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# G2M insight for Cab Investment firm

EDA

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# Background

- XYZ is a private equity 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.
- Objective : Provide actionable insights to help XYZ firm in identifying the right company for making investment.

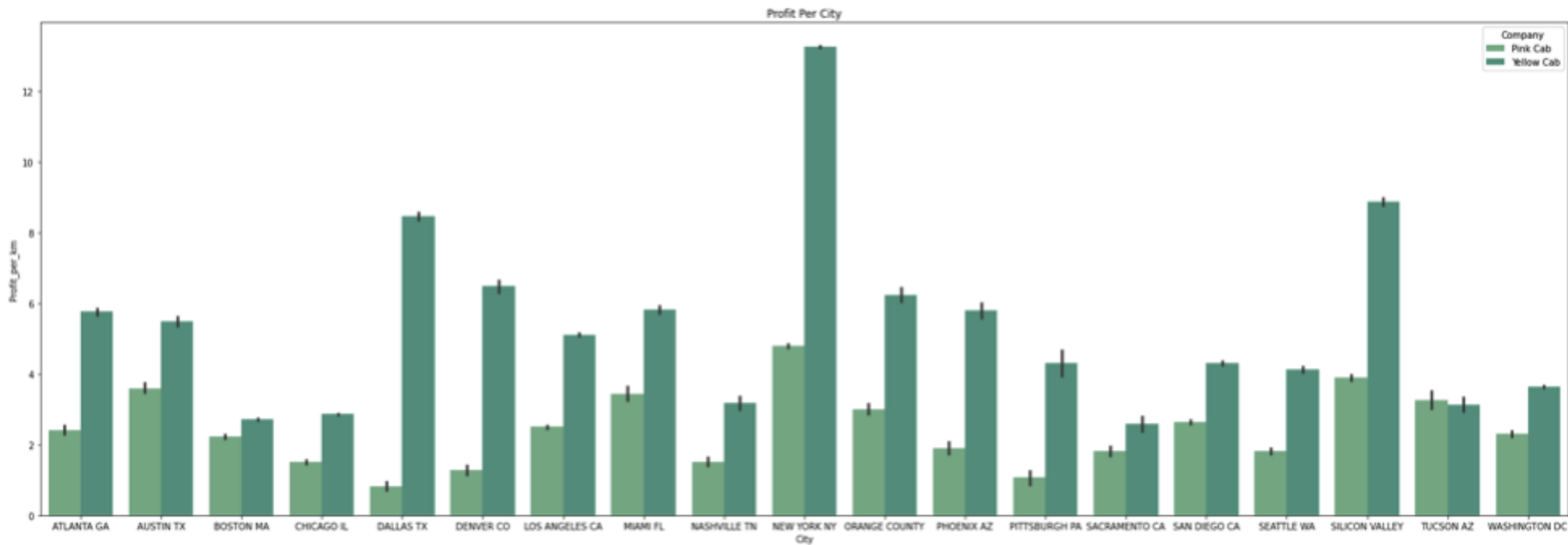
The analysis has been divided into four parts:

- Data Understanding
- Forecasting profit and number of rides for each cab type
- Finding the most profitable Cab company
- Recommendations for investment

