



Data Glacier

Your Deep Learning Partner

G2M insight for Cab Investment Firm

Virtual Internship Week 2

27th June 2021

Agenda

Executive Summary

Problem Statement

Approach

EDA

EDA Summary

Recommendations

Executive Summary

- XYZ is a private firm in US. Due to remarkable growth in the Cab Industry in last few years and multiple key players in the market, it is planning for an investment in Cab industry and as per their Go-to-Market(G2M) strategy they want to understand the market before taking final decision.

Problem Statement

- Cab Companies included:
 1. Yellow Cab
 2. Pink Cab
- The task is to identify the right company to invest in.

Data Exploration

- There are 4 datasets:
 1. Cab_Data.csv
 2. Customer_ID.csv
 3. Transaction_ID. Csv
 4. City.csv
- TimeFrame of the Data: 2016-01-31 to 2018-12-31
- Total Data Points: 355,032



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Exploratory Data Analysis

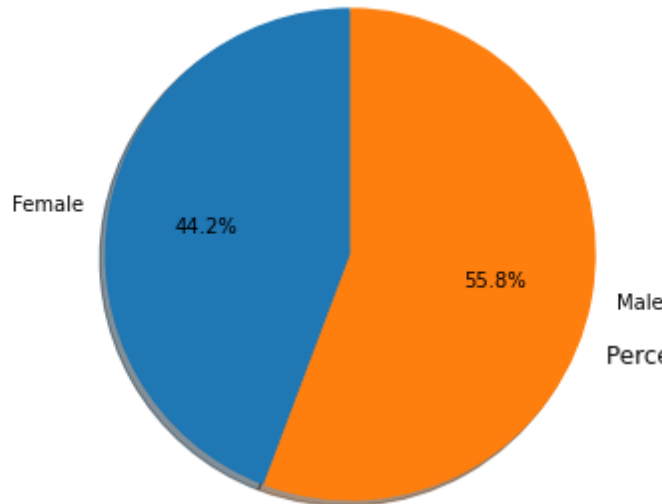
Statistics of the Total Distance Travelled by Both Cabs

	PinkCab	YellowCab
Count	84711.000000	274681.000000
Mean	22.559917	22.569517
Std. Dev.	12.231092	12.234298
Min	1.900000	1.900000
25%	12.000000	11.990000
50%	22.440000	22.440000
75%	32.960000	32.960000
Max	48.000000	48.000000

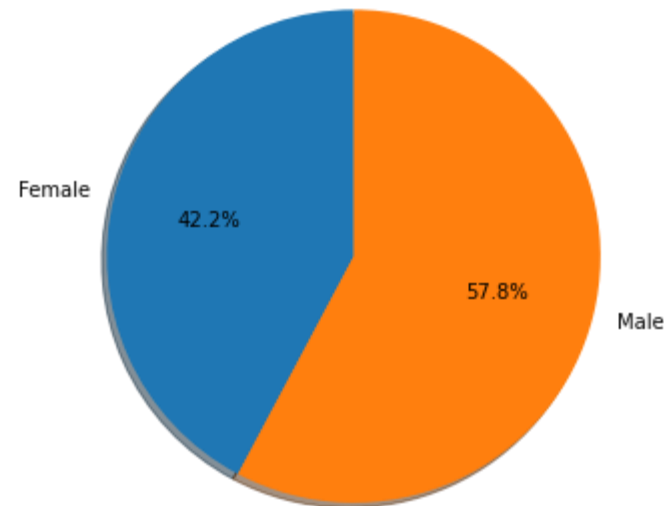
- The mean, standard deviation, minimum, maximum and all the percentiles are the same for both the cabs. However, the overall distance travelled for Yellow Cab is greater than Pink Cab.

