



Data Glacier

Your Deep Learning Partner

EXPLORATORY DATA
ANALYSIS

<CAB SERVICE>

<01/03/2023>

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.



Approach



Write down 5-7 hypothesis to investigate



Gather & Merge data sets



Understand the data



Data Analysis



Data Wrangling



Train & Test



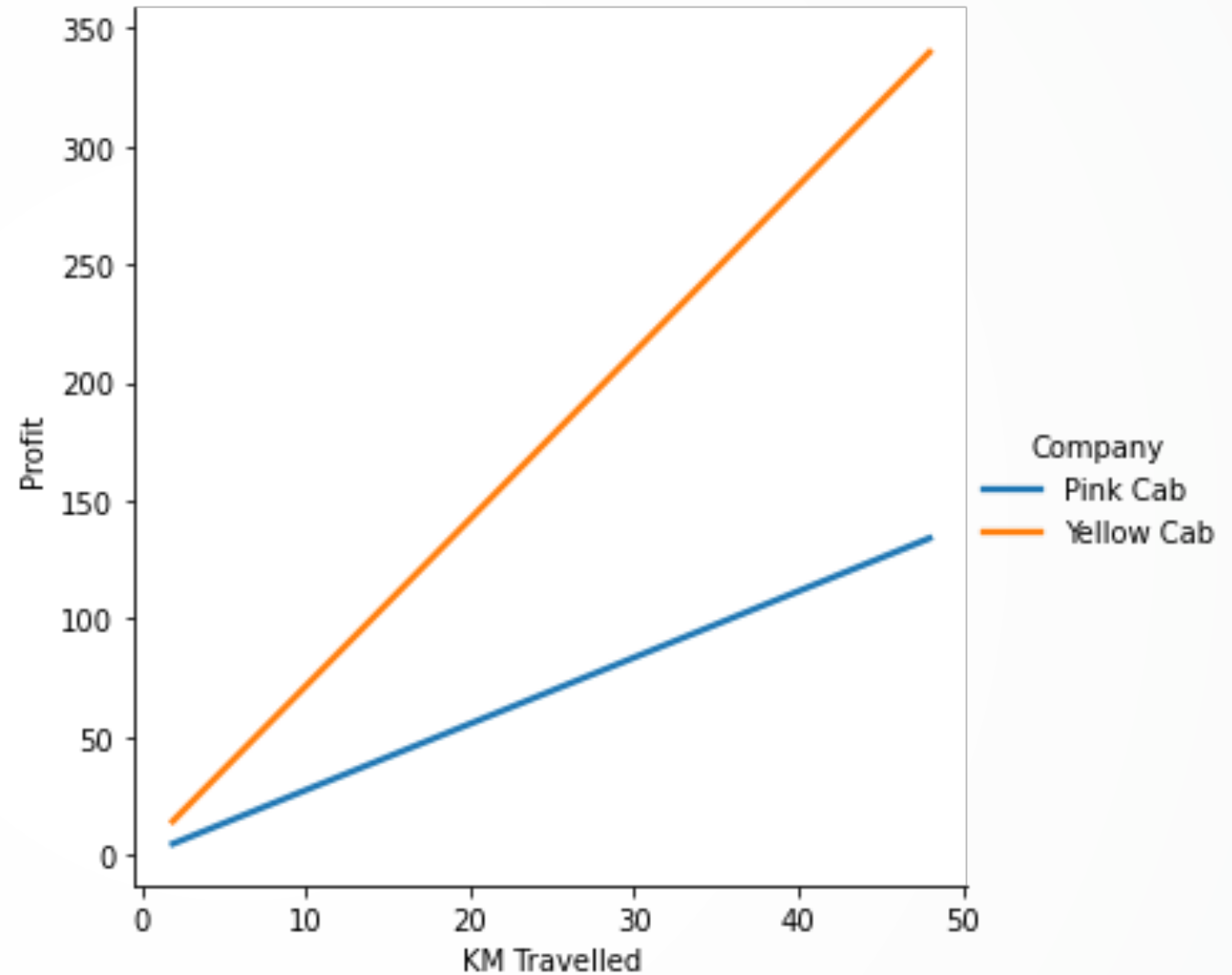
Accuracy check