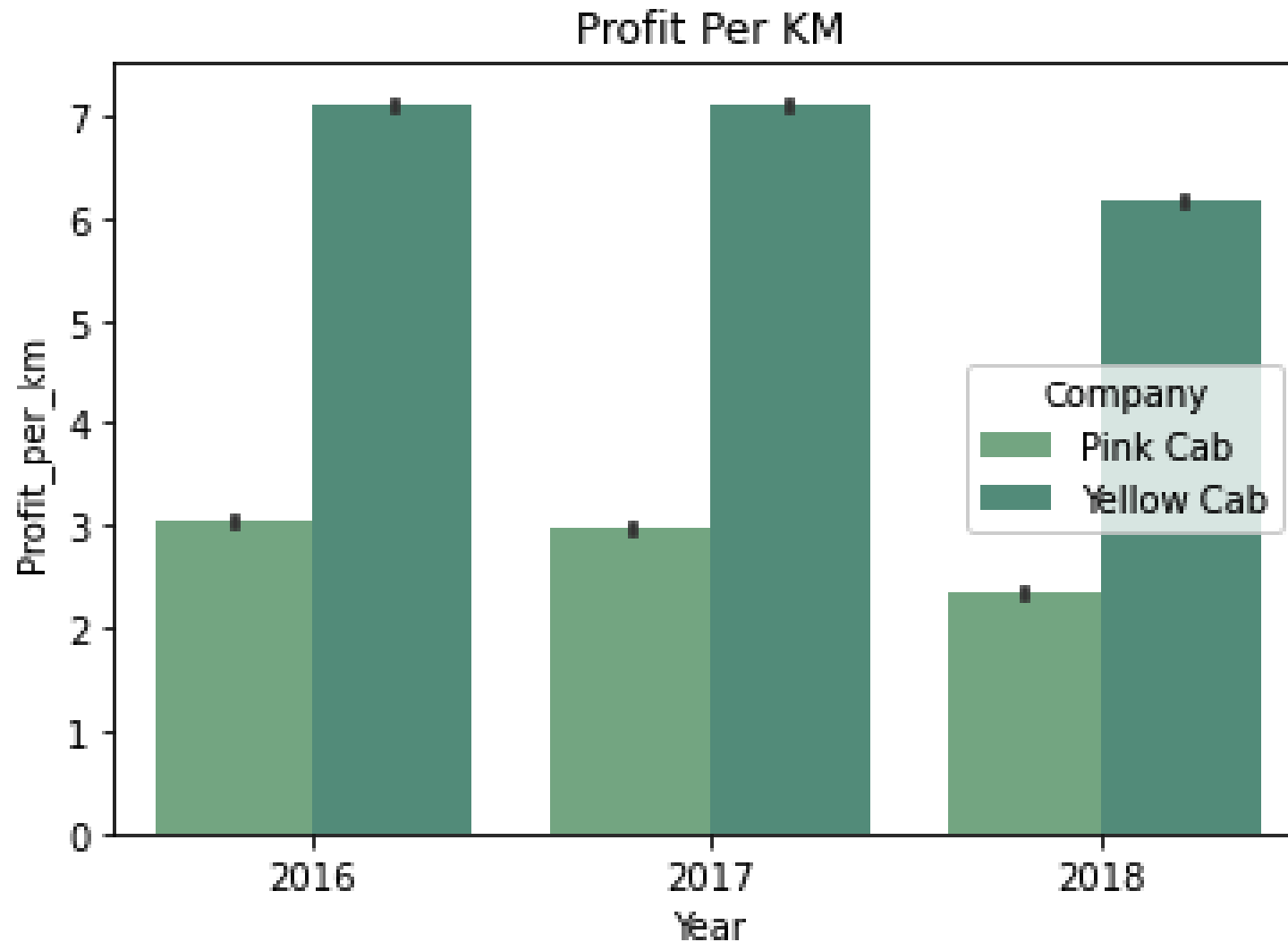
# Data Exploration

- 26 Features (including 12 derived features)
- Timeframe of data: 01-01-2016 to 30-12-2018
- Total data points: 359392
- Cab\_Data.csv, Customer\_ID.csv, Transaction\_ID.csv, City.csv and USholiday.csv merge into a Final dataframe.