Gender Based Percentage Distribution

Percentage distribution of customers for pink cab gender wise

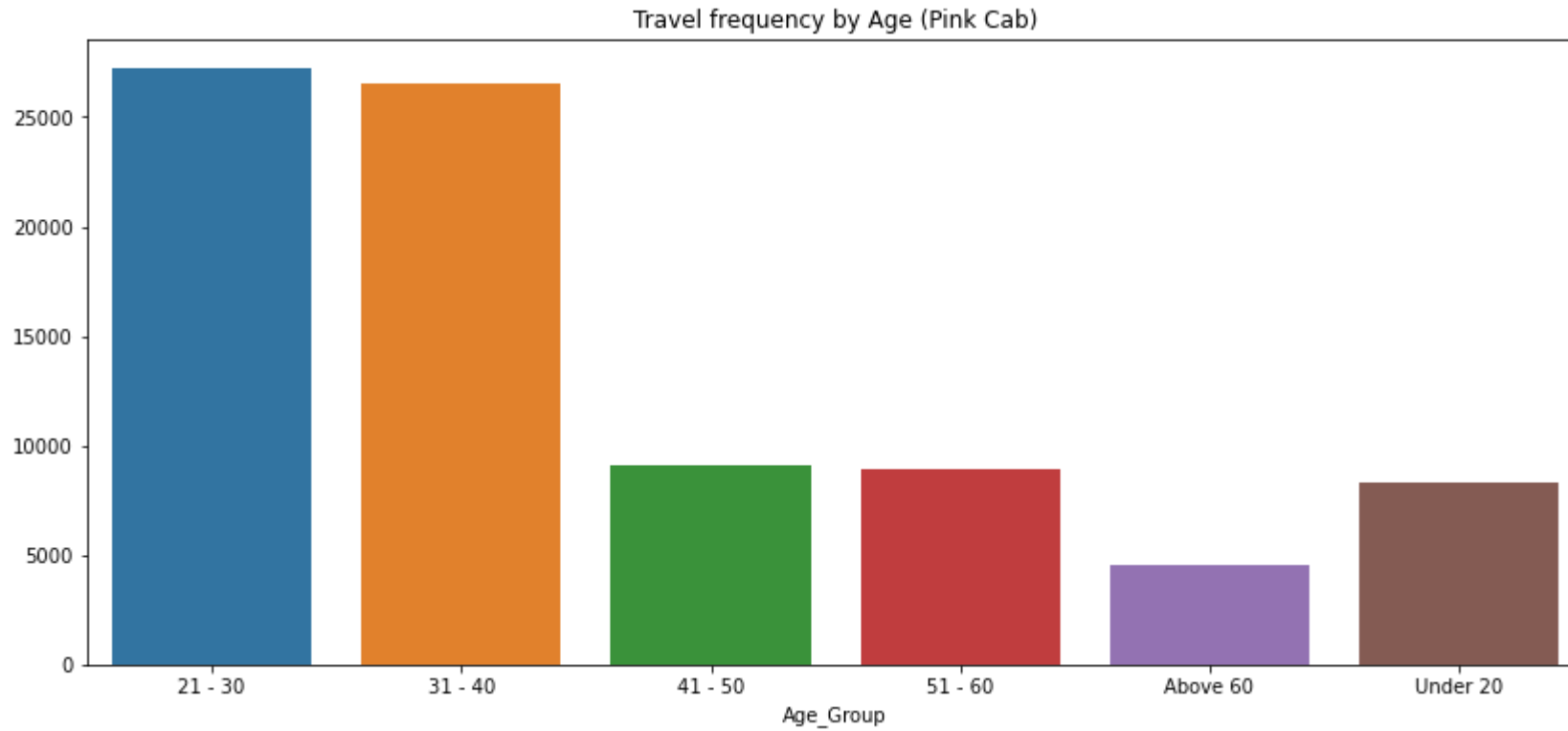


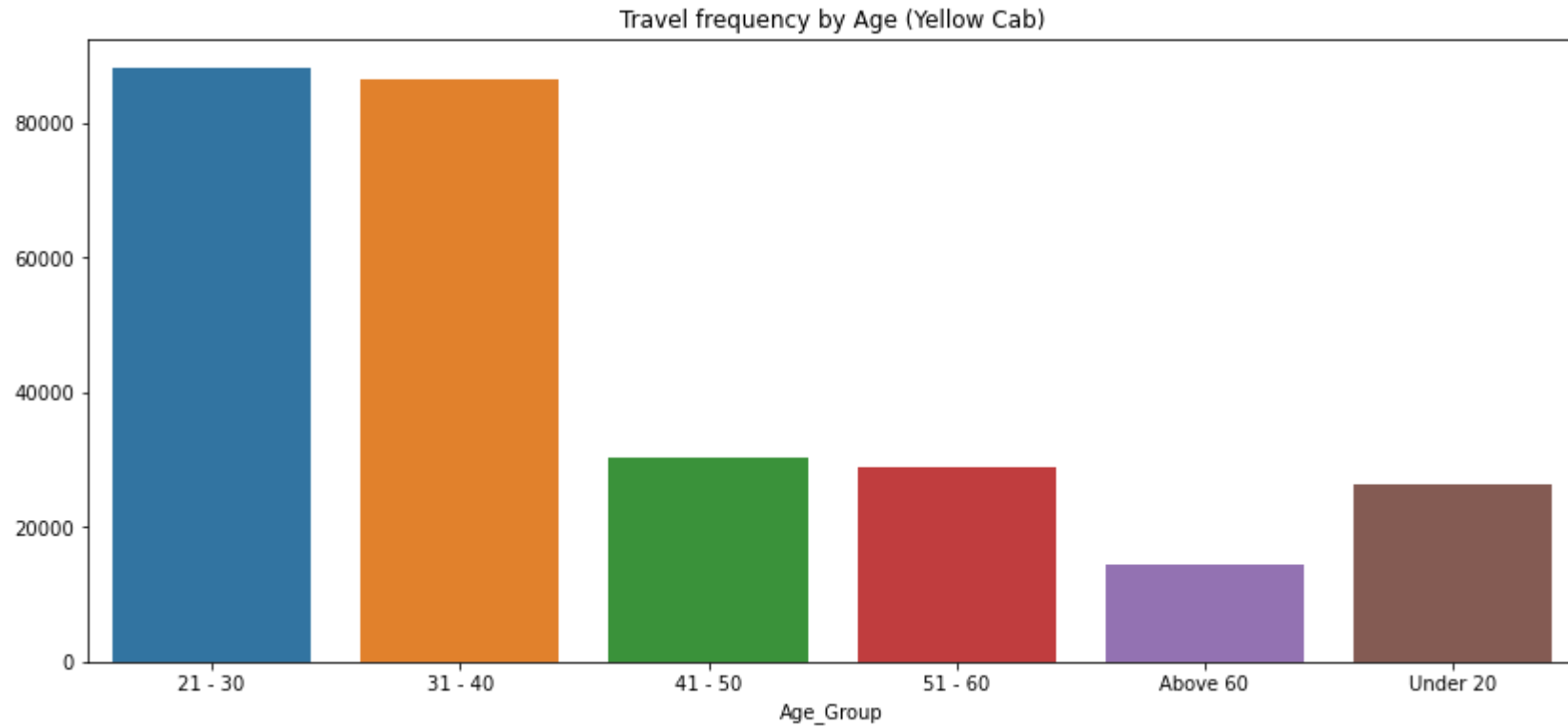
Percentage distribution of customers for yellow cab gender wise



- It can be seen that the overall percentage of females in Pink Cab is greater than in Yellow Cab.

