



Data Glacier

Your Deep Learning Partner



G2M insight for Cab Investment firm

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Agenda

- Problem Statement
- Datasets Information
- Approach
- EDA
- EDA Summary
- Recommendations

Problem Statement

- 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.
- Objective: Provide actionable insights to assist XYZ firm in determining the best company for investment.

Dataset Information

Datasets for the analysis:

Cab_Data.csv – this file includes details of transaction for 2 cab companies

Customer_ID.csv – this is a mapping table that contains a unique identifier which links the customer's demographic details

Transaction_ID.csv – this is a mapping table that contains transaction to customer mapping and payment mode

City.csv – this file contains list of US cities, their population and number of cab users

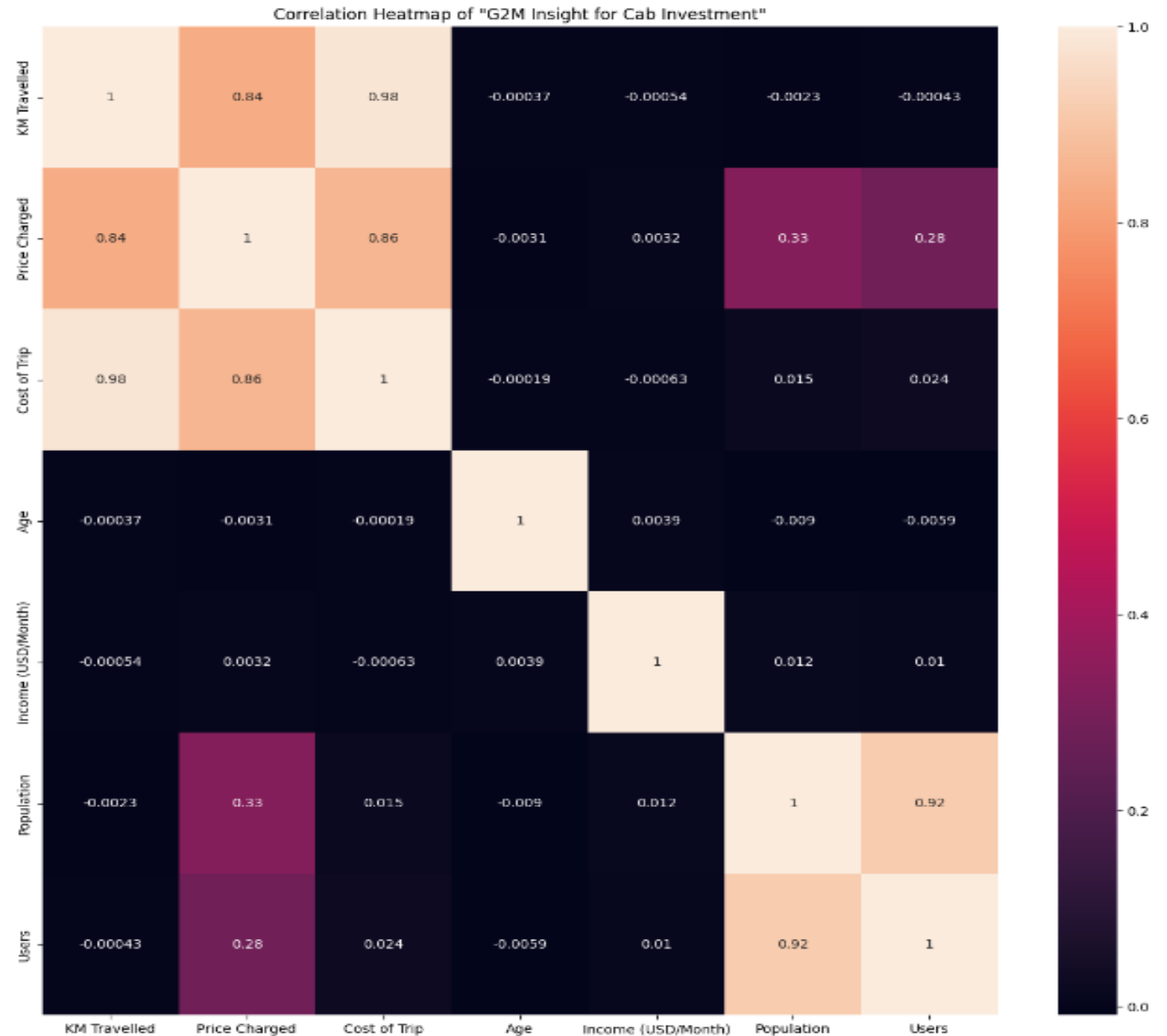
Approach

- Understanding the data and Visualization.
- Taking necessary data and checking the datatype.
- Recognizing the number of users per company.
- Finding the most expensive and least expensive cab.
- Identifying the profitable company.
- Investigating and testing multiple hypothesis

