a key indicator for the performance of the hotel. We have found the mean ADR yearly, monthly and country wise which helps the hotels in fixing the price-value ratio for the guests.

In this project, we analysed the busiest or busiest month for customers and we concluded that August is the busiest month with the highest number of bookings and January has the least. City Hotel is preferred by most customers. At both hotels, guests preferred room type A. Room change was also most common in room type A. Guests preferred to stay weeknights at both hotels rather than weekend nights. The majority of visitors come from Europe, the largest are from Portugal. August saw the highest number of cancellations, while January was the lowest. City Hotels received more cancellations than Resort Hotels. ADR tends to increase from January to August and to decrease from September to December. Moreover, most customers prefer to book hotels 2-3 months before they arrive. We tried to use the available data to analyse the factors that influence hotel bookings.