Age Based Travel Frequency

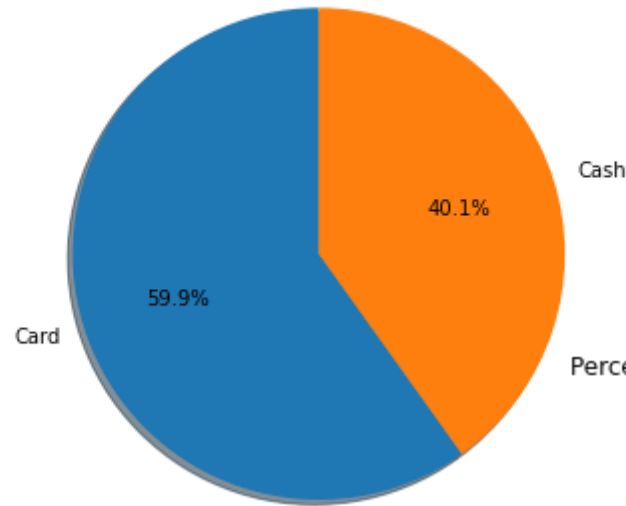




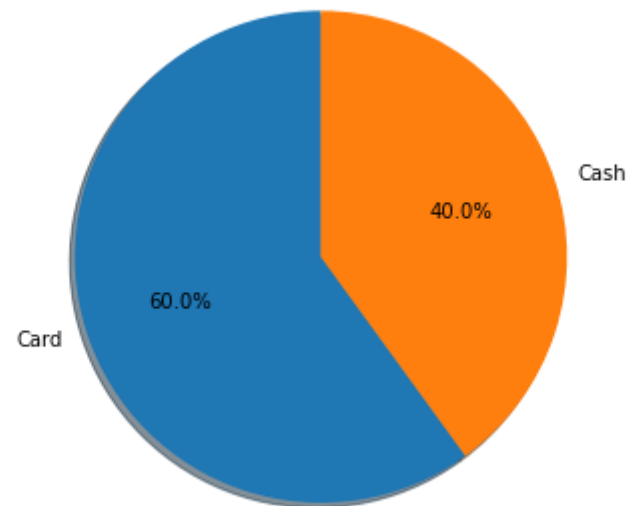
- For both of the cabs, customers between the age of 21-40 use more cabs than any age group.