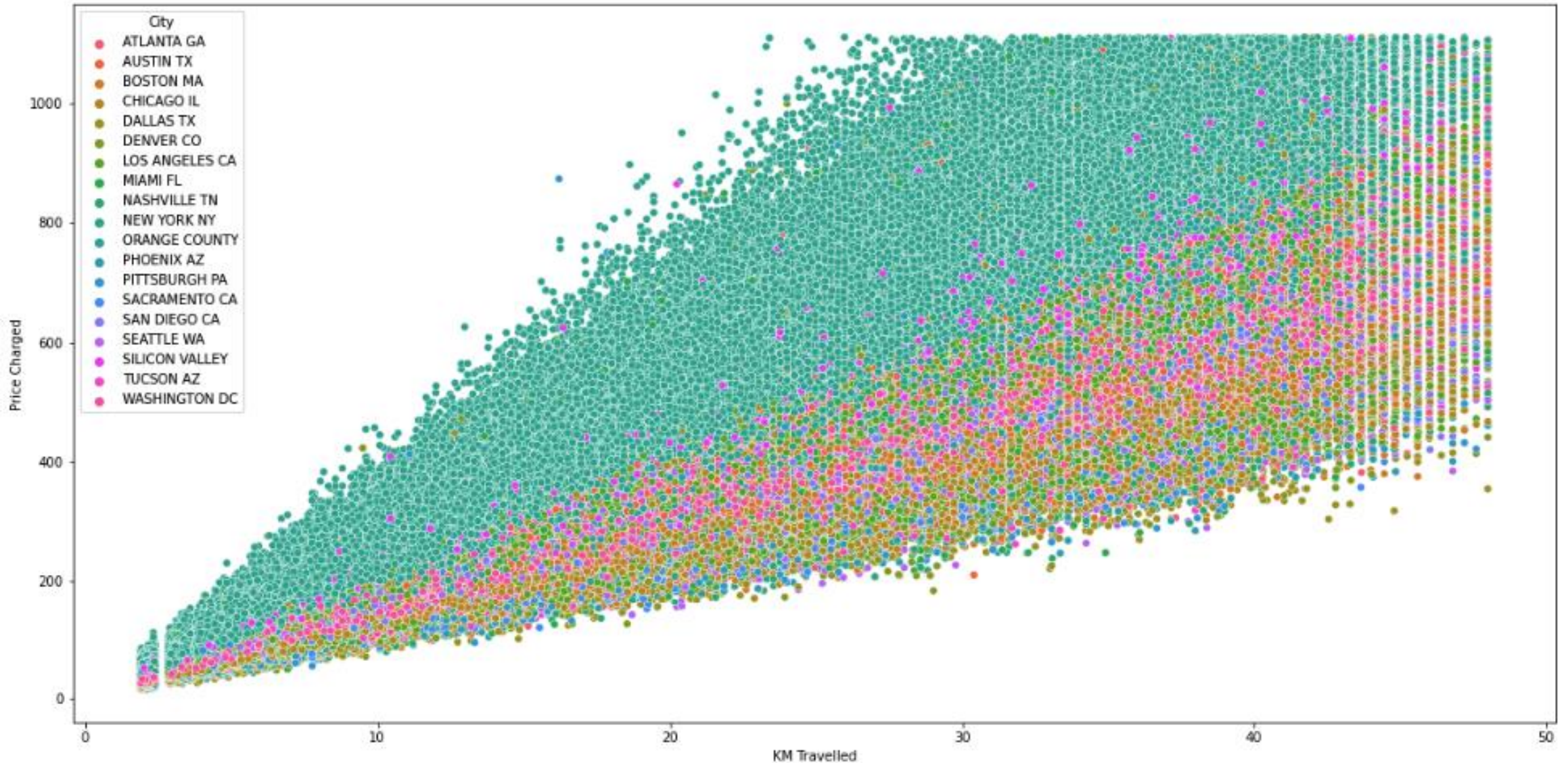
# Profit Analysis



# Yearly Profit Analysis