Provide recommendations

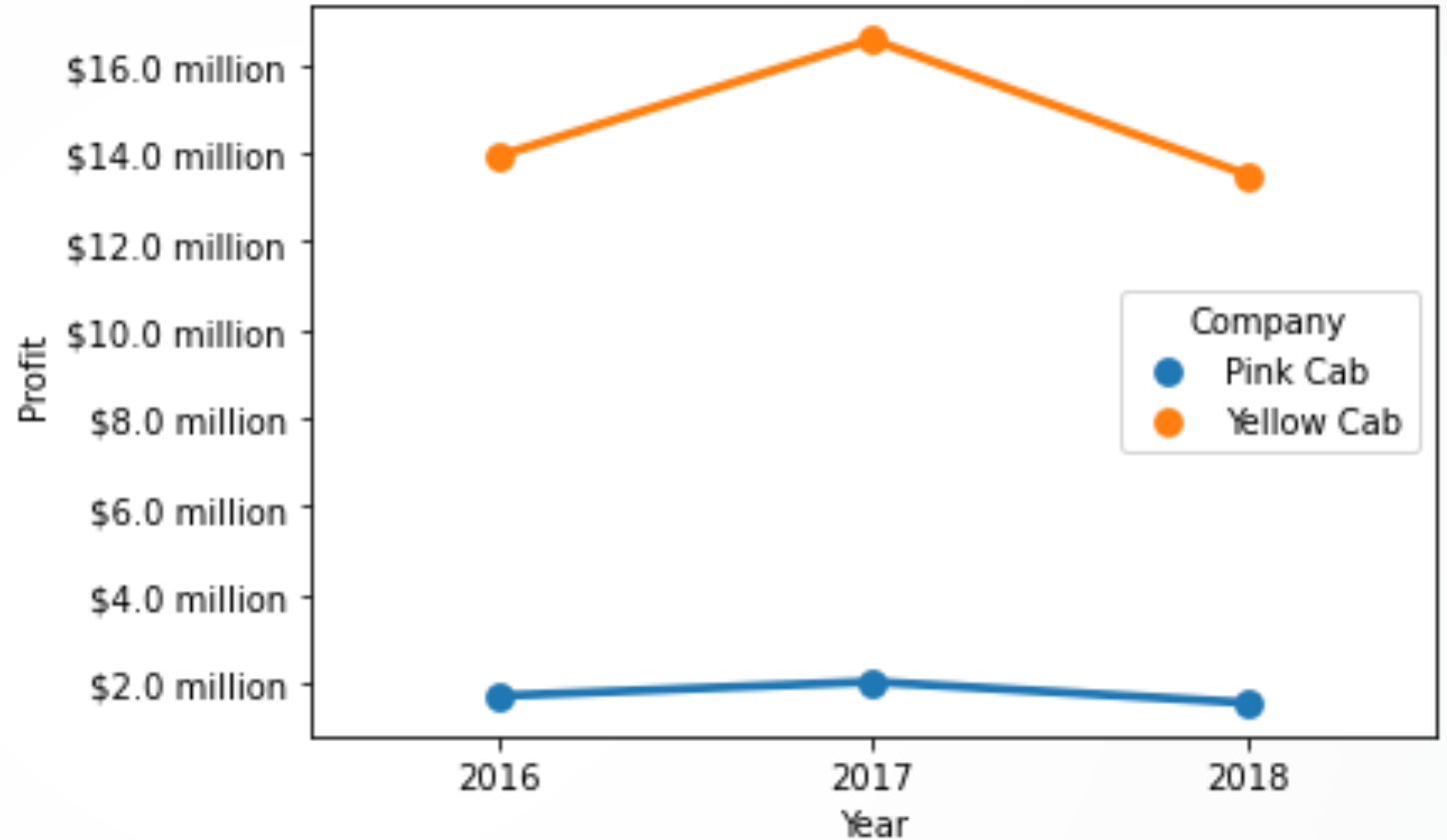
Profit by KM Travelled

- ▶ The yellow cab company has demonstrated a higher level of profit compared to the pink cab company when analyzing data based on the number of kilometers travelled.
- ▶ The yellow cab company has earned more than double the profit of the pink cab company when traveling distances greater than 20km.



