



Data Glacier

Your Deep Learning Partner

Insight for Cab Investment firm

Virtual Internship

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Executive Summary

Providing an actionable insight to XYZ private firm for cab investment after analysing the past data of the major cab services in major cities of US so that it can take a well informed decision.

From covering the preference of users for the cab service providers in each of the 19 cities across US to analysing the profit trends for these cab service providers over a period of month and year, it becomes quite clear for XYZ private firm to make a decision based on facts.

Problem Statement

Overview

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.

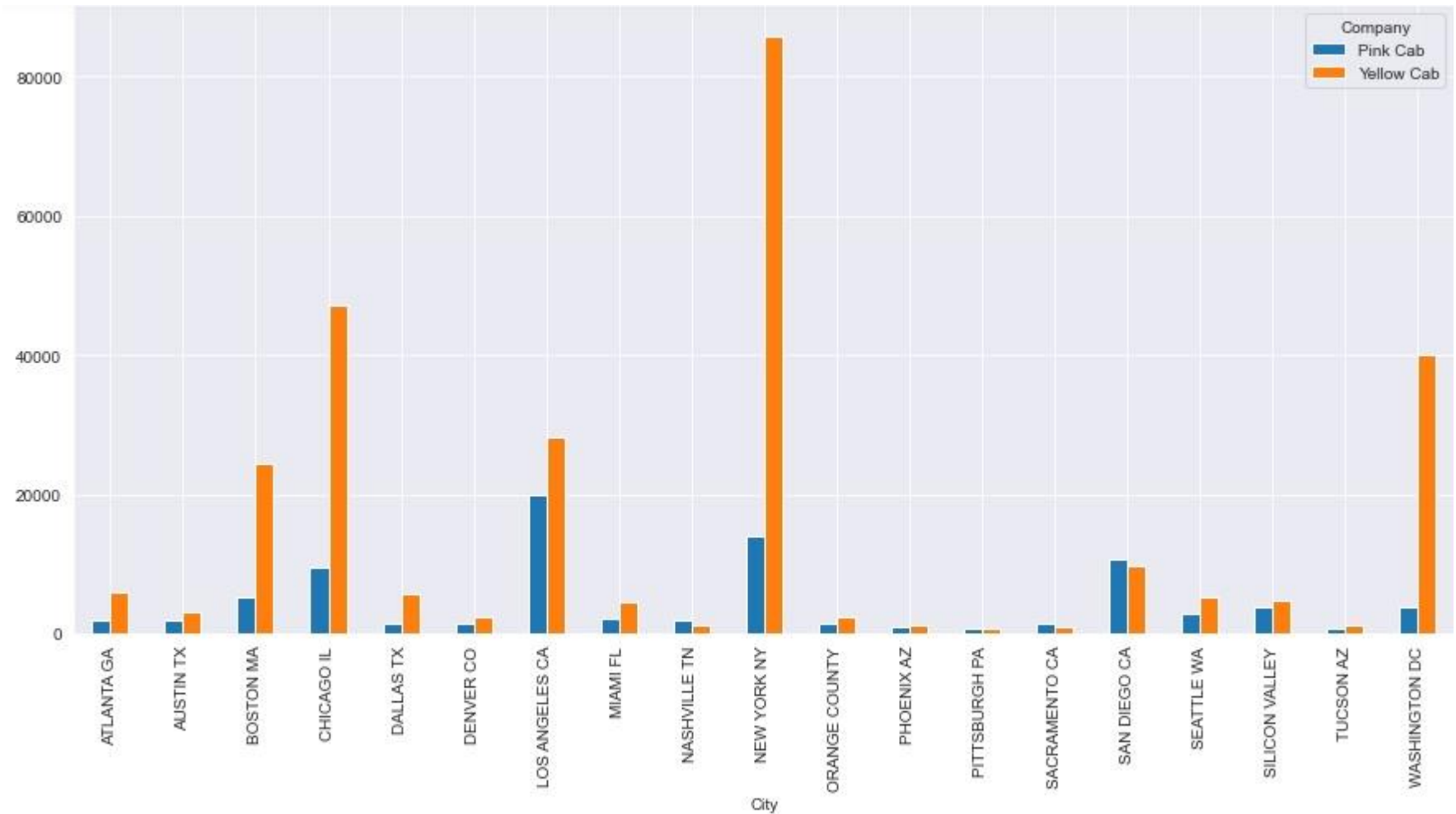
Solution

Provide an insight for cab investment by analysing the past data of the major cab services in major cities of US so that XYZ firm can take an informed decision.

Approach

- Understanding the preference of cab service providers in various cities.
- Which city provides highest profit per KM.
- Profit margin of cab service providers in each city.
- Analysing the profit trends.
- What percentage of the population of each city uses cab service.
- Age distribution of the users.
- Male and female users' count.
- What is the preferred payment type.
- Analysing the distance travelled on regular days vs. holidays.
- Any discount for female customers.
- On which day maximum distance is covered.