Correlation between variables

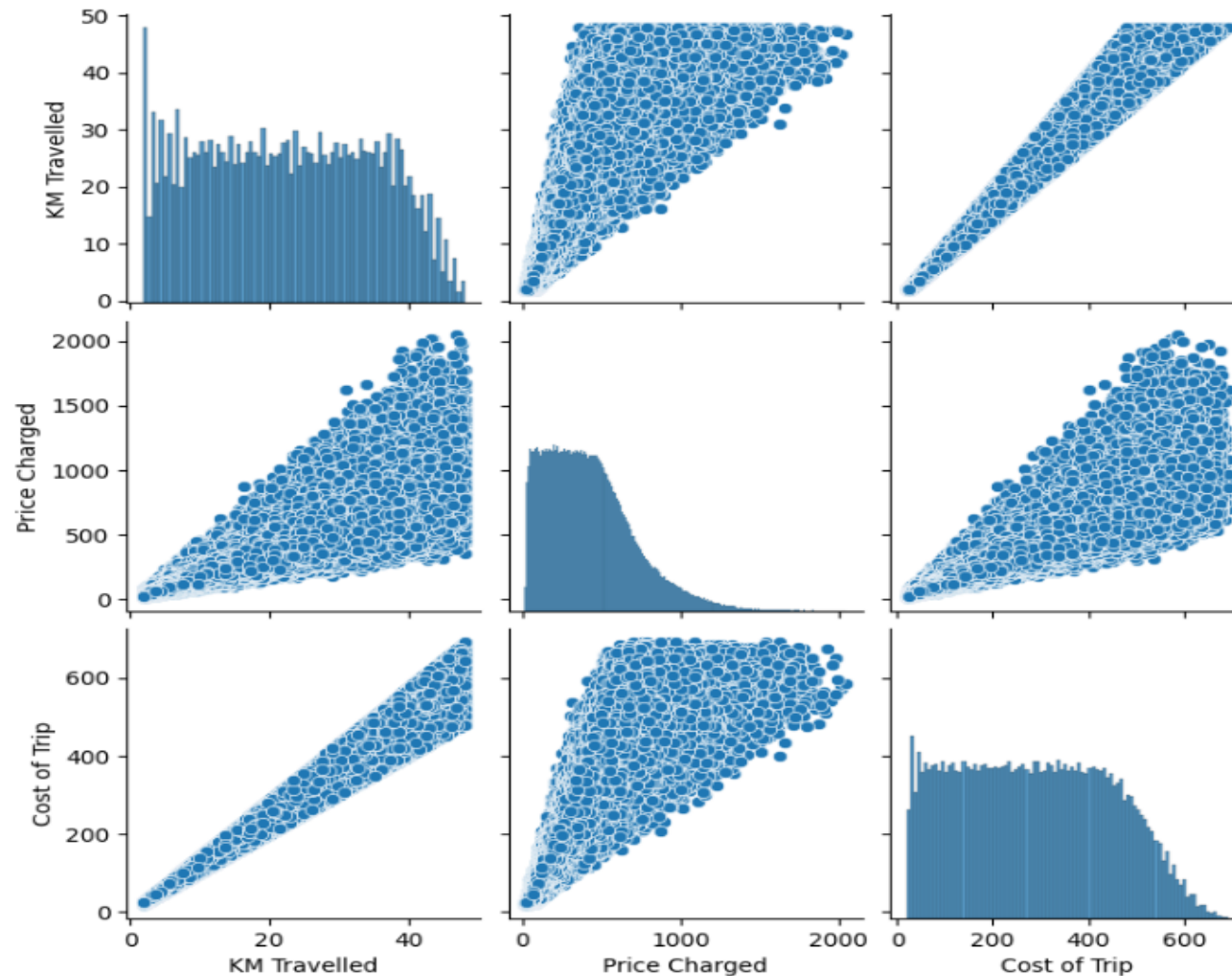
From above map there is a correlation between:

- KM travelled is highly correlated with Price Changed and Cost of Trip.
- Also, Users are related to population.