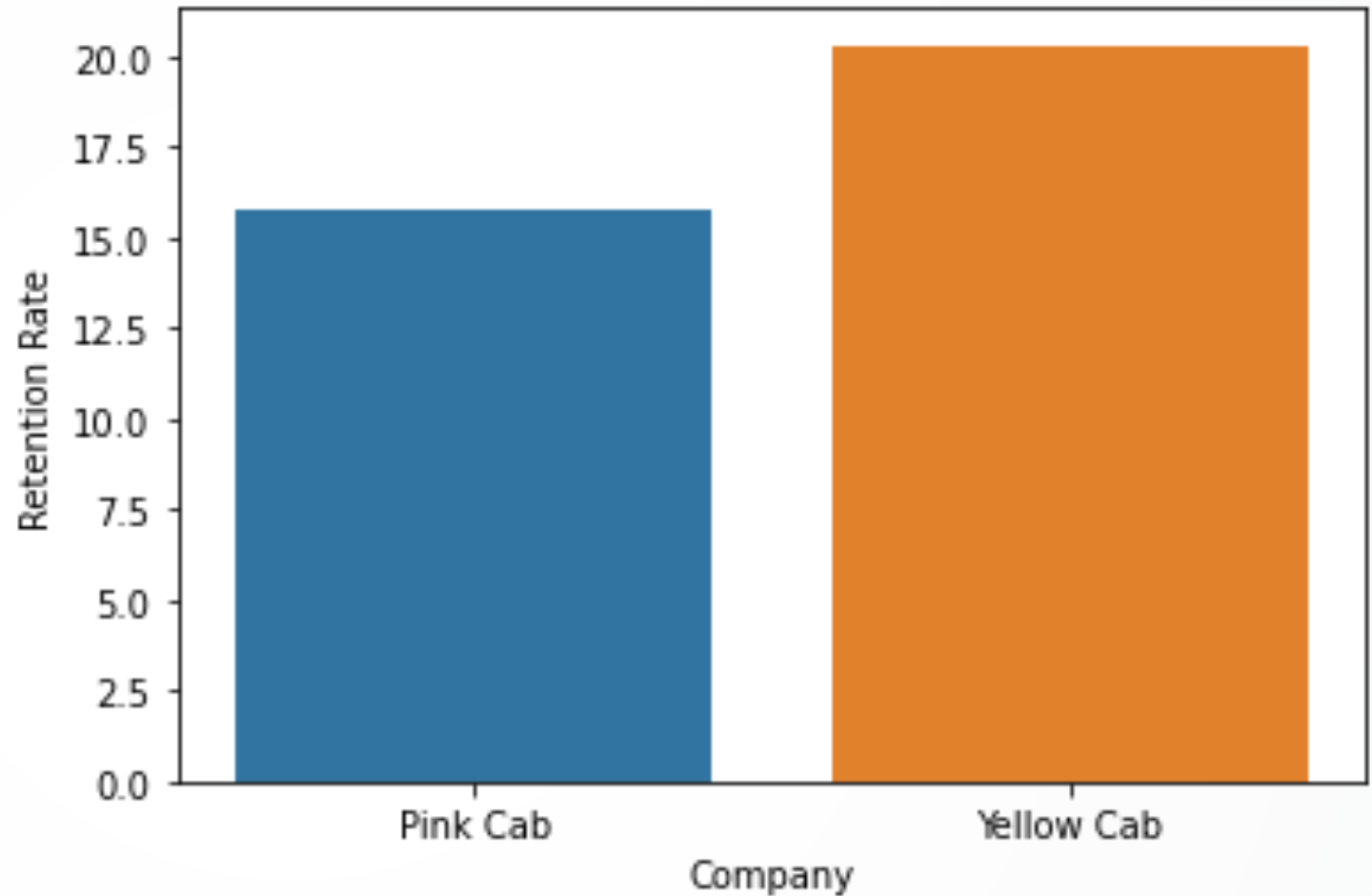
Profit Analysis by Year

- Both cab companies made the most money in the year 2017, and both cab companies also made less profit in 2018.
- Yellow cab company loss 18.45% in profit from 2017 to 2018 and pink cab company loss 23.28% from 2017 to 2018.