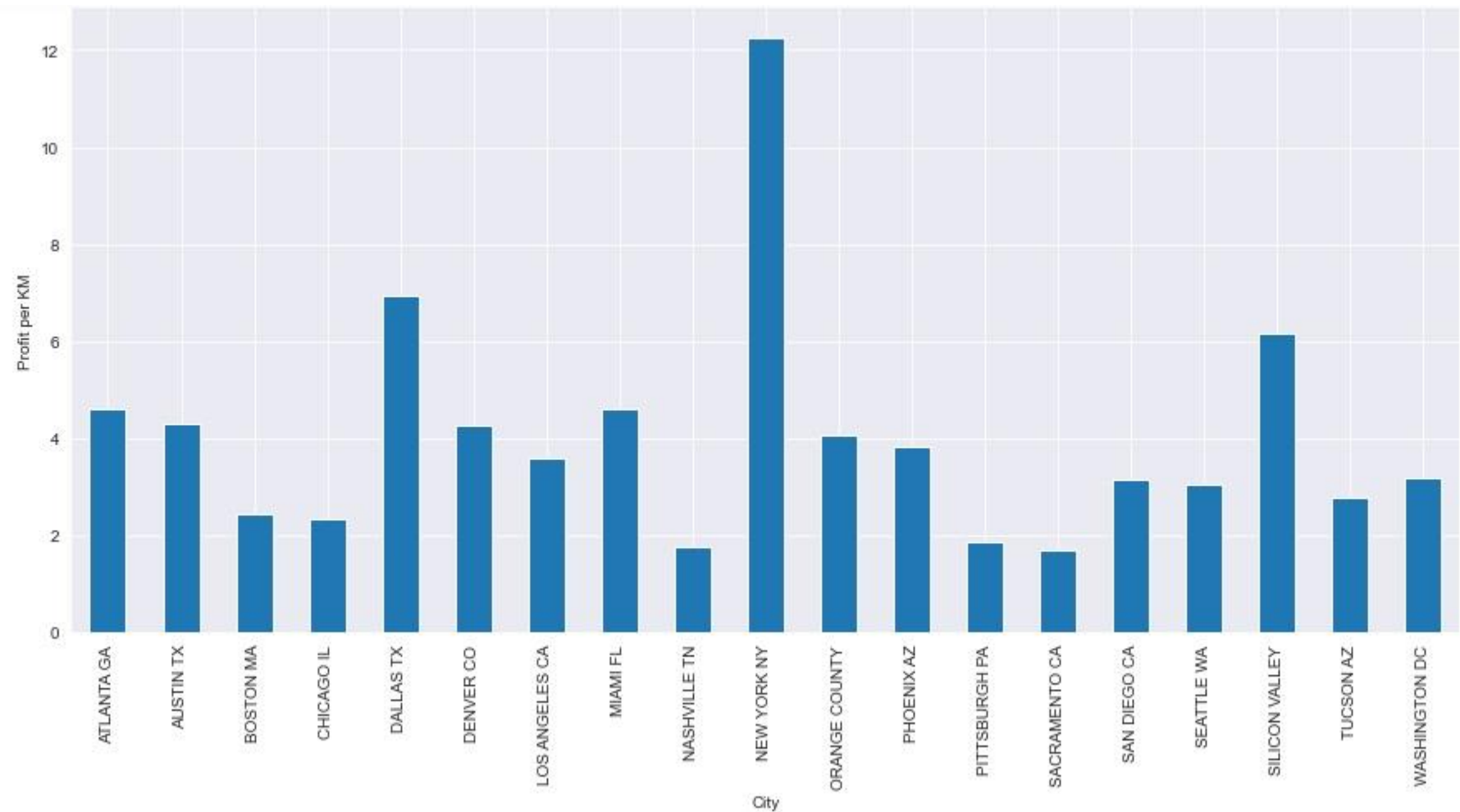
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People prefer Yellow Cabs over Pink Cabs in every city except these 4:

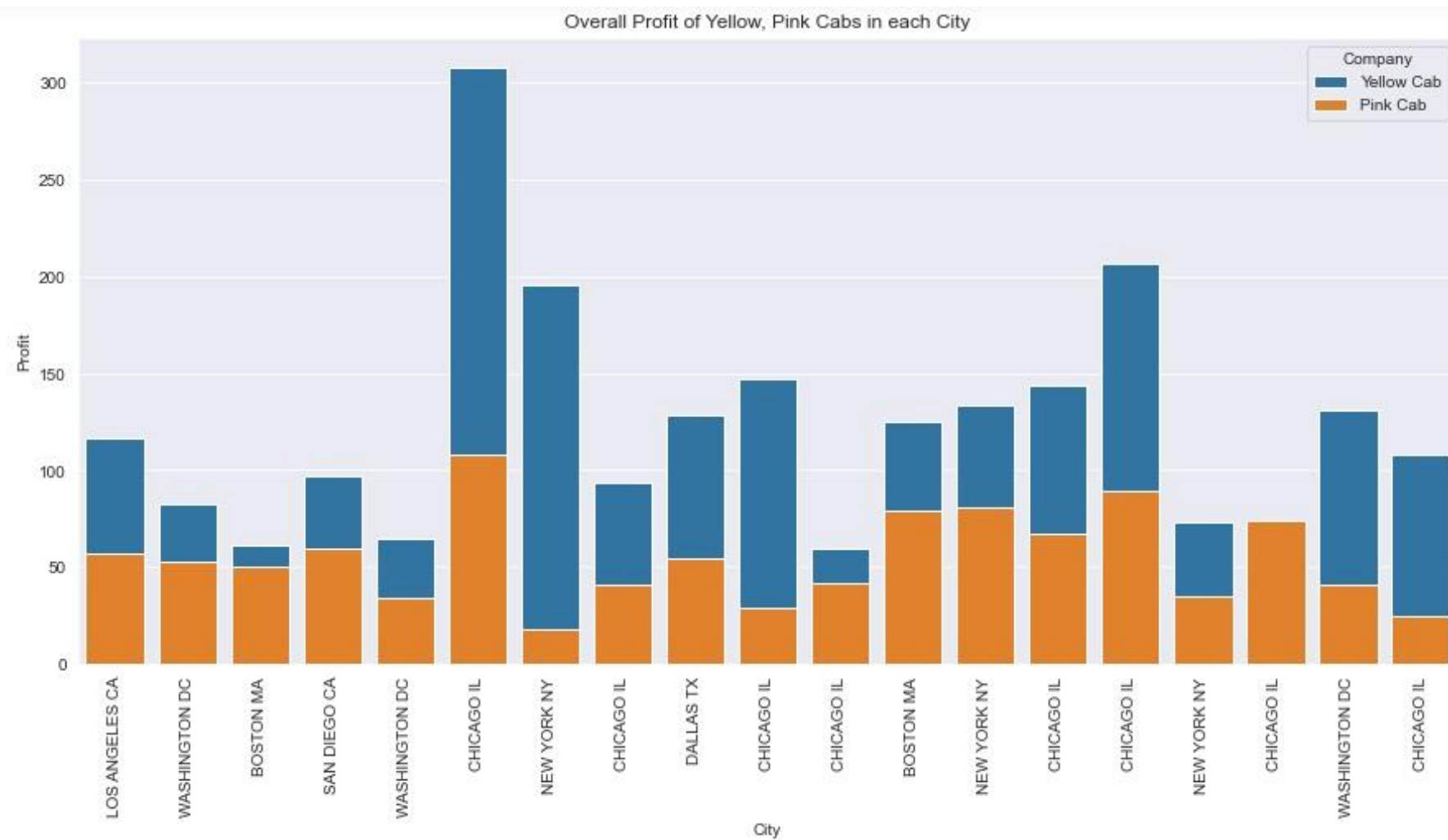
1. Nashville
2. Pittsburgh
3. Sacramento
4. San Diego

