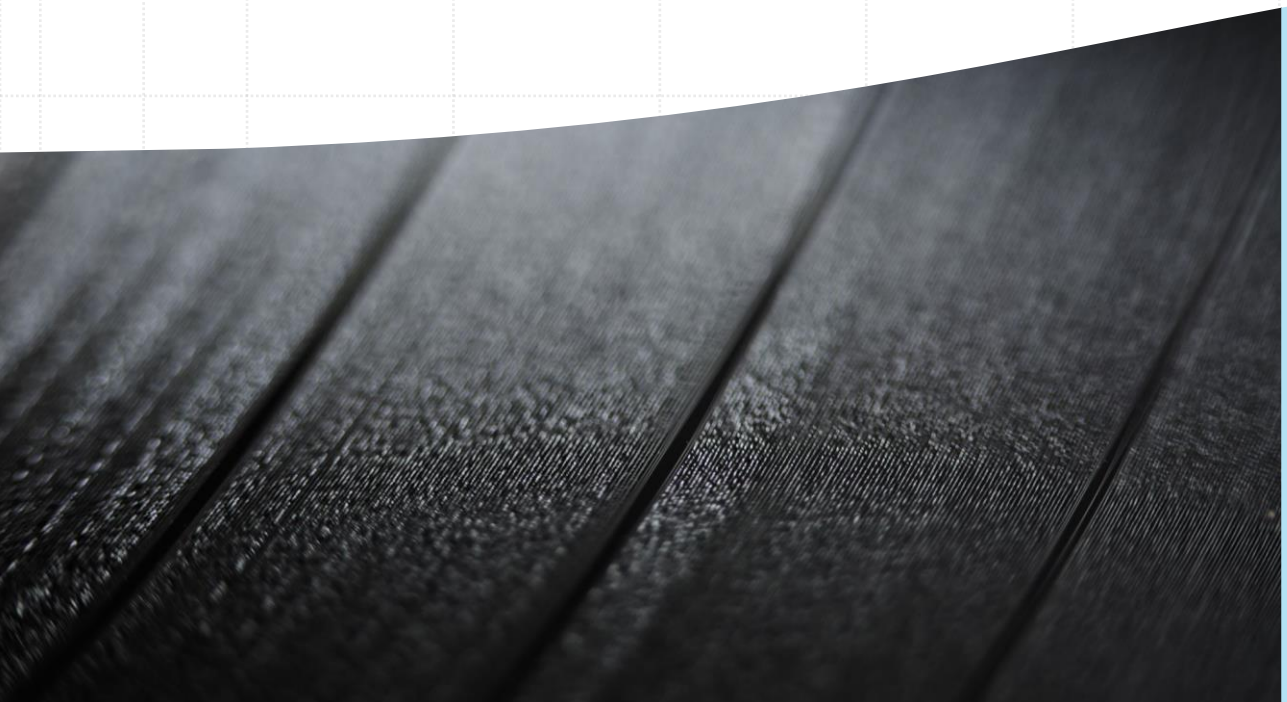
Predicting Hotel booking cancellations

- Suraj Rana Vujjini
- GJ58372



Introduction

- The average percentage of canceled reservations is 24%. Cancellations effect the revenue of the hotel will lose potential revenue customers who will not cancel.
- This number can vary depending upon the time of the year and other factors like weather, etc.
- As a part of the project, I will be creating a model to predict if the reservation will cancel or not. This can help the hotel forecast the future revenue and also price the rooms accordingly.
- The dataset was acquired from Microtel, BWI with permission from the hotel manager.