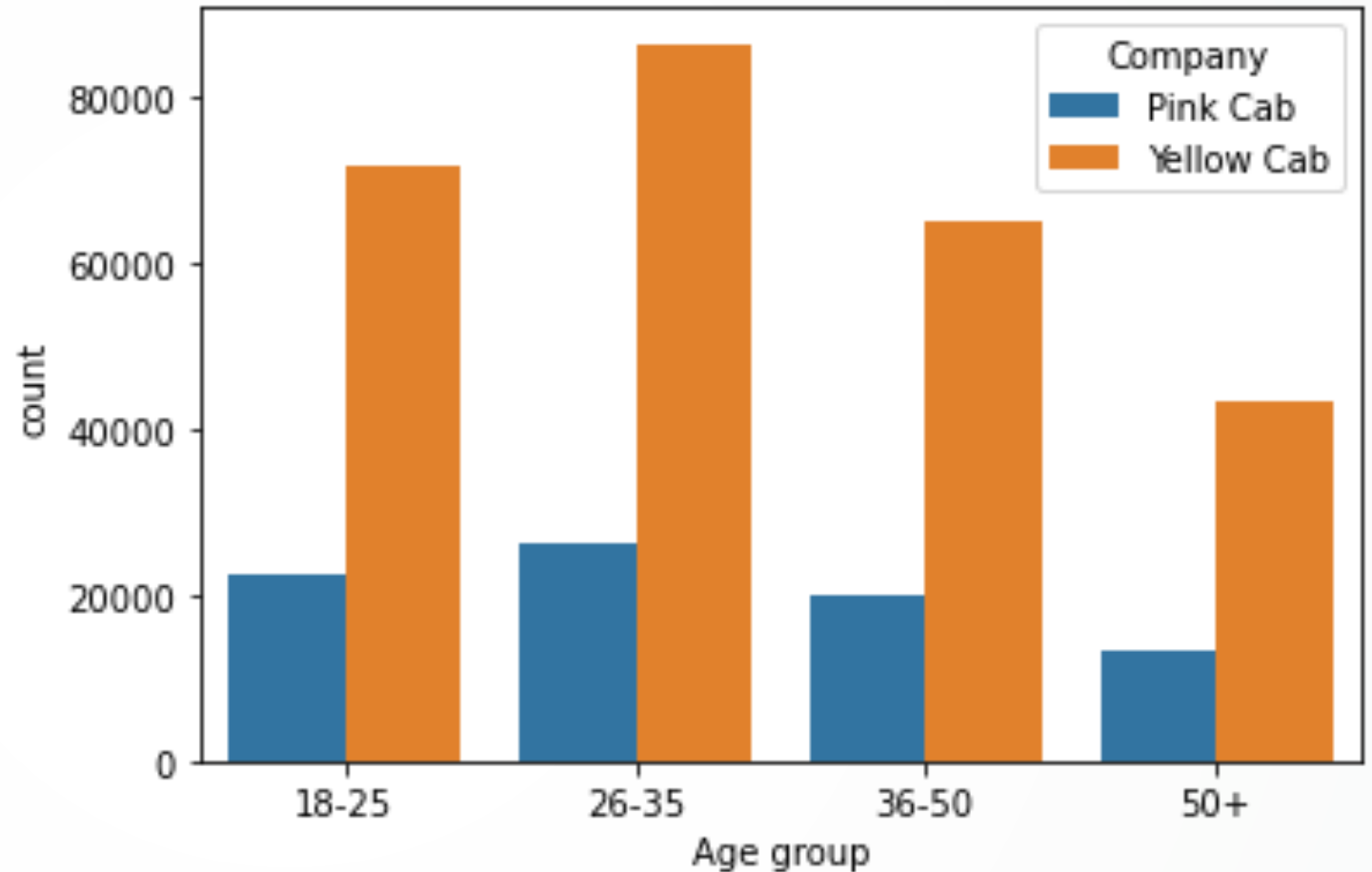
Customer Retention

- Based on the retention rate, there is a higher percentage of customers who took rides with the yellow cab company in the past that continues to take rides with them in the future.
- This is suggesting that the yellow cab company is more successful than the pink company at retaining its customers.