Payment Mode Based Customer Distribution

Percentage distribution of customers for pink cab payment mode wise

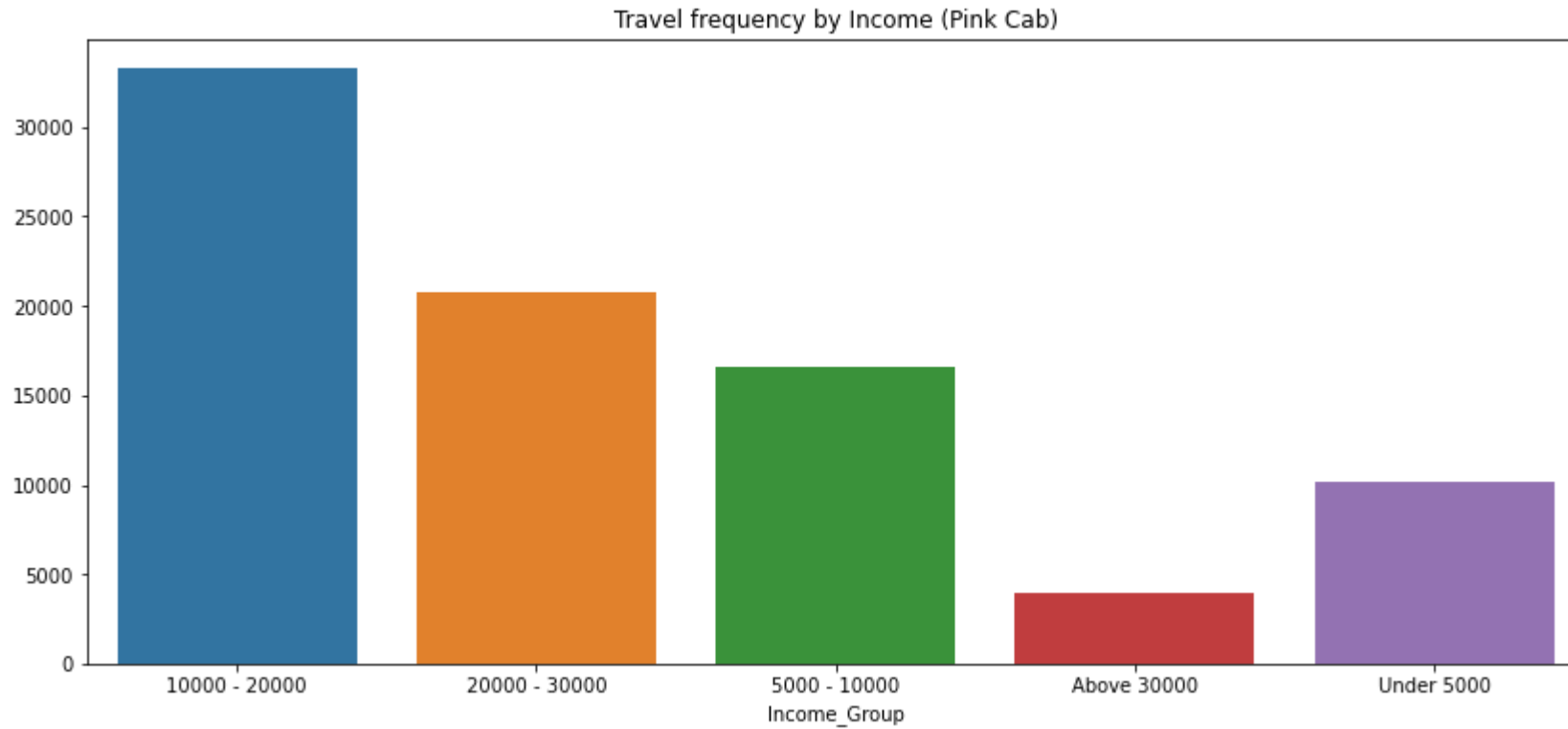


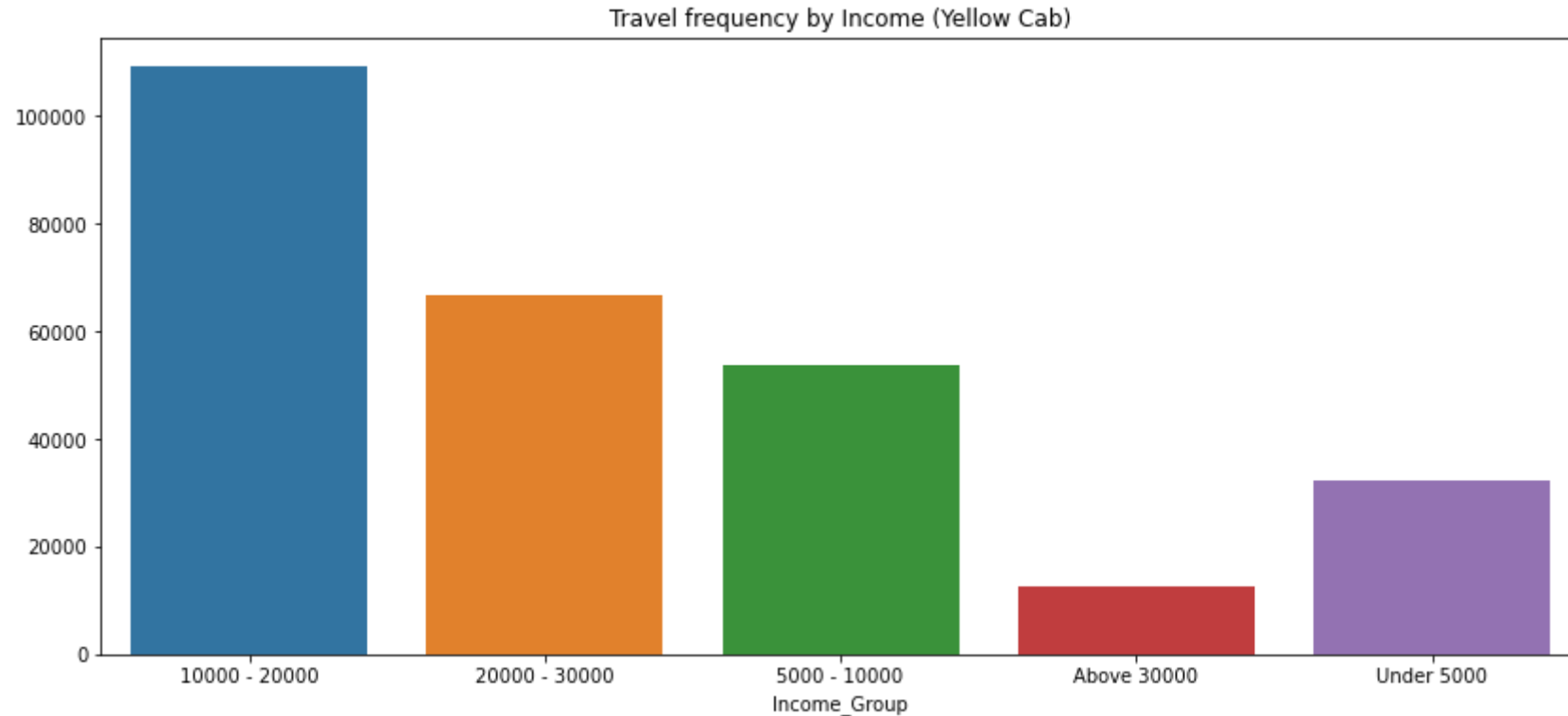
Percentage distribution of customers for yellow cab payment mode wise



- It can be seen that more of the customers prefer to use Card in Yellow Cab than in Pink Cab.