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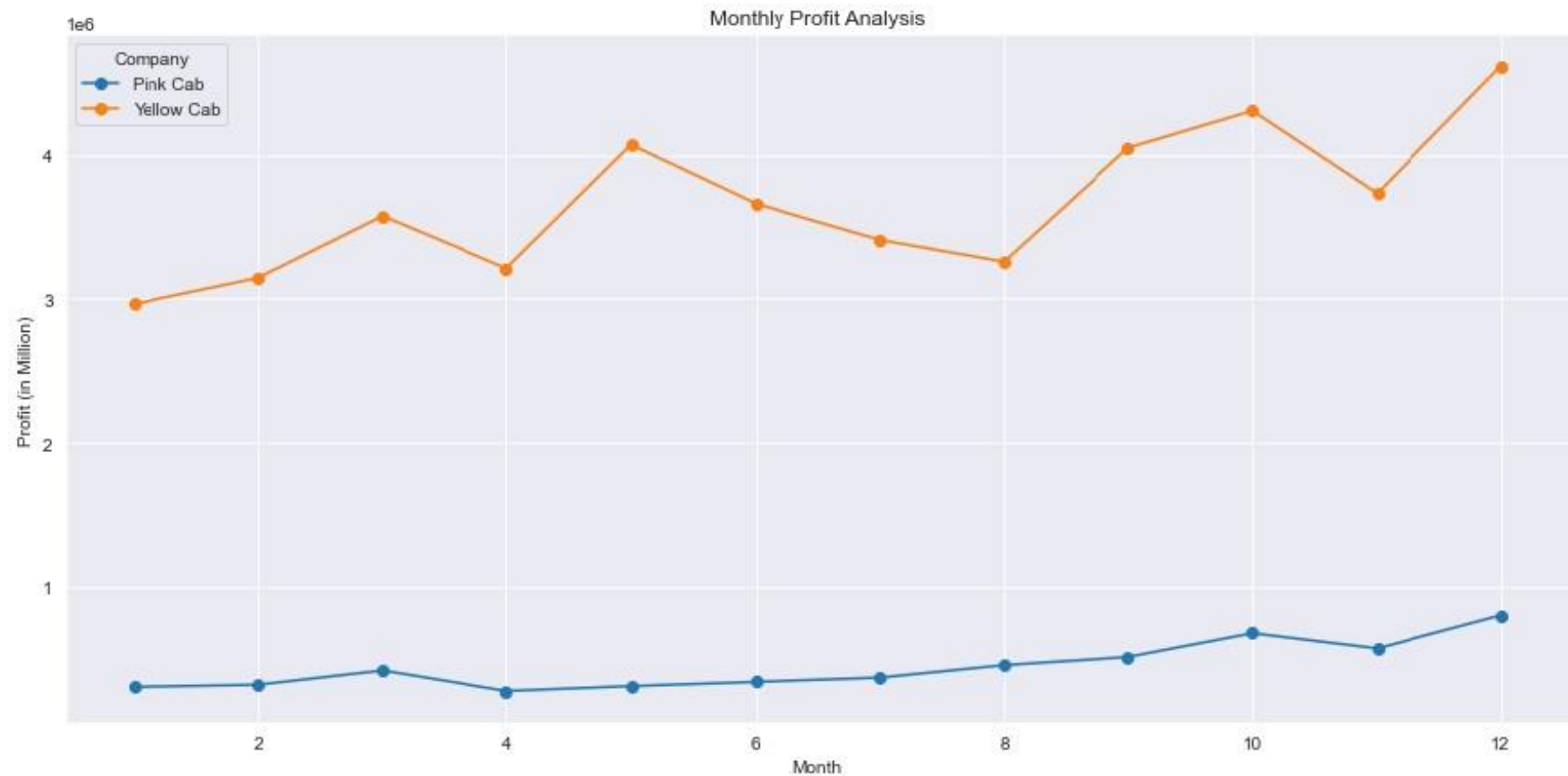
New York City has the highest Profit per KM while Sacramento has the lowest Profit per KM

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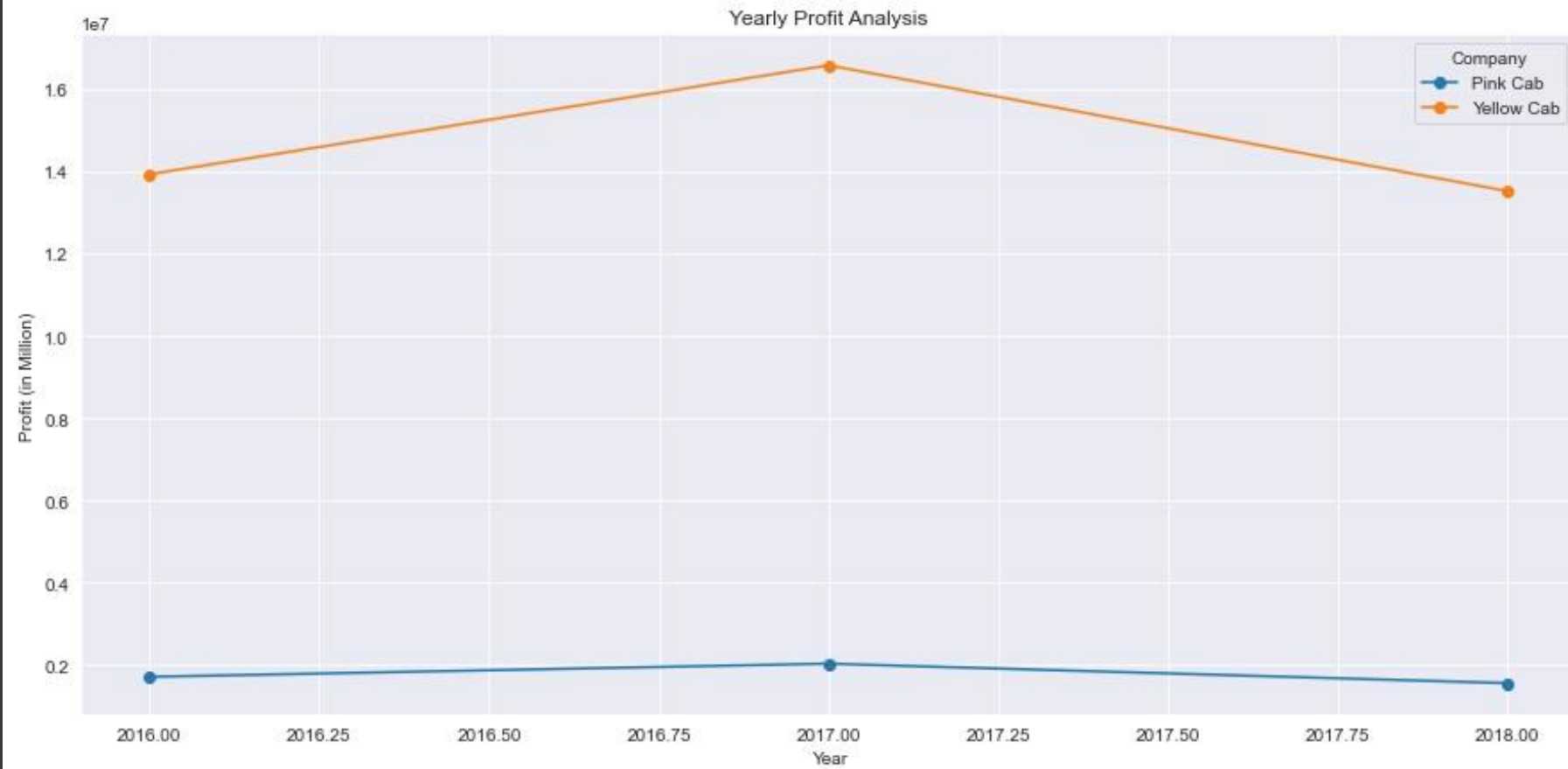
Except Chicago, Yellow Cab has more profit margin in each city.