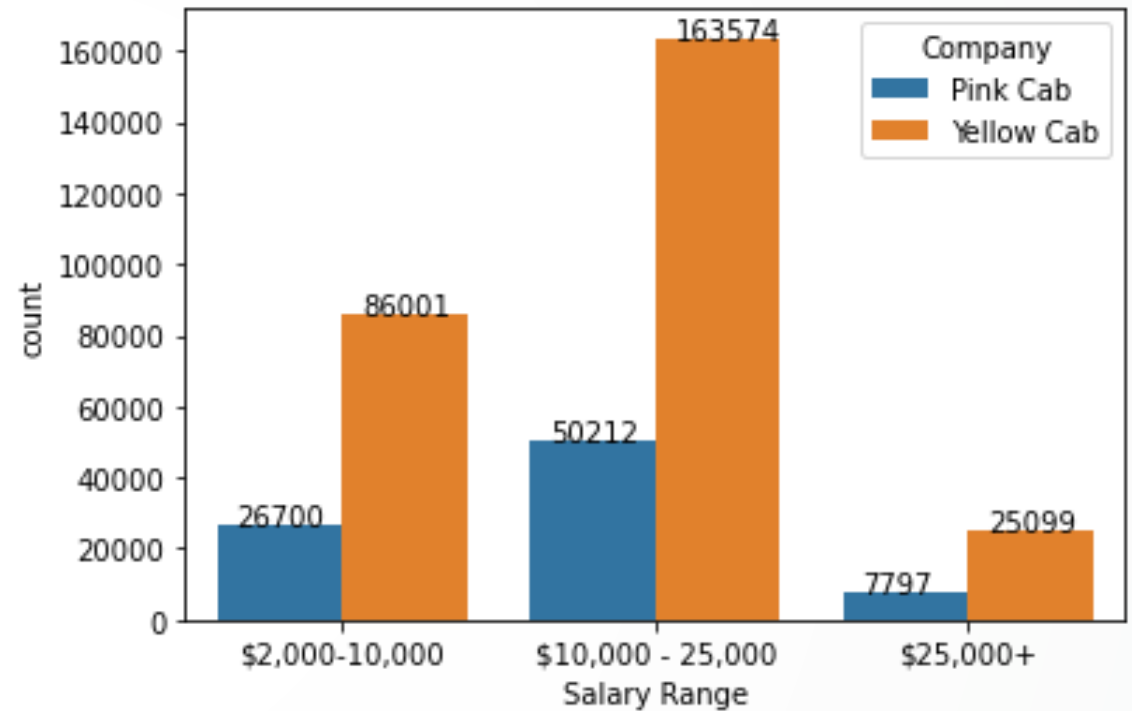
Customer Analysis by Age groups

- Both companies seems to have more customers between the ages of 26-35 years old.
- This shows that the age group 26-35 contributes the most profit for both cab companies
- Yellow cab company have more than double the amounts of customers than the pink cab company across all age groups