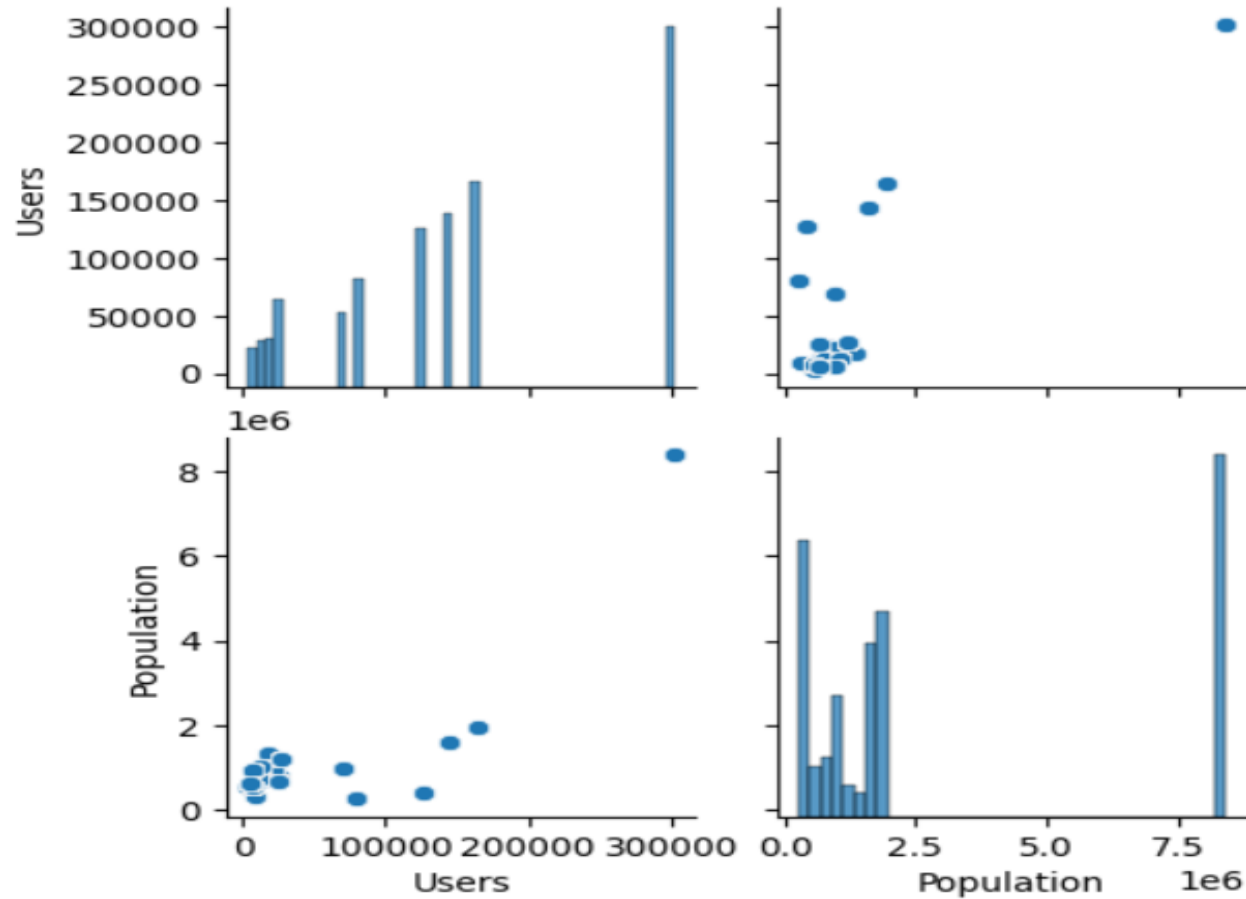
Correlation

KM travelled is highly correlated with Price Charged and Cost of Trip.



Correlation

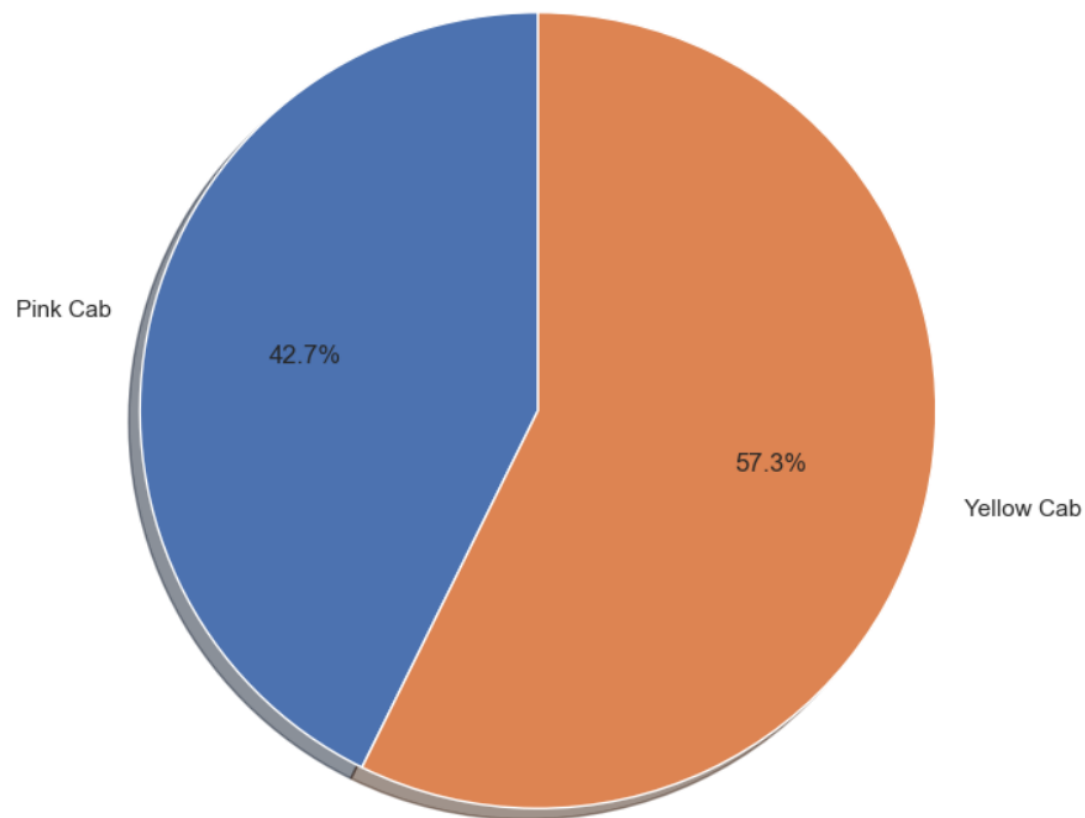
Users are correlated with Population .



