

Capstone project submission

Team Member's Name, Email and Contribution

1. Name :- Bhavesh Bhagwan Patil

Email :- bhaveshpatil1401@gmail.com

- Contributed In notebook helped with Google diver data connectivity and data cleaning, data manipulation, and in EDA Visualization.
- Contributed for the contents of PPT.
- Contributed in Technical Documentation in content of problem statement goal of project and steps involved.
- Solved following questions Which Agent get maximum No. Lead time through the year and booking each month. The ratio of car parking requirement and manipulation of data.

2. Name :- Paresh Suresh Badgujar

Email :- pbadgujar940@gmail.com

- Contributed in notebook for data cleaning, data manipulation, and in EDA Visualization and finalizing the conclusion.
- Contributed in PPT by making sure all the points to be covered.
- Contributed in Technical Documentation in content of problem statement goal of project and steps involved.
- Solved the following questions : Cleaning Data, remove duplicate row and missing value and converting column appropriate data type and data handling.

3. Name :- Avinash Vasant Patil

Email :- avinashpatil35153@gmail.com

- Contributed In notebook helped with Google diver data connectivity and data cleaning, data manipulation, and in EDA Visualization and recording presentation.
- Contributed for the contents of Technical Documentation.
- Contributed in PPT in content of problem statement goal of project and steps involved.
- Solved following questions : Drawing Correlation Heatmap, analysis base on cancelation and which country the guest are coming from and percentage of repeated guest in hotel.

Bhavesh Patil Link :- (github: <https://github.com/bhava534/Capstone-Projects>)

Paresh Badgujar Link :- (github: <https://github.com/pareshbadgujar2000/EDA-project-hotelbooking-analysis>)

Avinash Patil Link :- (github: <https://github.com/Avipatil123/EDA-project-on-analysis-of-hotelbookings>)

Conclusion :-

- City Hotels are the most preferred hotel by guests.
- Even though the booking made in City hotel are greater than the resort hotel, almost double though the revenue by city hotel is less,
- This shows that Resort hotels are bit expensive and receive less cancellation than City hotels
- Out of total no of reservations 63% actually showed up, 36% got canceled, and only 1% reservation got No-show.
- It seems that 2016 is the year where the hotel bookings are highest. so the cancellation % is also the highest this year. Every year there is 25-30% cancellation received for resort hotels and 40-45% cancellation received for city hotels
- From the above graph we can see in city hotels there is a peak from April to July and the booking is high in August. And in resort hotels we can see two peaks, first in June and second in September and booking is high in July, August and October, so people usually book hotels 30-60 days in advance.
- For Resort hotels-- ADR is increasing between May to September and then starts falling down, so the best time to book a resort hotel is from October to April as we are getting lower ADR.
- For City hotels--City hotels have nearly constant ADR from April to October and after that ADR starts decreasing, so the best time to book a City hotel is from November to March.
- Resort hotels and City hotels both are getting higher revenue between June to September. This is also because at the same time ADR is also high for both types of hotel as shown in the previous slide. Hence this period is best for hotels to generate more revenue.
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- Here we can see that as lead time increases the ADR decreases. This means if a customer book a hotel in advance, he can get a better deal.
- Most bookings are done by transient customer types.
- Majority of people prefer room type-A. It seems to be more economical for booking as it has the least ADR.
- Majority of the bookings and cancellations are made through Travel agencies (Online/Offline) and Tour Operators.

- Cancellation is more in City hotels as compared to Resort hotels.
- Chances of cancellation is high when there are no deposits taken by hotels. So minimum deposits should be taken by hotels to decrease the rate of cancellation.
- As length of total stay increases, adr decreases. This means for longer stay, the better deal for customers can be finalized.
- 77% of the people prefer the BB (bed & breakfast) meal type in both the hotel types.
- Maximum bookings and revenue are generated from Portugal.
- About 94% of people don't require the car parking spaces while booking hotel
- Mostly the guests are new customers and very small share for repeated customers