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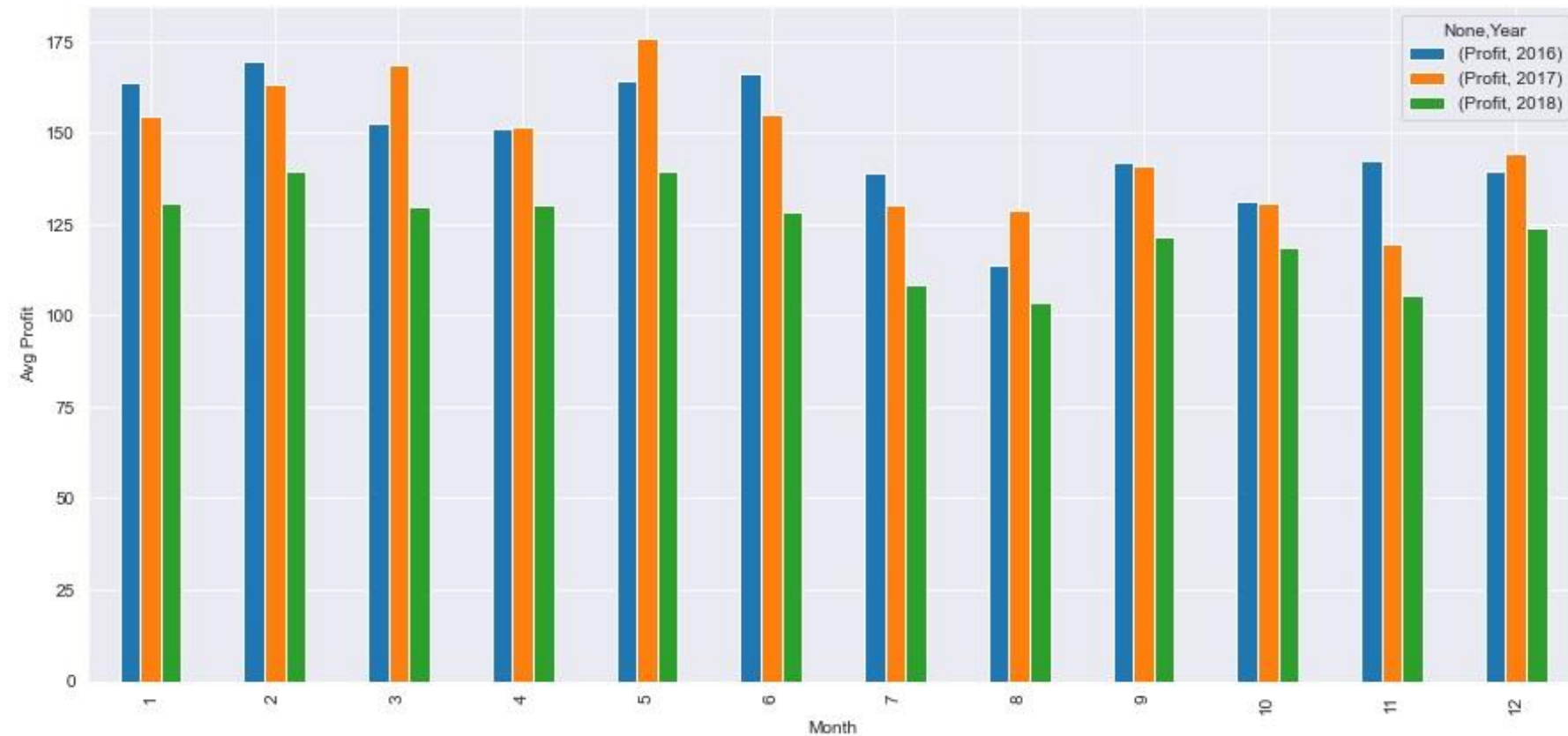
There is a decrease in Monthly Profit of Yellow Cab during June to August whereas Pink Cab has an increase, however it is still higher than Pink Cab's profit.

EDA



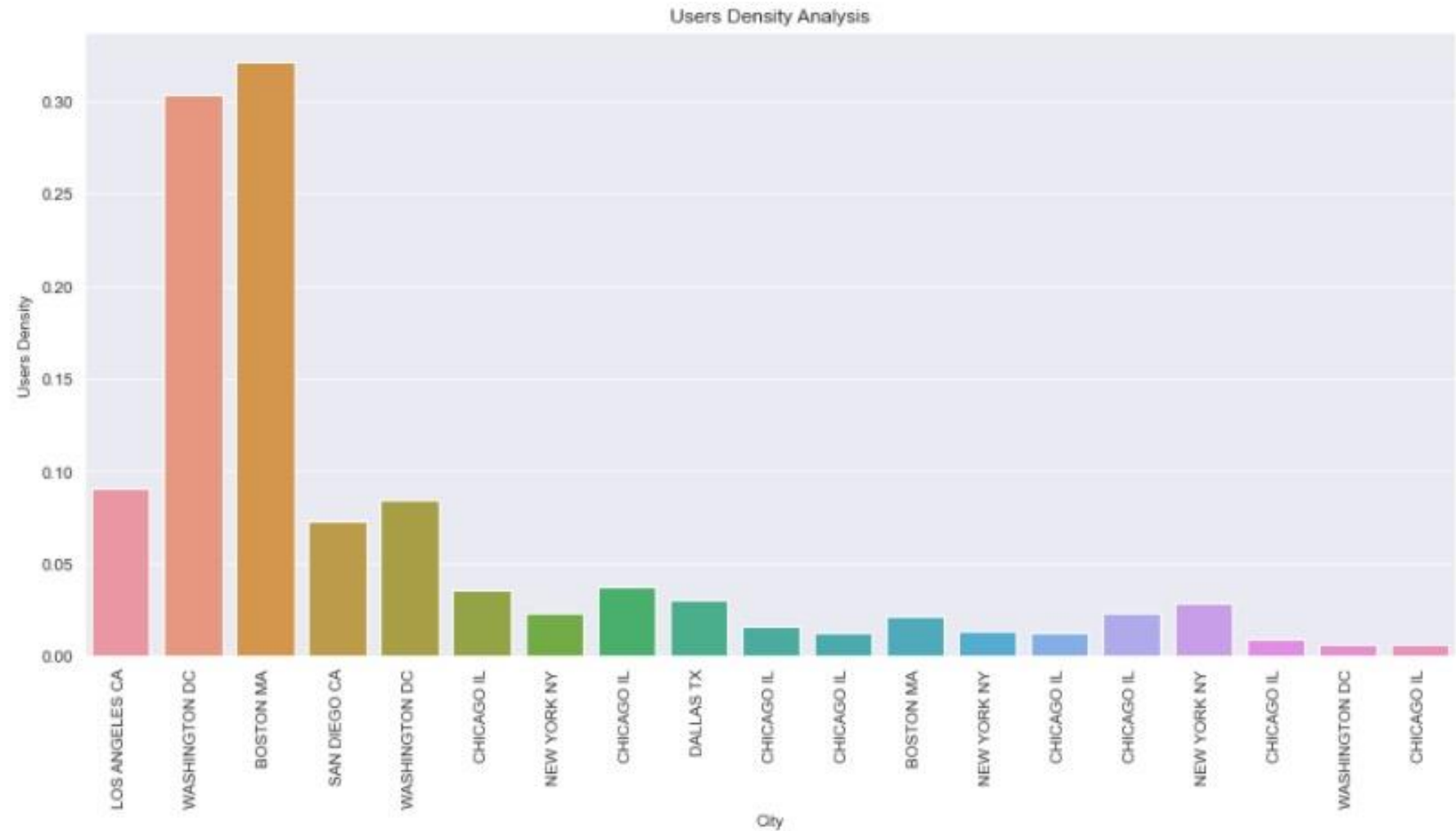
There was an increase in annual profit in 2017 when compared to 2016 and 2018.