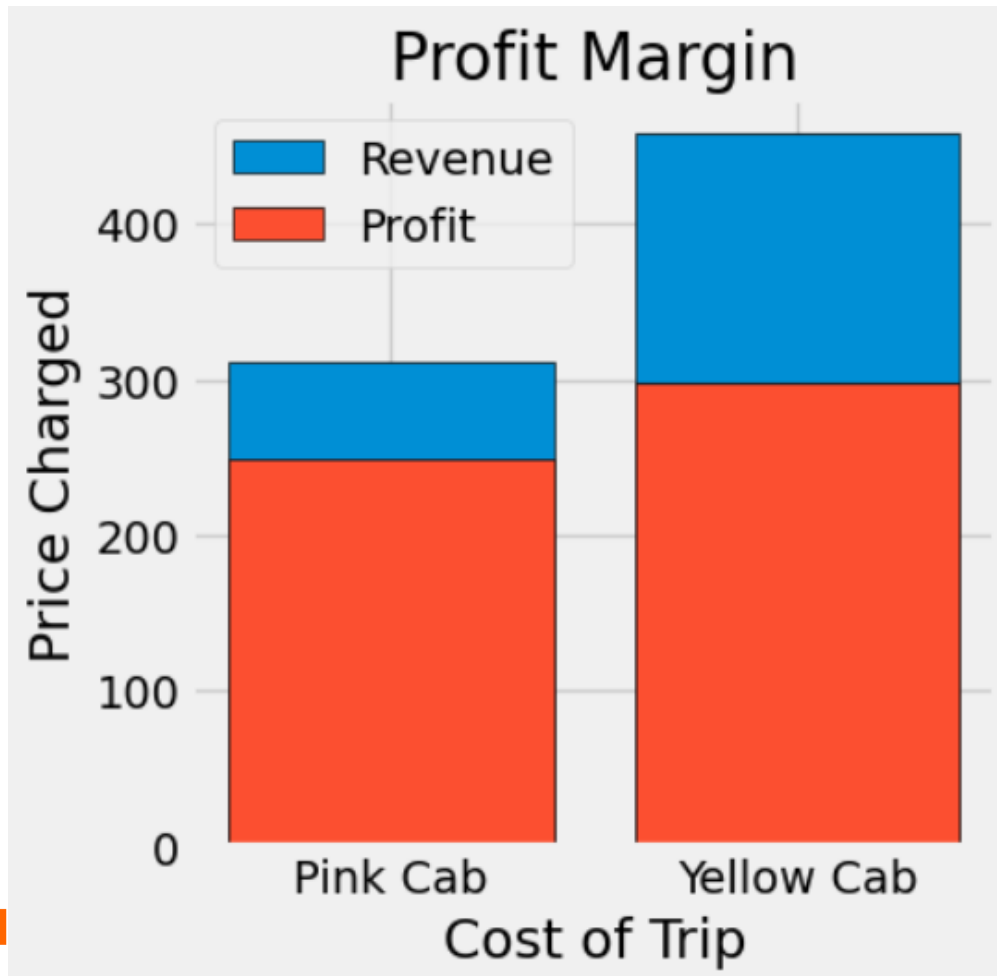
Exploratory Data Analysis

No of Users

- From the pie chart it is evident that Number of yellow cab users are more than pink cab.
- For Pink cab it is 42 % while Yellow cab has 57 %.



Profit Margin



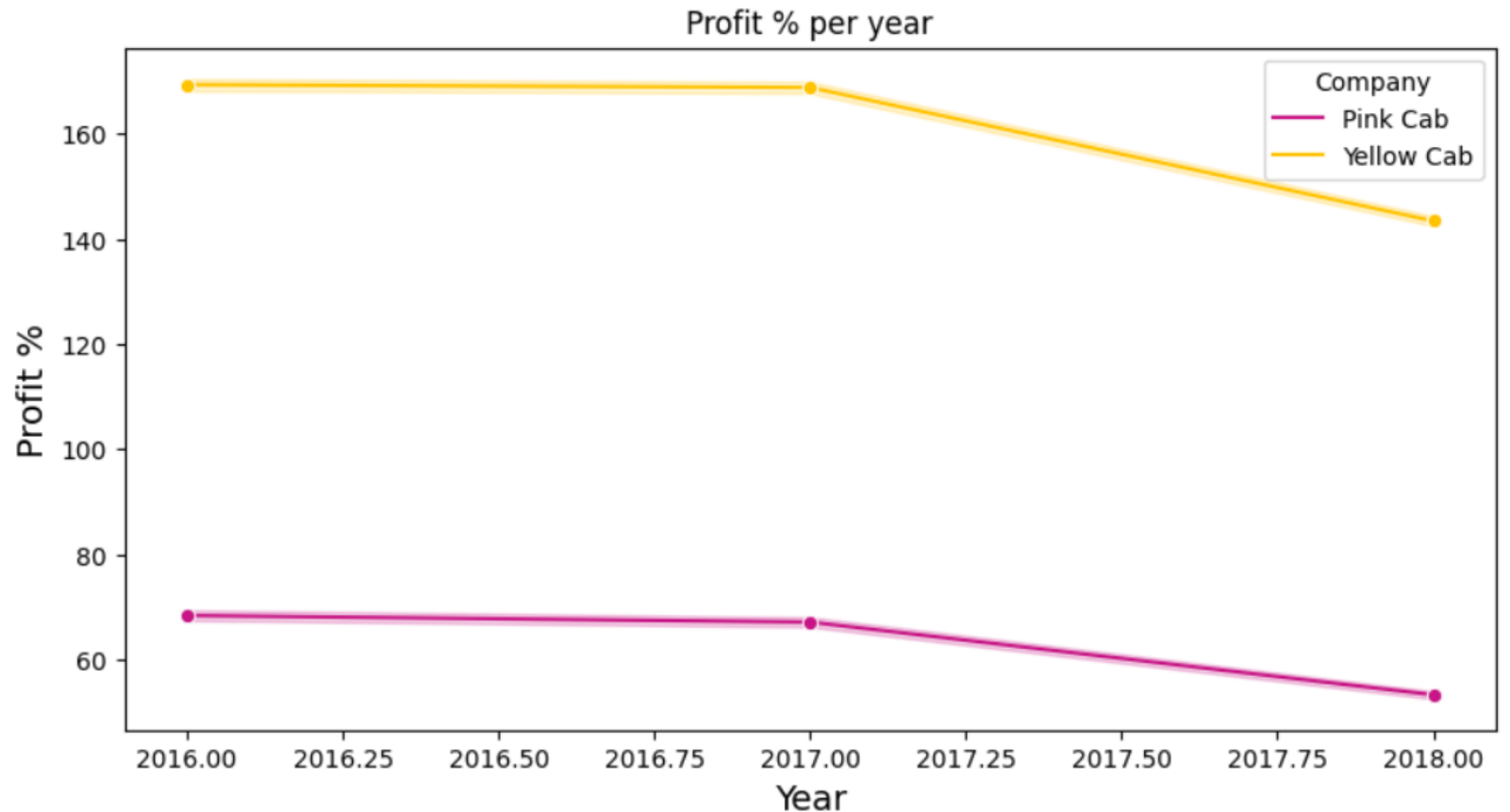
- In contrast to the Pink cab, the Yellow cab has a higher profit margin.
- In x-axis the cost of the trip and on y-axis price charged.
- This bar graph shows Revenue as well as profit are more in Yellow cab.