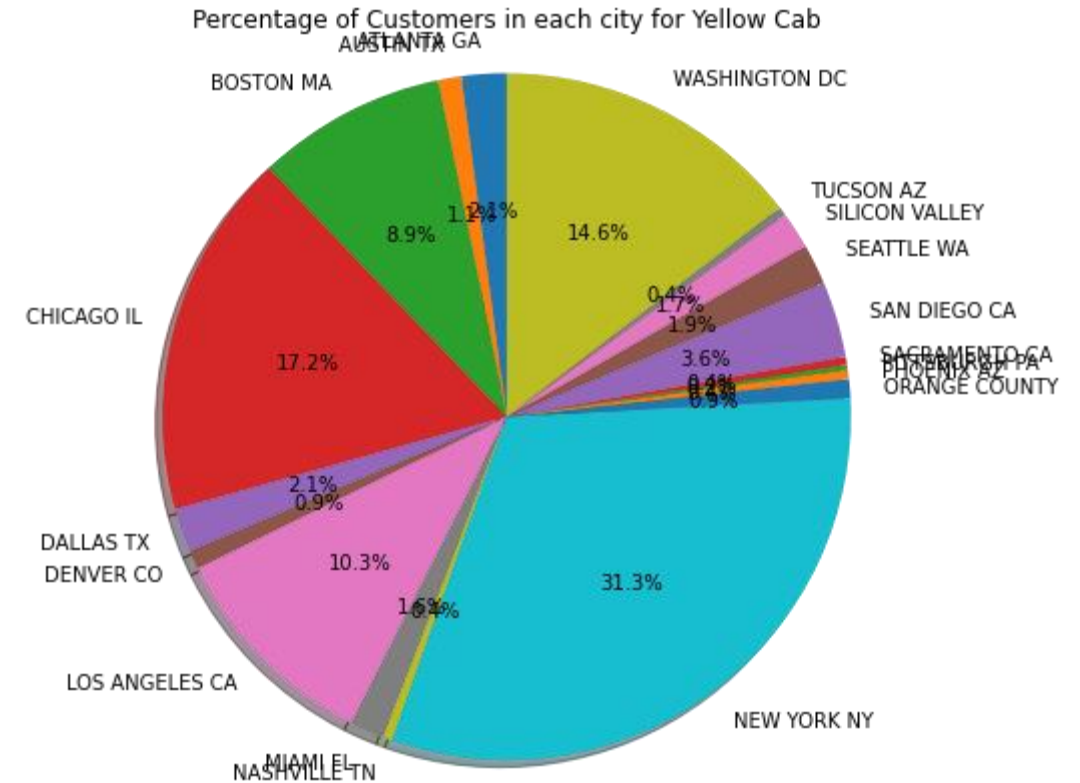
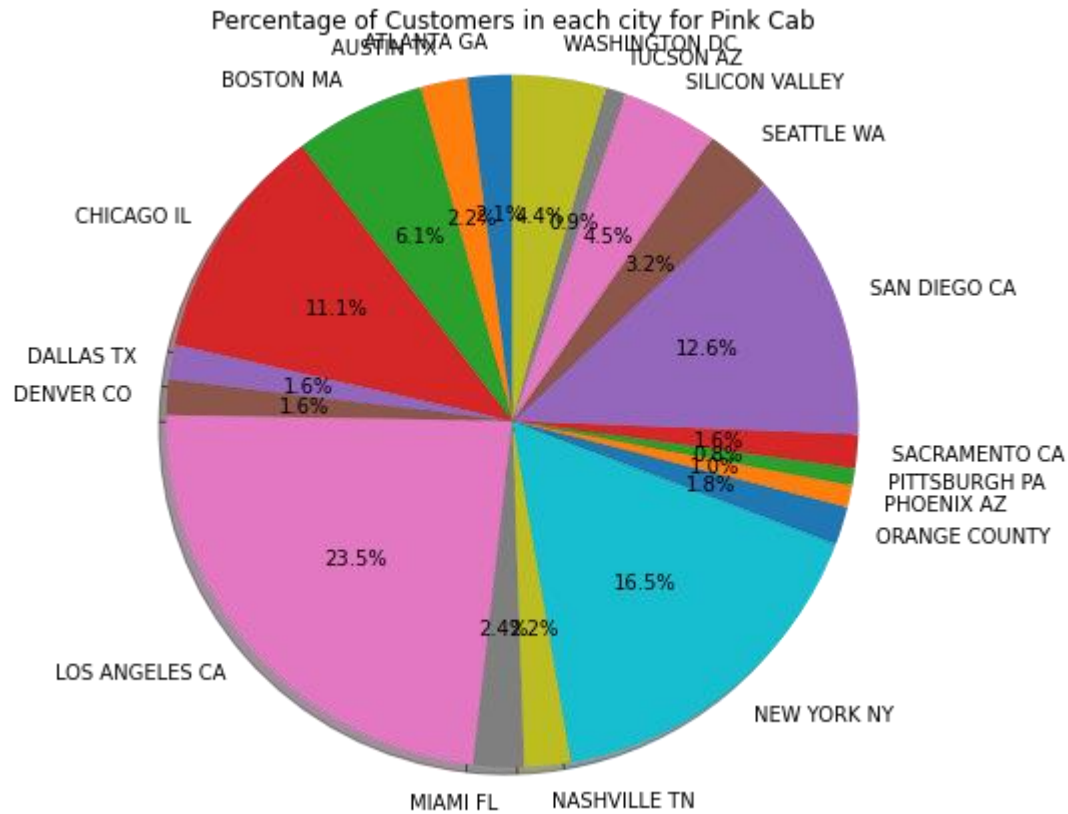
Income Based Travel Frequency