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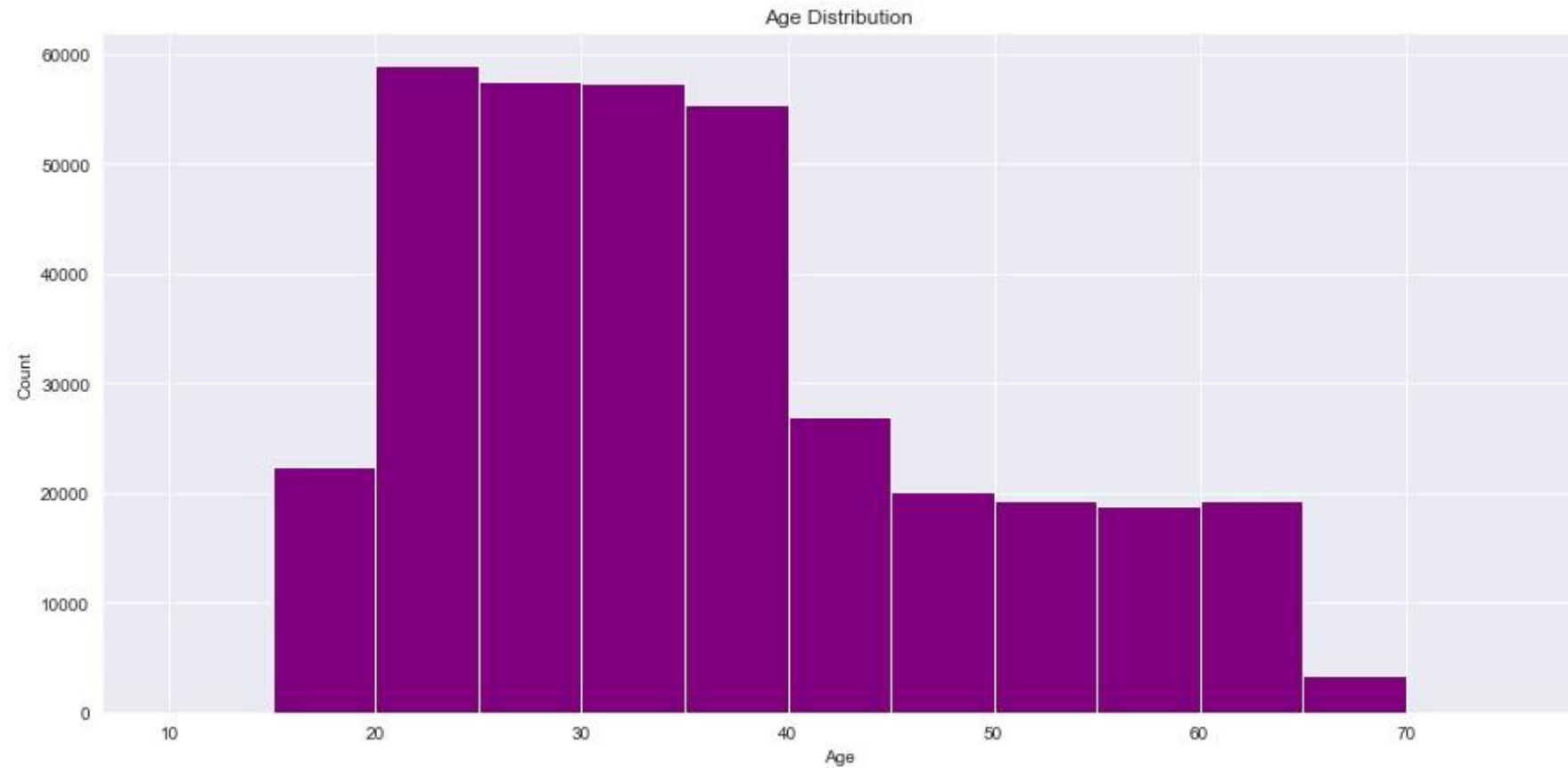
Profit during the first half of the year is greater than the second half of the year.