Profit in Year

Time period of data is from 2016 to 2018.

From the line graph we can conclude

- In comparison to 2018, both companies' profits were higher in 2016.
- In the year 2018, PINK cab had higher profits than YELLOW cab.
- From 2016 to 2017, the profit margin stayed consistent and it was dropped after 2017.

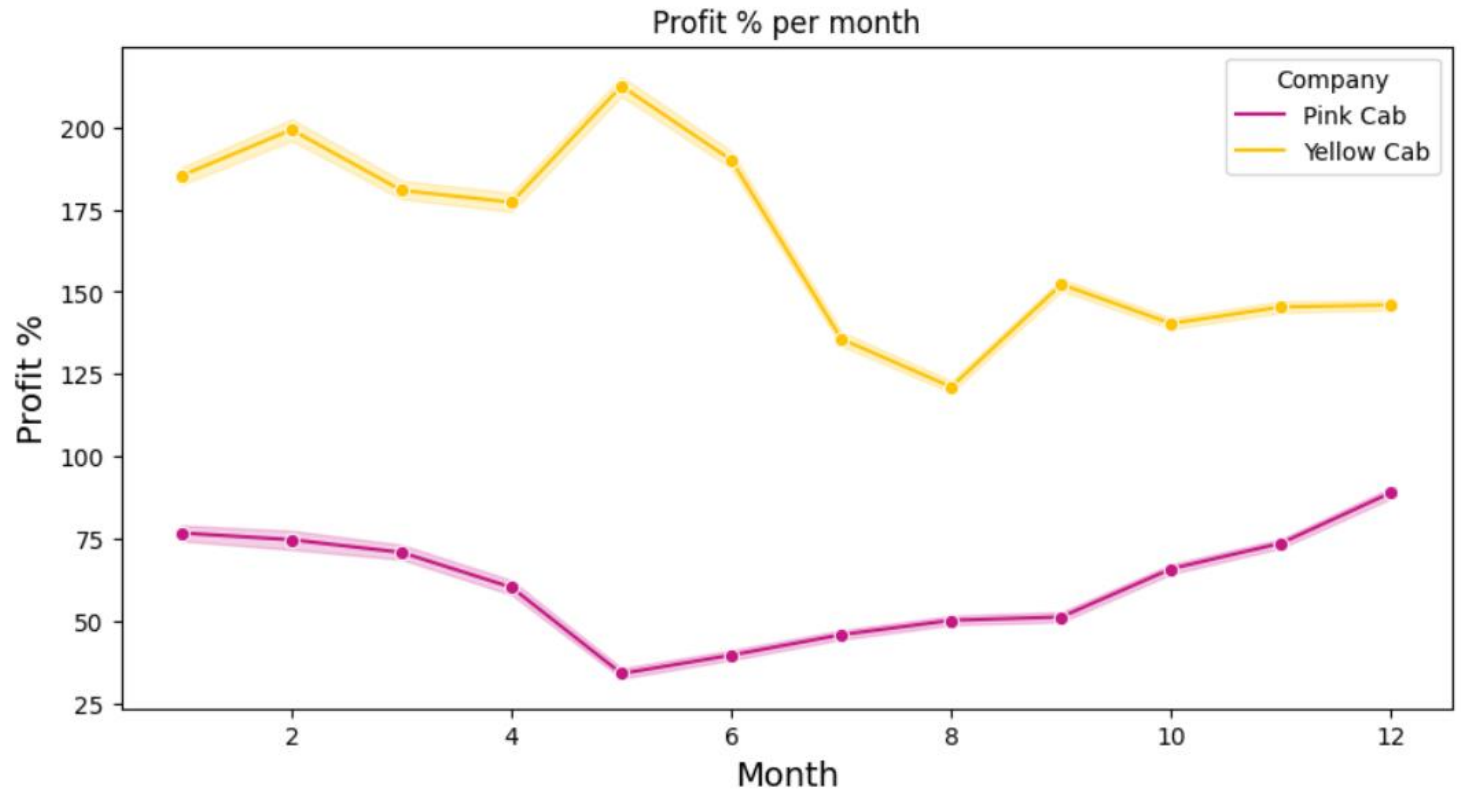


Profit in Month

Time period of data is from 31/01/2016 to 31/12/2018.