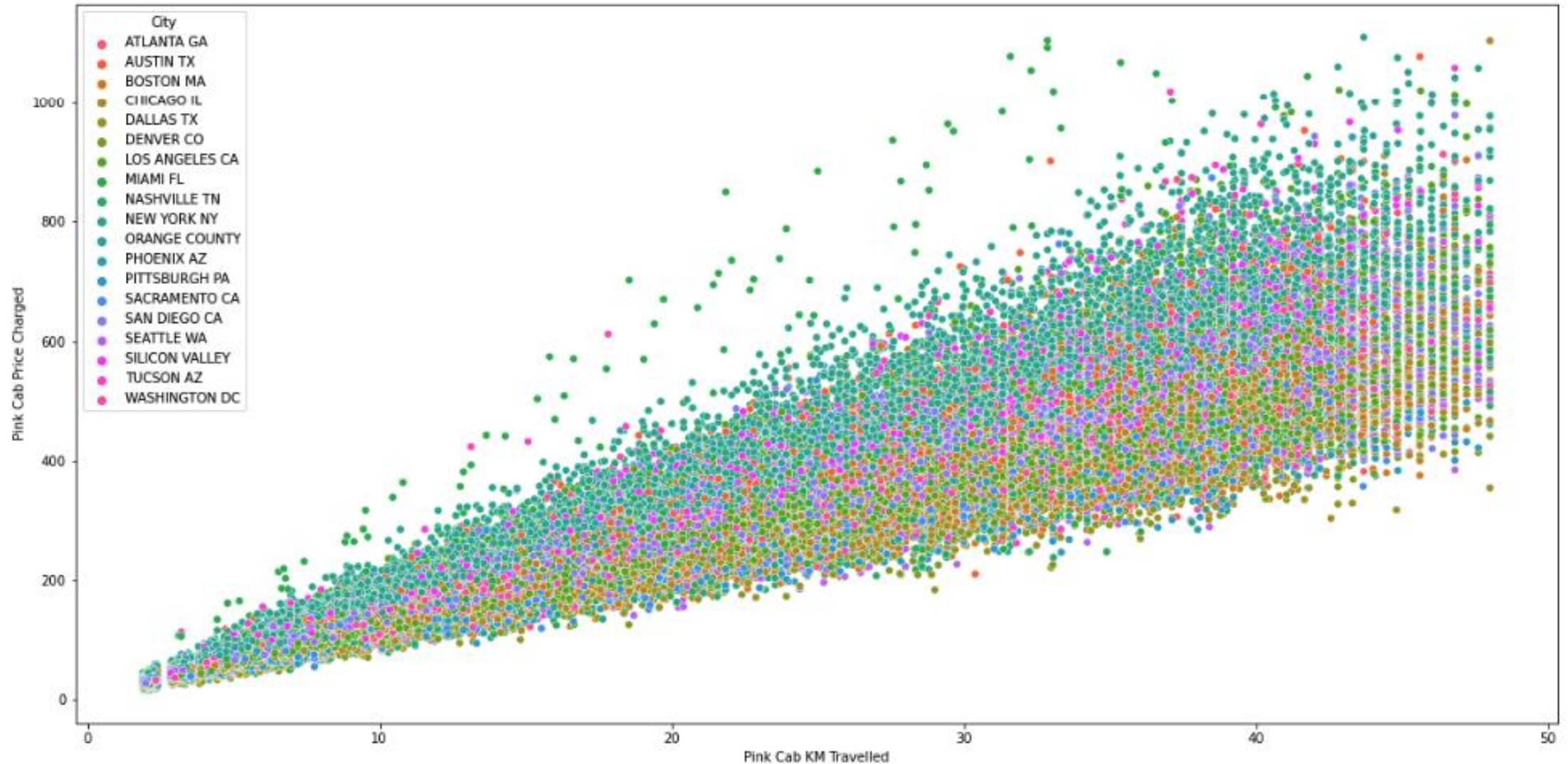


# Prices on the basis of cities

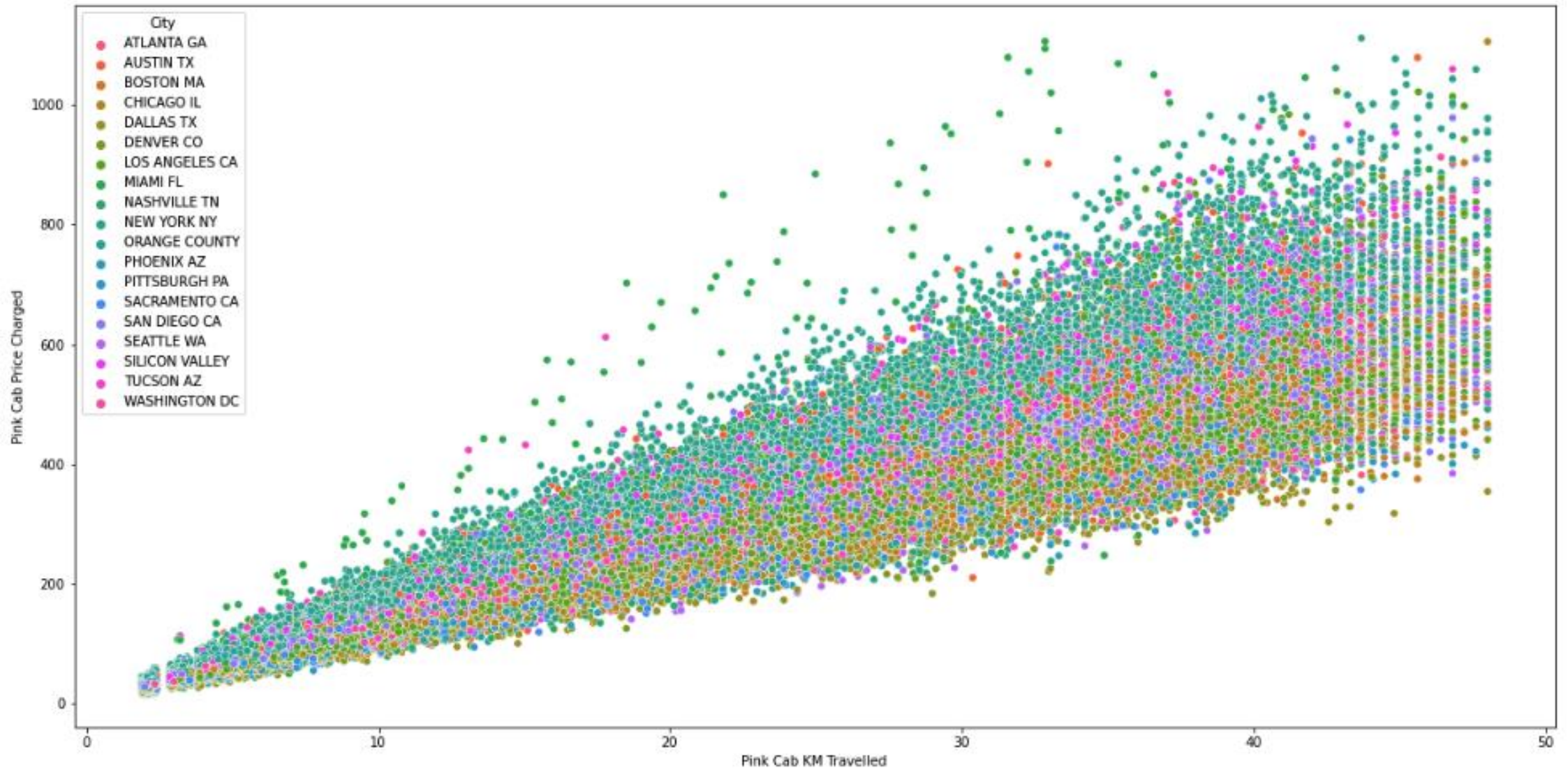