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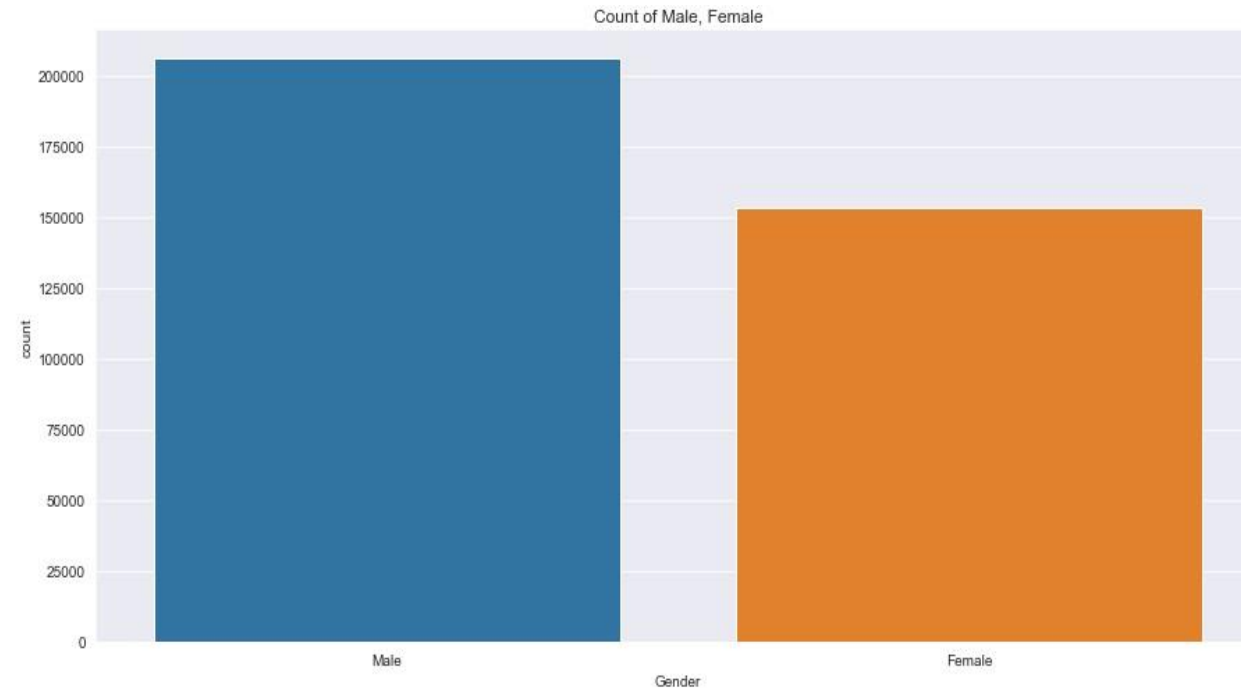
Around 30% of the population in Washington DC and Boston use cab services whereas for all other cities it's less than 10%

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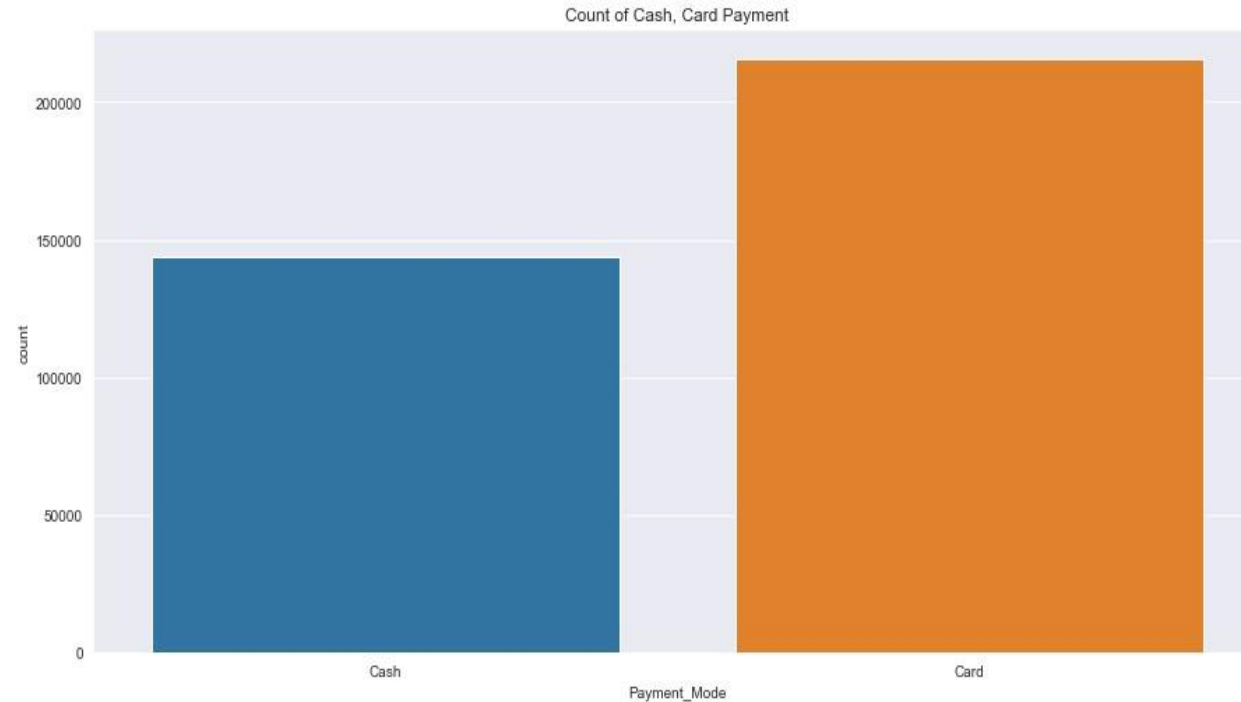


Most of the users are aged between 20 to 40 years.