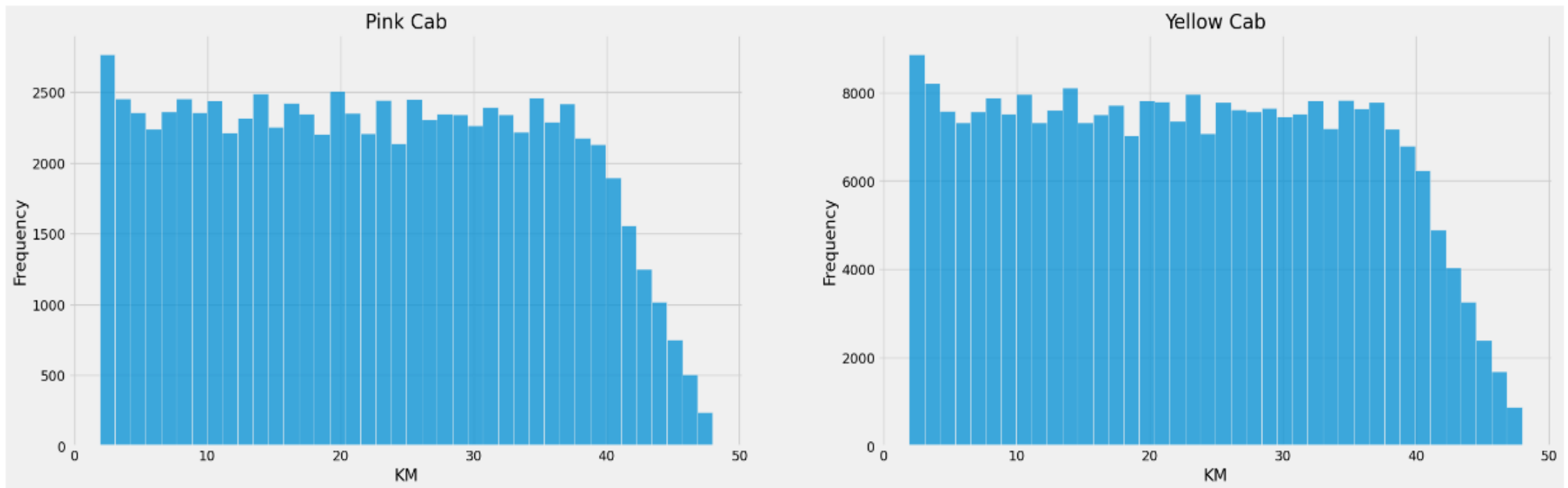
From the line graph we can conclude:

- The middle of the year appears to have been profitable for YELLOW cab.
- PINK Cab has made more profit at the beginning and end of the year.
- In pink cab, profit was going up and down consistently while in yellow cab it was declined over the months and later it went up.