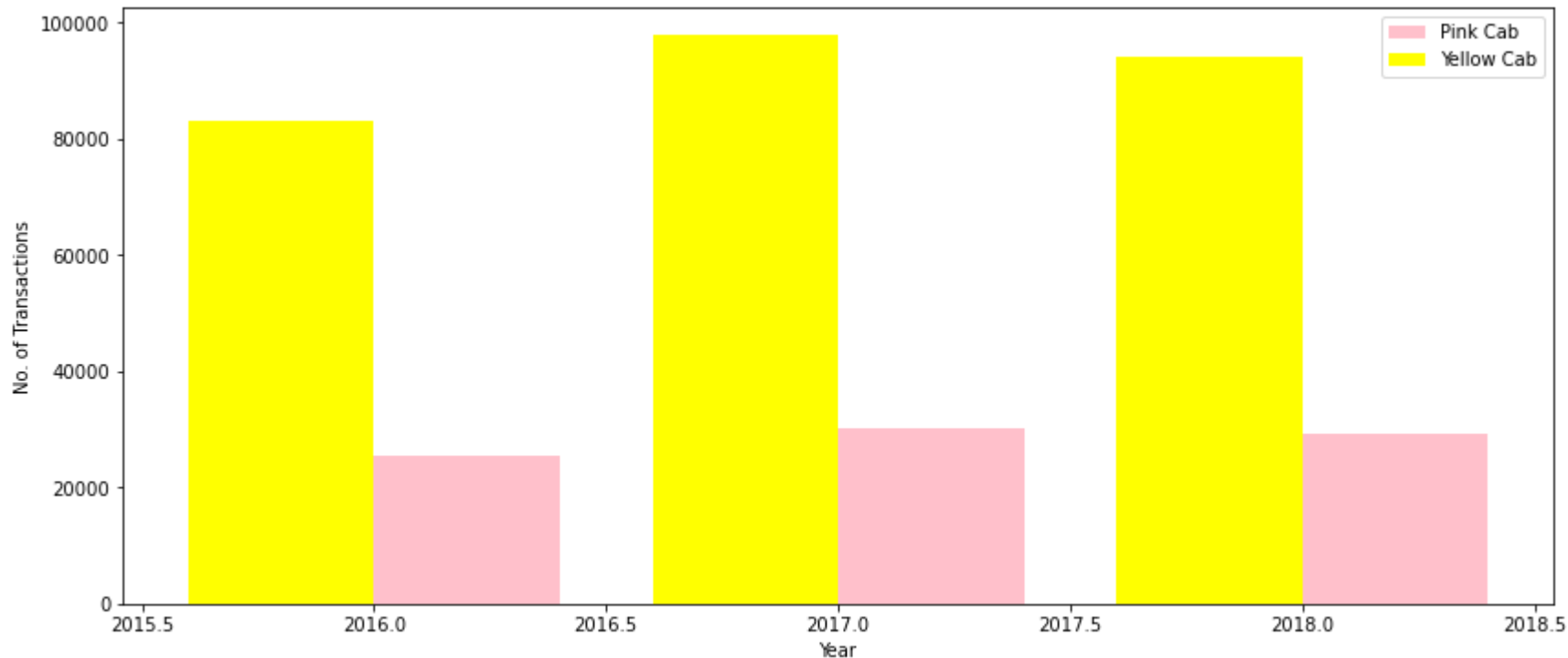
- Customers with income between 10,000 and 20,000 prefer to use cabs the most.
- However, for each income group the number of customers for Yellow Cab is significantly higher, showing that there are more customers for the Yellow Cab.

Customer Distribution in each city



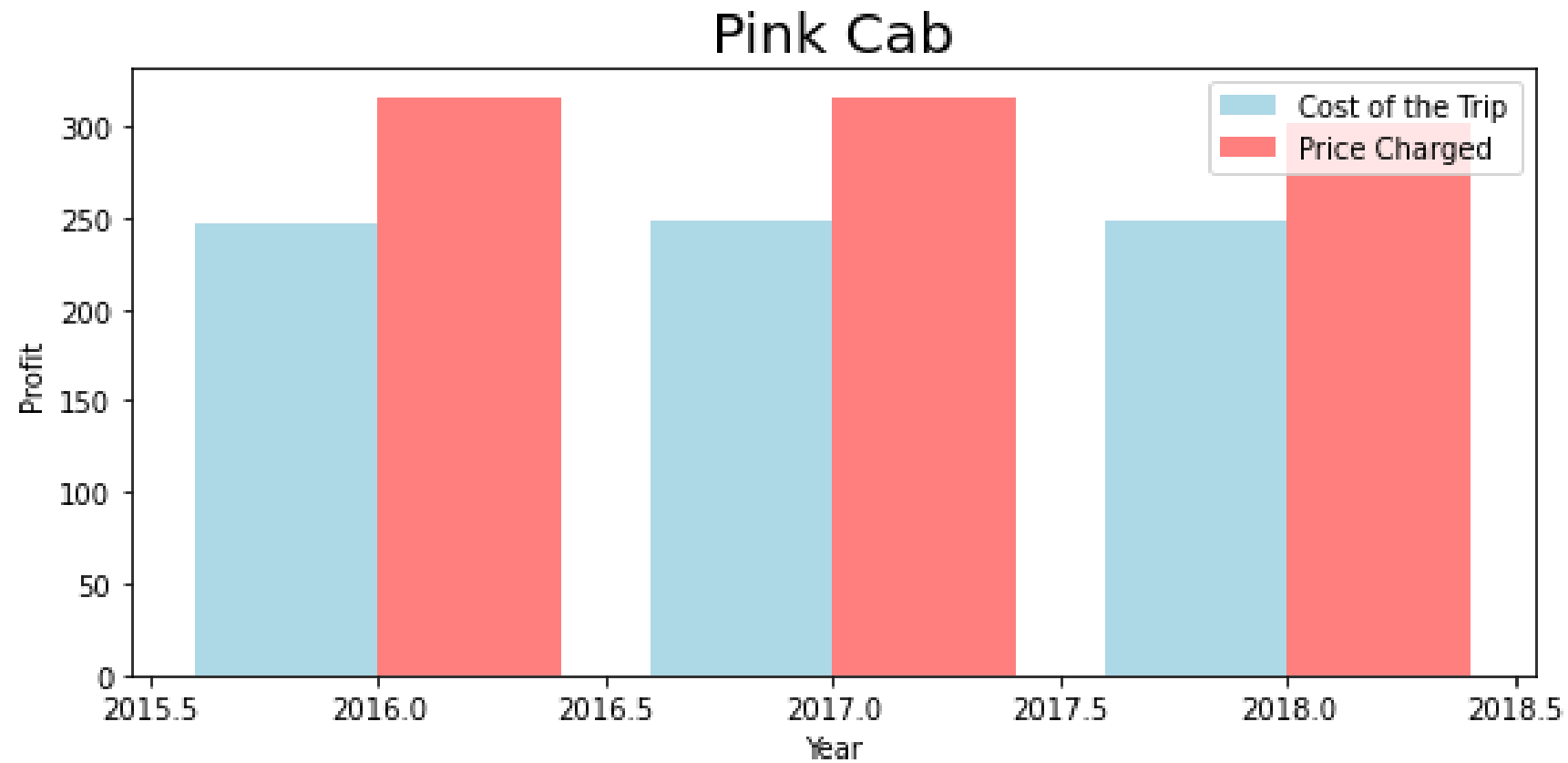
- In the major cities of New York, Chicago and Washington, more customers prefer to use the Yellow Cab. In Los Angeles, customers prefer Pink Cab.