Topic Domain

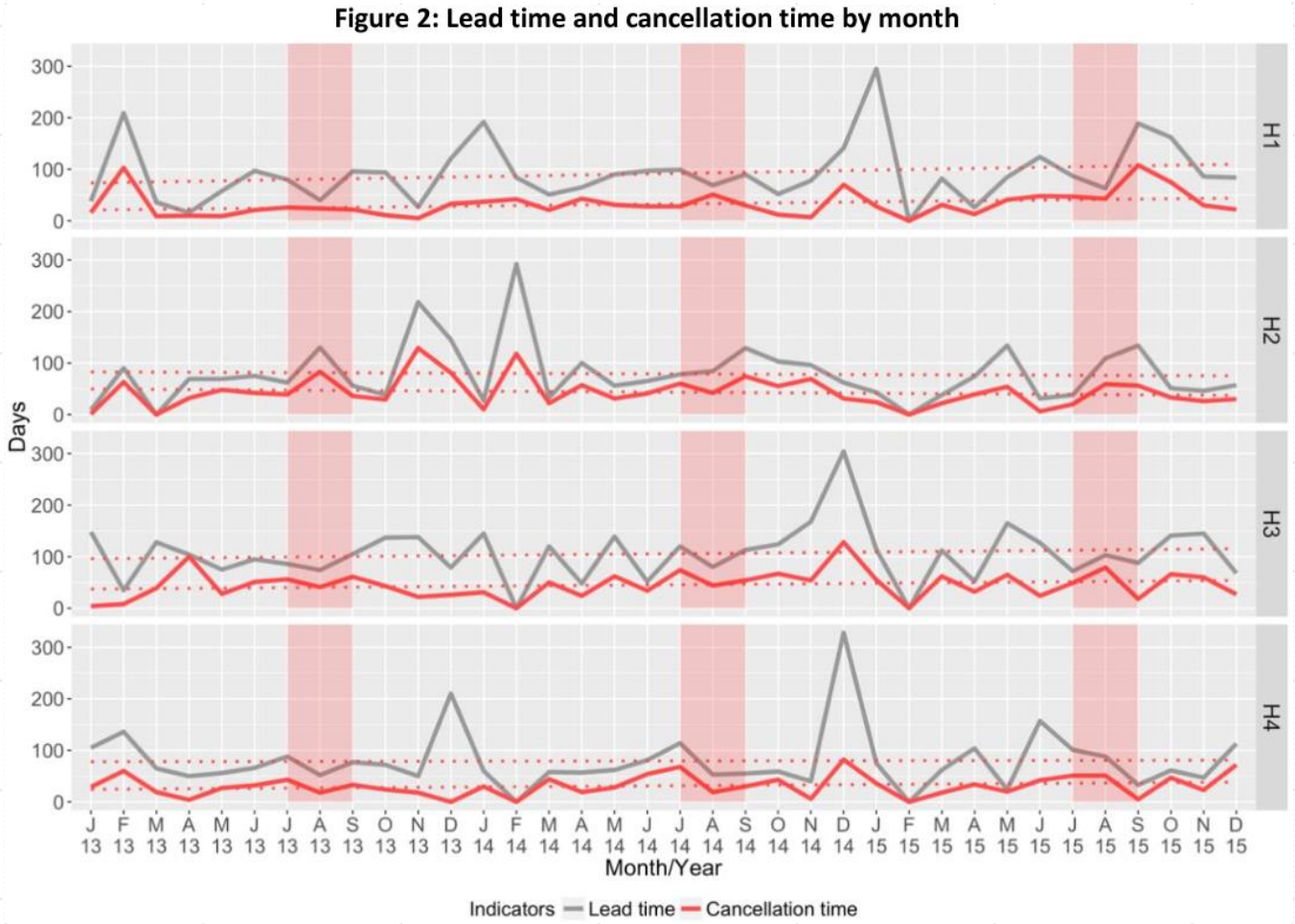
- The main outcome of the project will be to do exploratory data analysis on the reservations of the hotel and predict if the reservations will be canceled.
- The analysis involves showing the customer's booking behavior with respect to the time of the year, type of room booked, etc.
- The model will be using the columns containing the year, Lead Time, day, Length of stay, room type, previous booking history of the customer, etc.

Details of the dataset

- Number of rows: 36,275
- Number of columns: 19
- Total number of values: 689,225
- Dataset acquired from: Microtel Inn & Suites by Wyndham BWI Airport Baltimore

Solution

- The cancellation of the reservation can be found out using logistic regression using scikit-learn.
- I will also be using matplotlib to visualize the data.



Sample graph denoting the month, lead time of the cancellations