KM Travelled Distribution

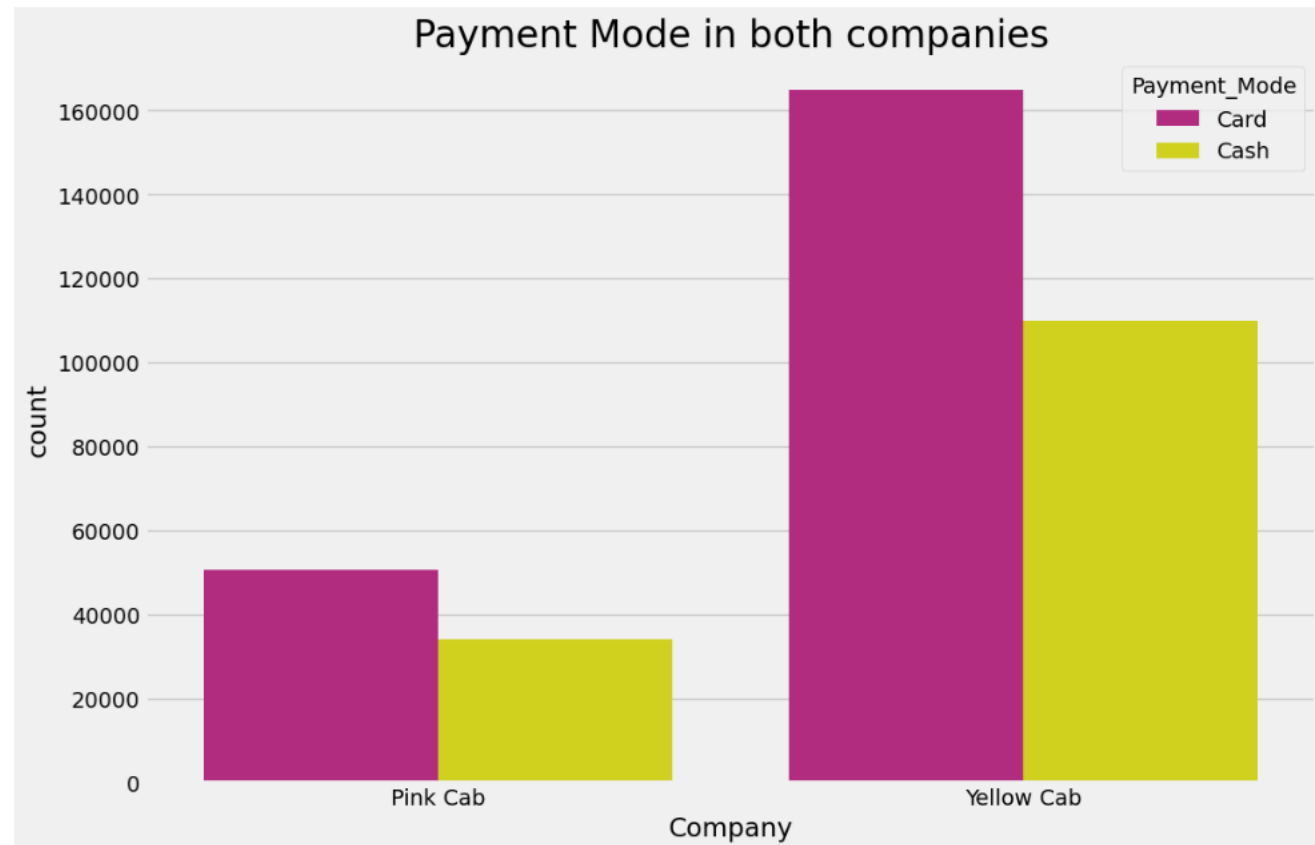
Number of km travelled in both cabs.



Most of the rides are in the range of approximately 2 to 48 KM.

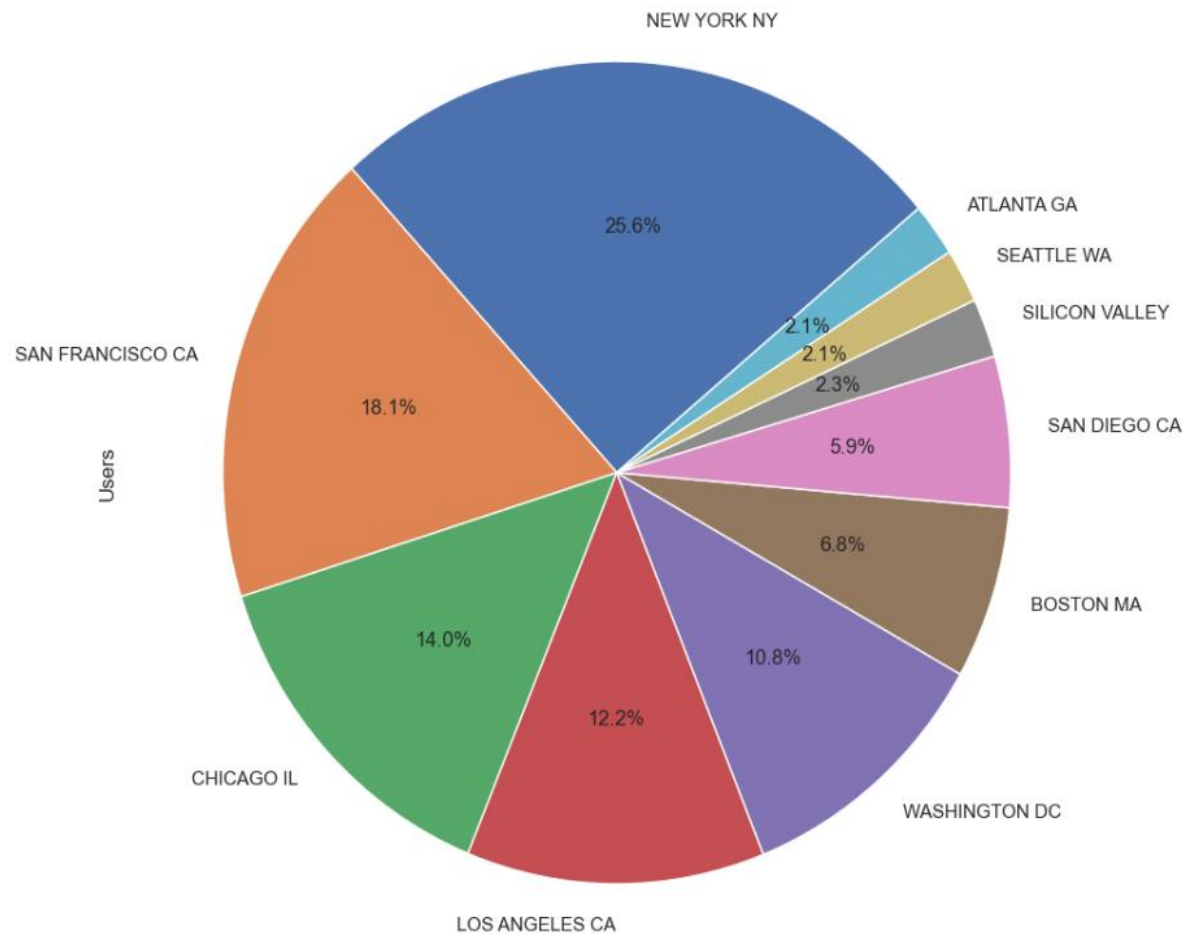
Mode of payment

Users preferred to pay with a card more than cash.