# Pink Cabs km prices on the basis of cities

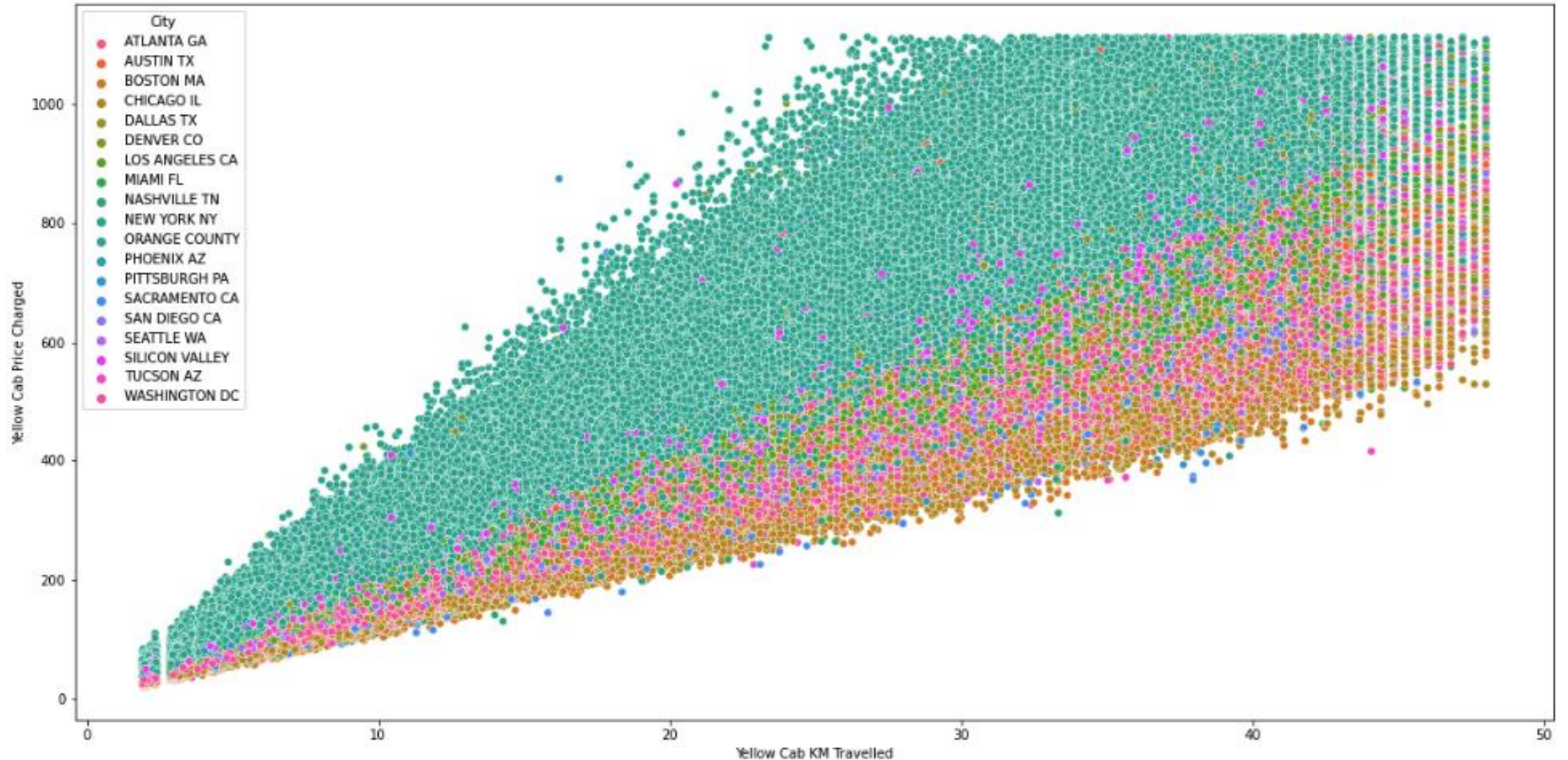