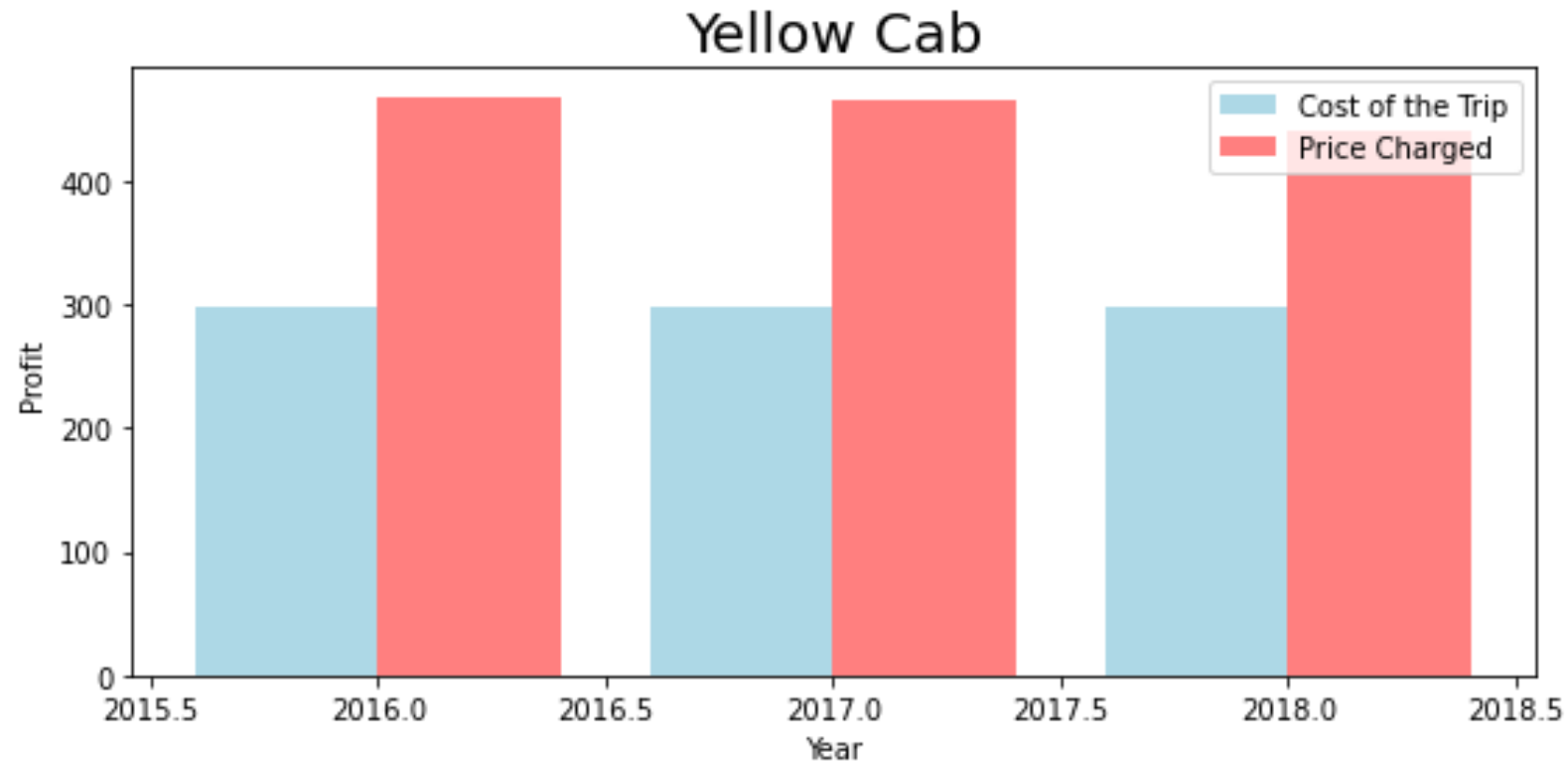
Number of Transaction per year



- The overall number of transactions for all the years is almost 4 times higher for the Yellow Cab.
- The customer reach has also increased more for the Yellow Cab in 2017.