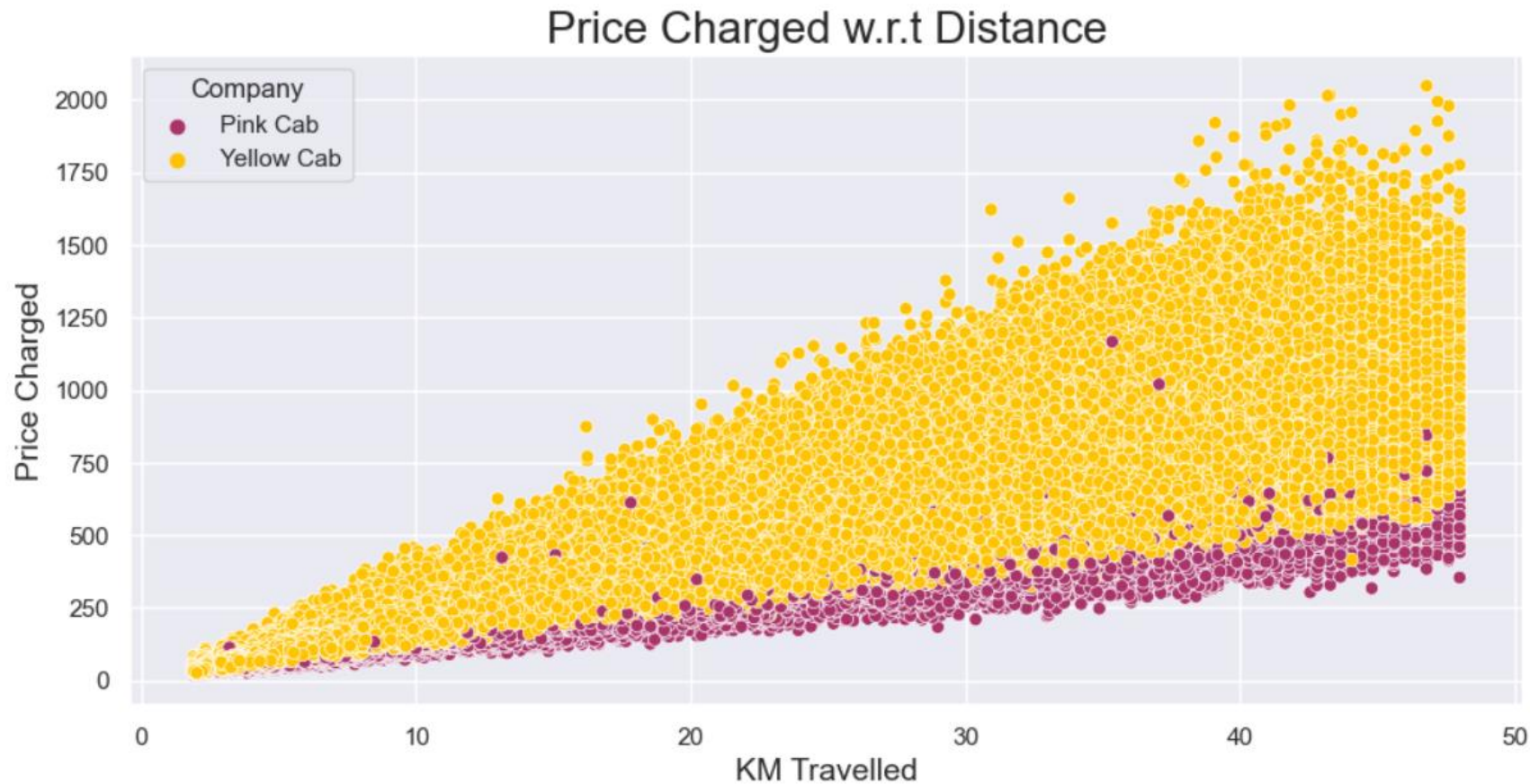
Users per City

User presence city wise.



- The majority of cab users are in New York City (25%), followed by San Francisco (18%), and Chicago (14%).
- It is clear that New York city represents the largest portion of 25%. That is a quarter of the total.
- San Francisco has the second-highest users, at 18.1 per cent. Chicago represents 11.7 per cent of the total. Los Angeles is 12.2 per cent, followed closely by Washington DC at 10.8 per cent, and then Boston at 6.8 per cent.
- The smallest users in terms of city are Atlanta, Seattle, Silicon. These cities have almost same amount of per cent.

Price charged with respect to Distance



The scatter plot above demonstrates a linear relationship between the price charged and the distance travelled for both cab companies. Moreover, Yellow cabs are more expensive than Pink cabs.

Recommendations

- Yellow Cab is noticeably earning much Profit than Pink Cab.
- Yellow cab is preferred by the customers over Pink cab.
- Yellow Cab is more popular than Pink Cab overall.

Therefore, Yellow cab would be the preferred one.

THANK
YOU