# Pink Cabs km prices on the basis of cities

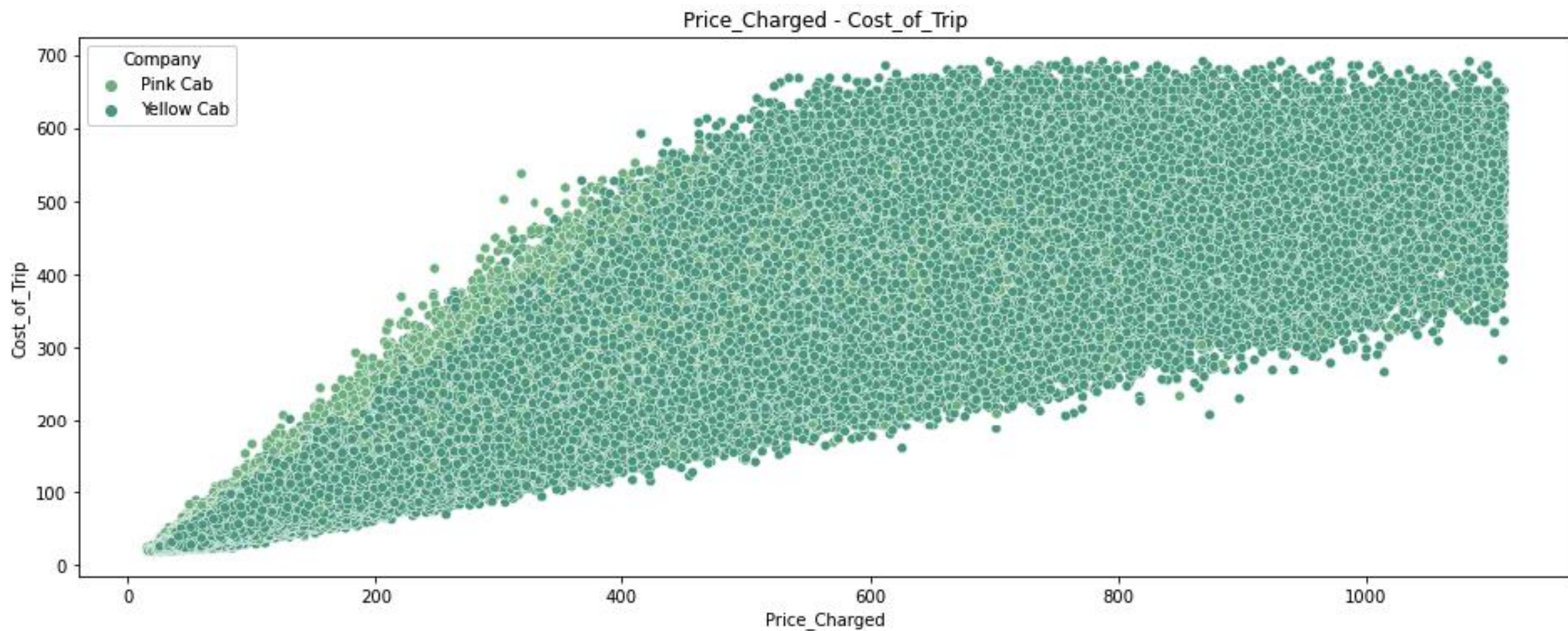