EDA

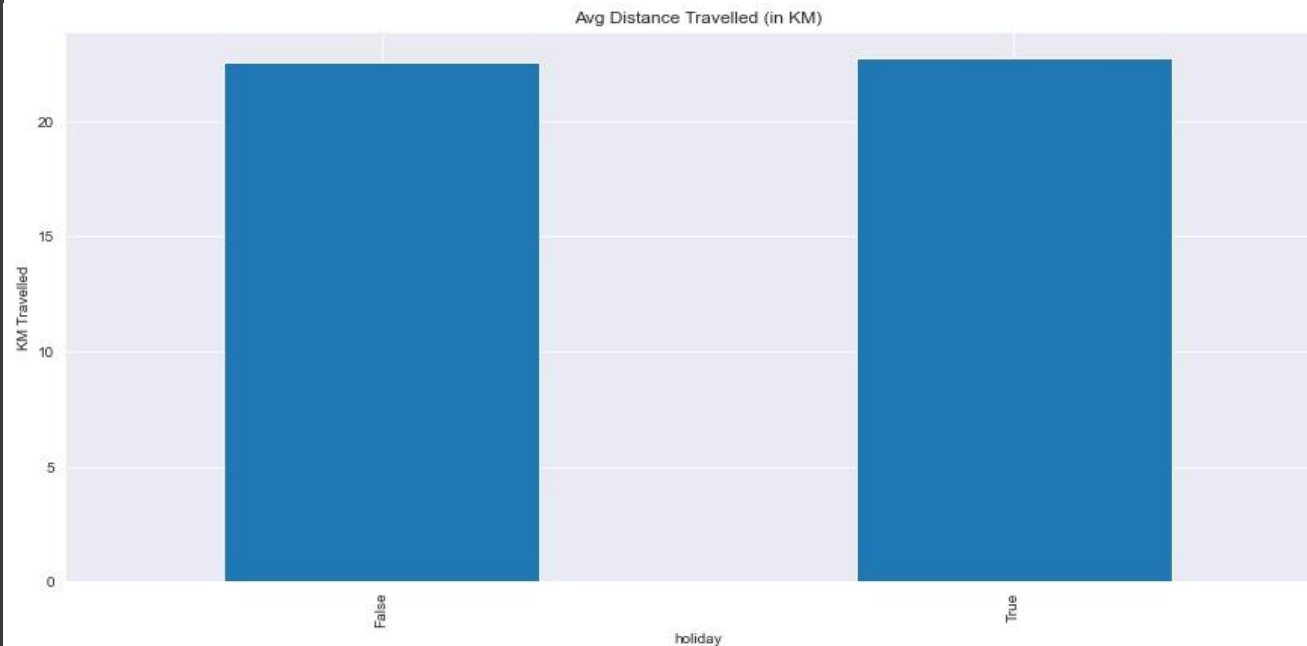
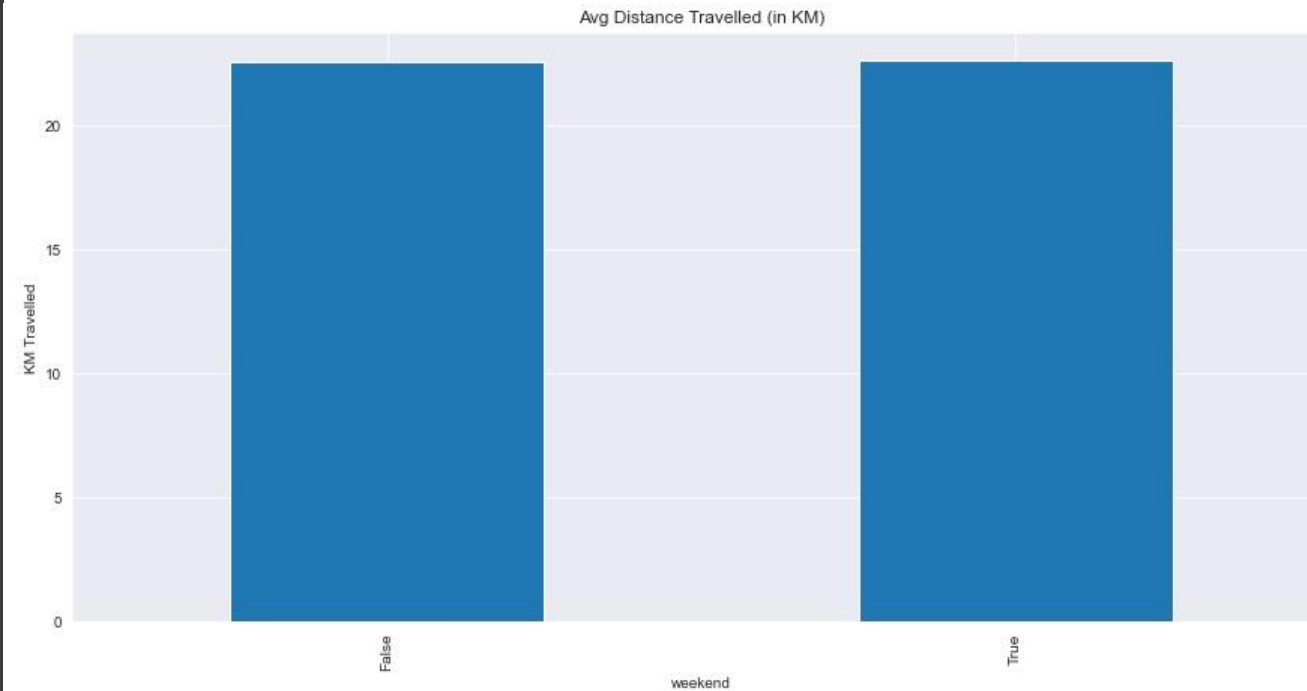


- More no. of Male users.



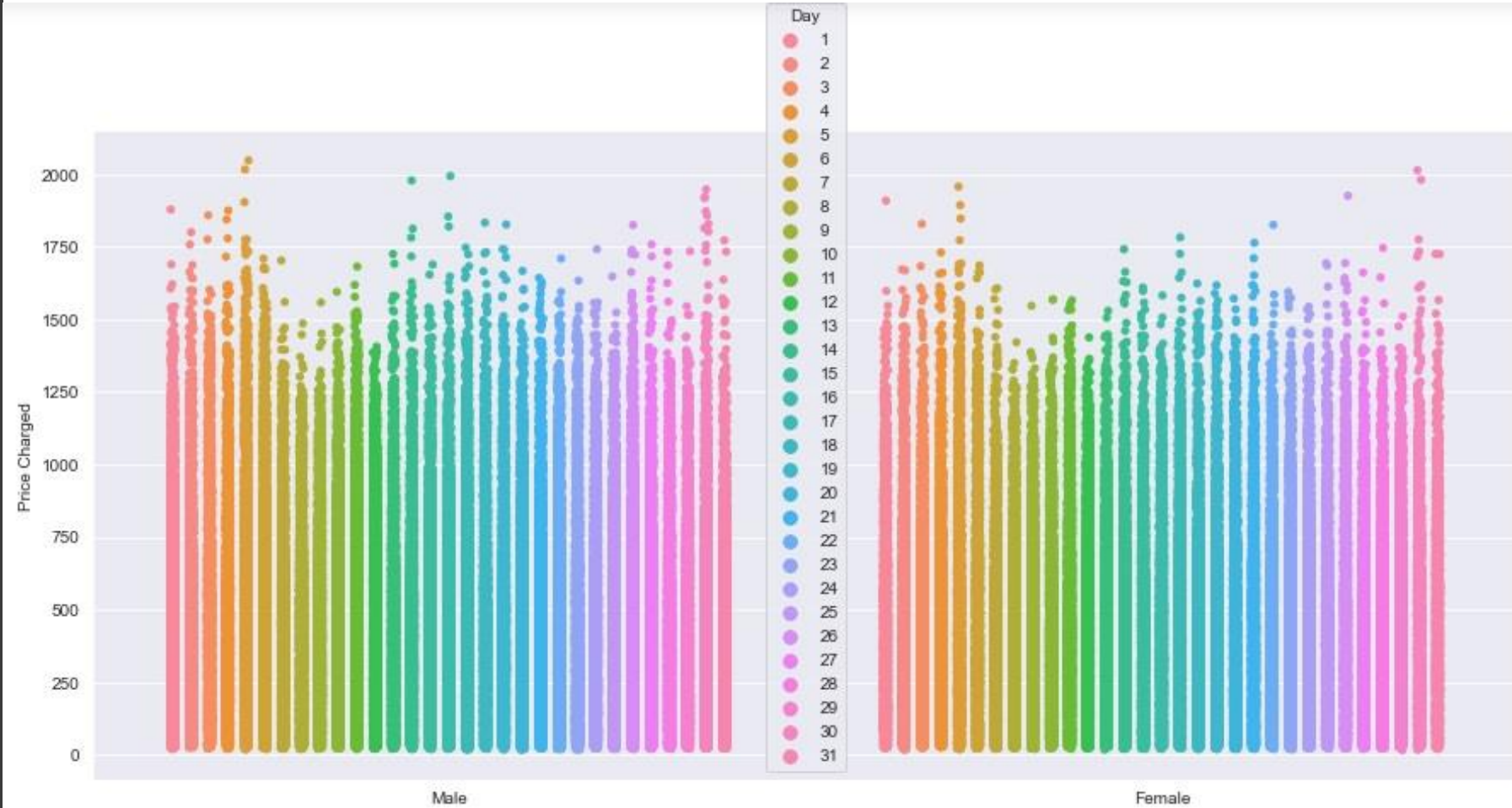
- Number of Card payment is more than number of cash payment.