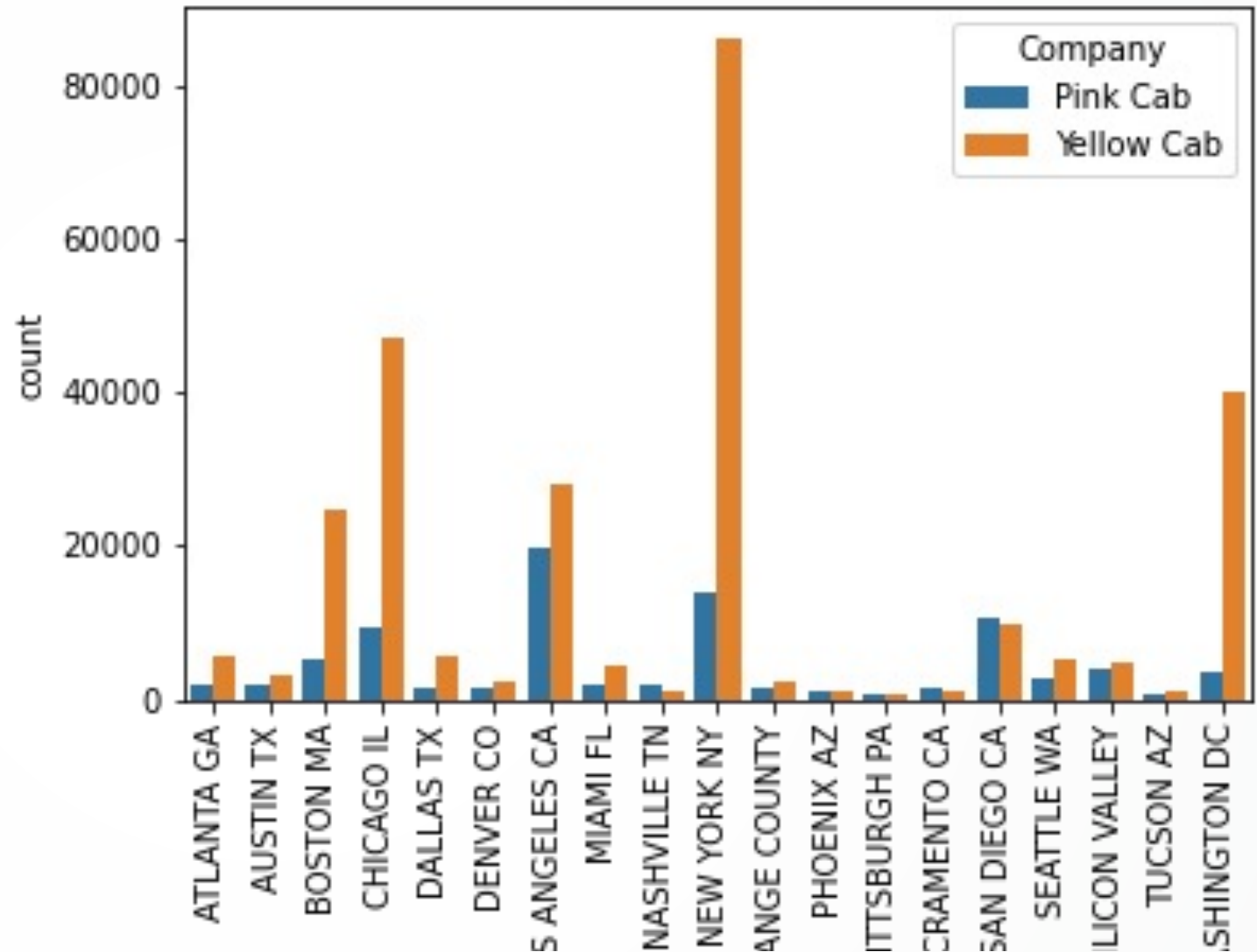
Customer Analysis by their Income

- For low income, middle income, and high income, Yellow cab company obtains approximately 76% of the total cab users by both companies