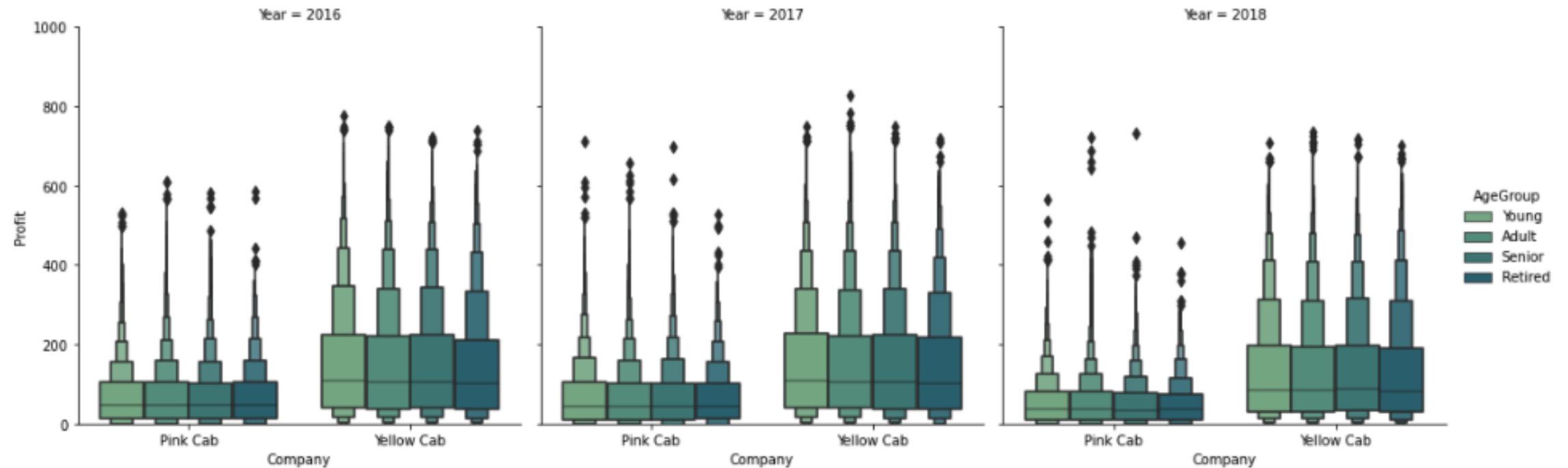
# Yellow Cabs km prices on the basis of cities