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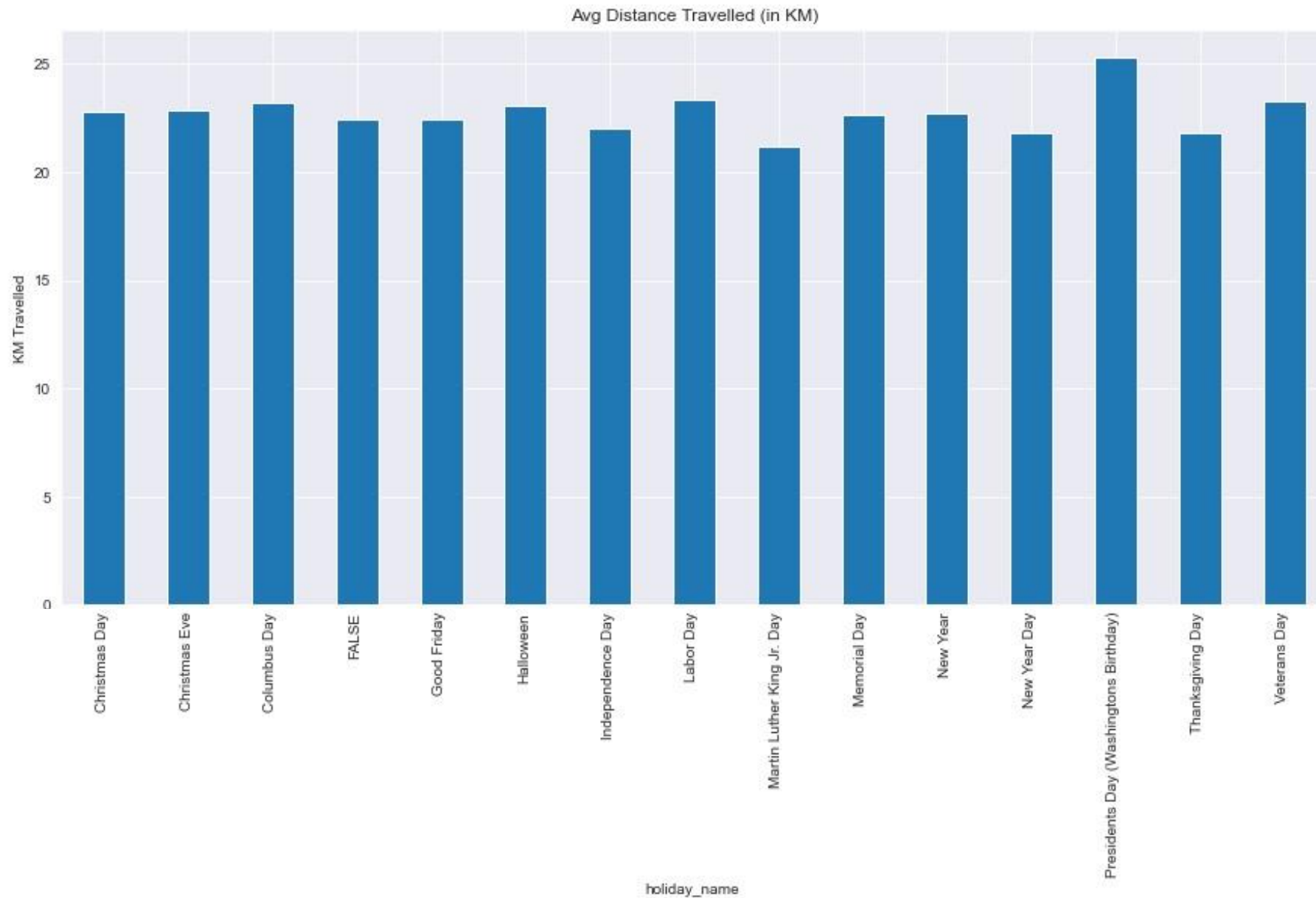
- Distance travelled is more or less the same for both weekdays and weekends.
- The distance travelled does not depend on holidays as well.

EDA



There is no discount for Female customers as price charged is similar for both male and female customers.

EDA



Average Distance travelled is max on
Presidents Day (Washington's Birthday).

EDA Summary

- After exploring the data and analysing, it is evident that Yellow Cab is dominant in count as well as preferred by most of the users in almost all the cities except Nashville, Pittsburgh, Sacramento and San Diego.
- The profit margin of Yellow Cab is much higher than Pink Cab throughout the year.
- As Sacramenyo has the lowest profit per KM and also Yellow Cab is not preferred here.
- Most of the users are aged between 20 to 40 years.
- There is negligible impact of holidays on the profit and the distance covered for any cab service provider.

Recommendations

After evaluating both the cab service providers on following points, we found Yellow cab better than Pink cab:

- **Customer Preference:** Yellow cab has higher customer preference in most cities while Pink cab has higher customer preference in 4 cities i.e. Nashville, Pittsburgh, Sacramento and San Diego. Also Sacramento has the lowest profit per KM, so this city might be considered for little/no investment.
- **Age wise Reach:** Most of the users are 20 to 40 years in age.
- **Average Profit per KM:** Yellow cab's average profit per KM is almost three times the average profit per KM of the Pink cab.
- **Monthly Profit Analyses:** Even though there is a decrease in Monthly Profit of Yellow Cab during June to August and Pink Cab has an increase, it is still higher than Pink Cab's profit.
- **Gender based discount:** There is no discount for Female customers as price charged is similar for both male and female customers.

On the basis of above points , we recommend Yellow Cab for investment.

Thank You