Profit Margin

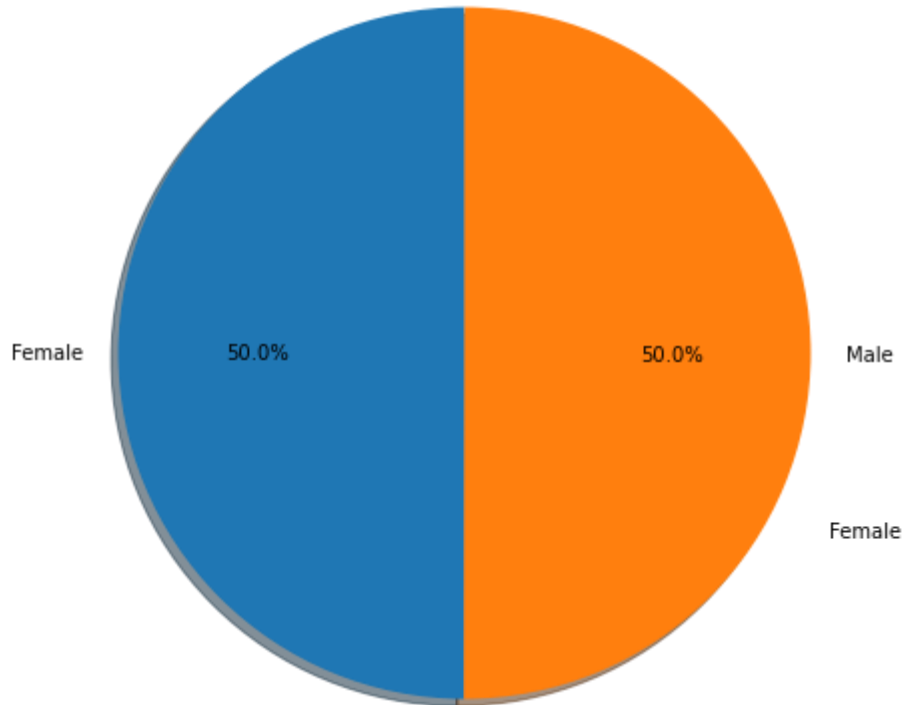




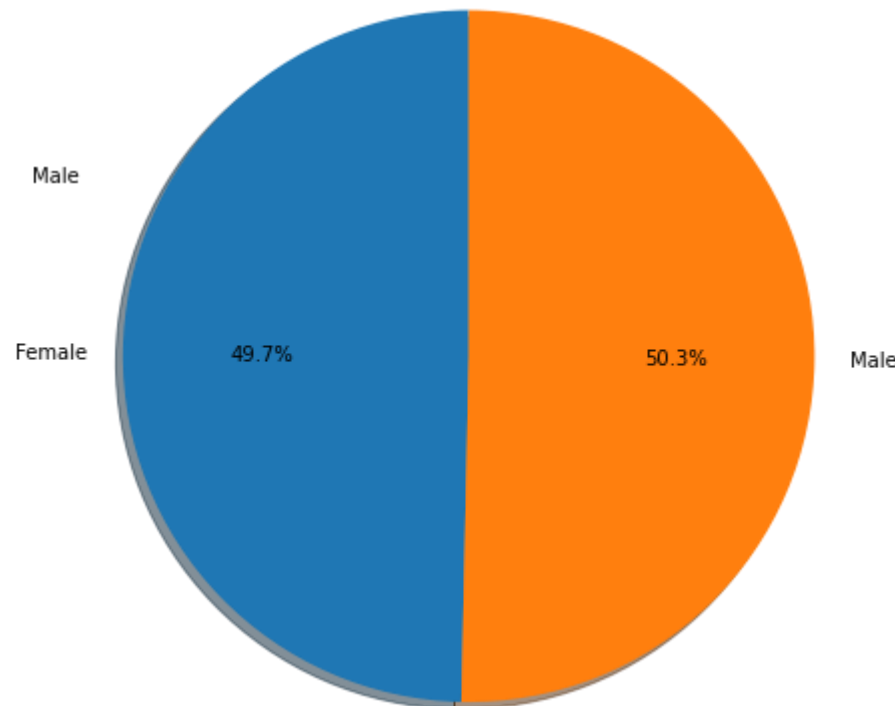
- It can be easily seen that the Yellow Cab has kept more Profit Margin.

Price Charged per Gender

Price Charged per Gender for Pink Cab



Price Charged per Gender for Yellow Cab



- The price charged for the Pink Cab is the same for both genders, however, the Yellow Cab seems to give more discounts to the females.

Summary

	Pink Cab	Yellow Cab
<i>Distance Travelled</i>	lesser	greater
<i>No. Of Customers</i>	lesser	greater
<i>Female Customers Percentage</i>	greater	lesser
<i>Age Based Customers ratio</i>	Same	Same
<i>Income Based Customers ratio</i>	Same	Same
<i>Customers Percentage using Card for payment</i>	lesser	greater
<i>Customers Percentage in major cities</i>	Los Angeles	New York, Chicago, Washington
<i>Increase in Customer Reach</i>	lesser	greater
<i>Profit Margin</i>	lesser	greater
<i>Percentage Discounts to females</i>	lesser	greater

Recommendation and Summary

- Based on the points stated in the previous table, we suggest that it is better to invest in the Yellow Cab.
- Yellow Cab has more customers, covered more distance, have gained more customers trust which can be seen by more customers using card and the customer reach increasing.
- It is also very popular in most of the major cities. Yellow Cab provides discounts to females, but also has kept the profit margin high.

Thank You