

We made the following assumptions

- 1) Total profit for each cab
 - 2) Years profit analysis
 - 3) Seasonality
 - 4) Profit analysis based on age
 - 5) Profit analysis based on city
 - 6) KM travelled profit analysis
 - 7) Profit analysis based on income
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- 1) In this step we calculate the number of rides from each cab, the total profit and the average profit per one ride. The results showed that there are significant differences between the rides of the two cabs. The Yellow Cab has approximately 140000 rides more. As a result, it has 39 million profit more than the Pink cab. Furthermore, Yellow cab has approximately 98 dollars more profit per one ride than the Pink cab.
 - 2) In this step we visualize the total profit over the years. Based on the graphs from our analysis, we observe that Yellow cab has more profits at each period over the years.
 - 3) We also observe seasonality, since in the period of September to January there are more profits in both cabs, while in period of May to August there are few profits.
 - 4) In this step we visualize the total and the average profit based on the age of the customers. Based on the graphs we can see that there are two zones. The zone of 20-40 and the 40-65. In both zones the total profit of Yellow cab is more. The same outcome exists in the average profit based on the ages 20-65.
 - 5) The same procedure is utilized in the fourth step. We use the cities instead of age. The total profit of some cities seems to be equal for both cabs. In addition, for the average profit per 1 ride only the city of Tucson Az has more profit in the Pink cab.
 - 6) In this step we calculate the total profit per 1 KM by each company directly. There is significant the two cabs. The Yellow one has more profits again.
 - 7) Finally, in the last step of our analysis we follow the same procedure based on the income group variable that we created. In any case the total profit of Yellow cab is more. In the average profit per 1 ride there are no differences among the groups of income, but all of them have significant difference between the two cabs. The Yellow one has more profits per 1 ride.

EDA RECCOMENDATION

The whole analysis showed us that Yellow cab has by far more profits and demand than the Pink cab. Thus, we recommend the Yellow cab for investment.