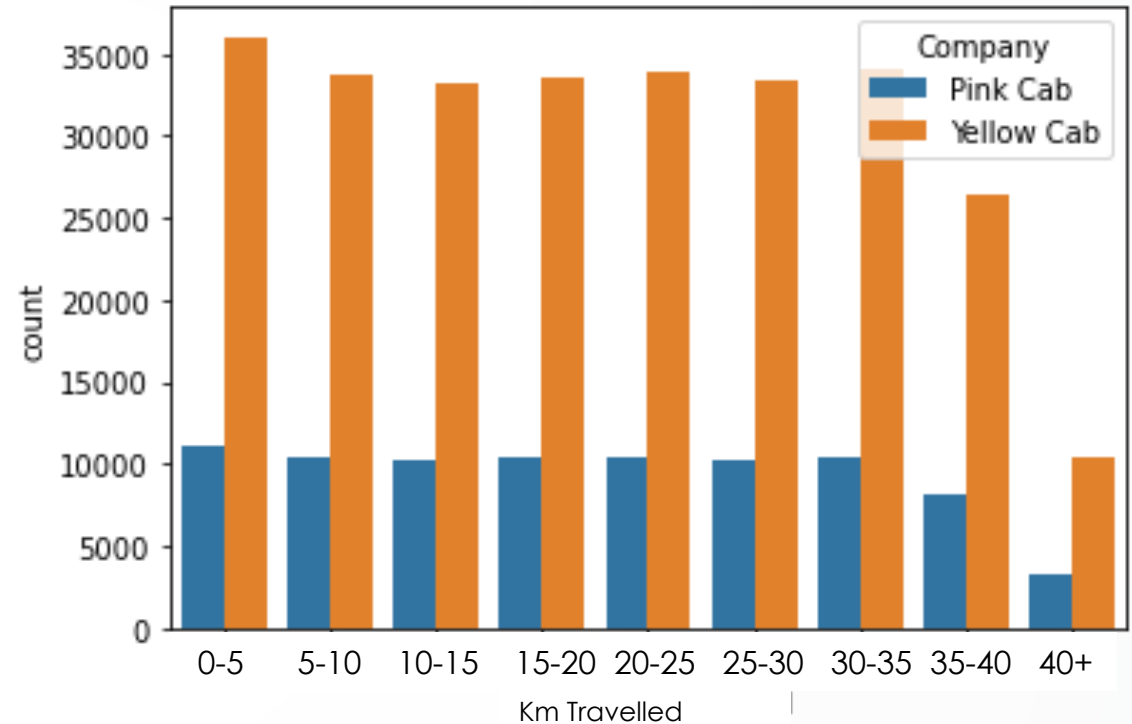
Number of cab users by city

- - Yellow cab has reached more customers than pink cab in every city except San Diego, Nashville, Sacramento and Pittsburgh.



Ride distance analysis

- - Yellow cab reach more customers in short, medium, and long trip. This demonstrates that the yellow cab company 's dedication to provide the best service for all types of travel.
- - Most trips in both companies occurs between 5km to 40km in distance.





Recommendations

City: Out of the 19 cities from the data set, Yellow Cab service had reached more people than pink cab service in 15 cities.

Km Travelled: Yellow cab reached more customers in short, medium, and long trip distances.

Age: Both companies have the same pattern on the amounts of customers based on different age groups

Income: Yellow cab is the choice of 76% of the customers from different income classes.

Customer retention: Yellow cab company is more successful than pink cab company at retaining their customers.

Profit: In 2018, pink cab company's profit decreased by 23.28% from 2017 while yellow cab's profit decreased only by 18.45 %.

Recommendation: After a careful analysis of both cab companies, yellow cab company seems to be a better investment

Thank You