# Scatter plots of dataset features to see correlations

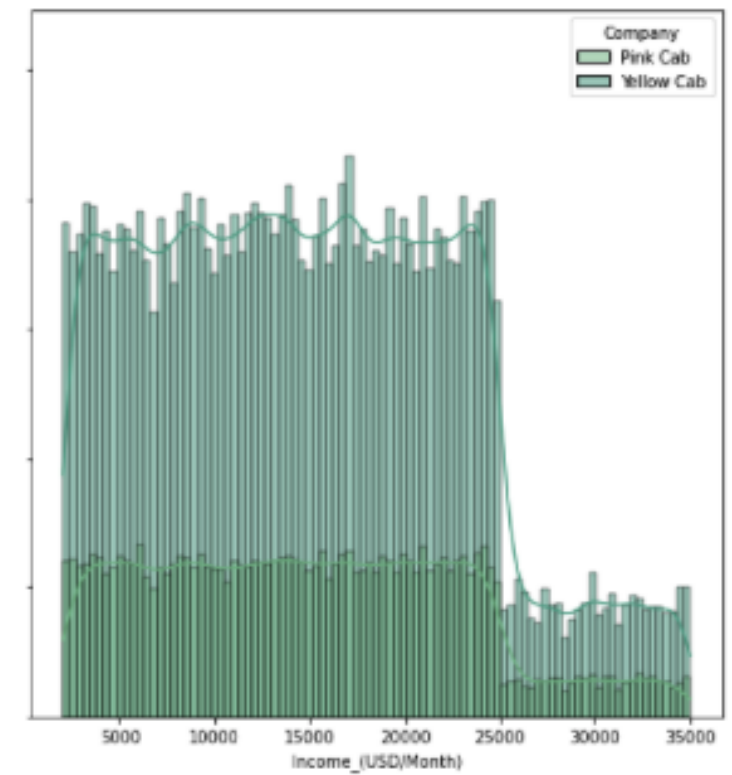
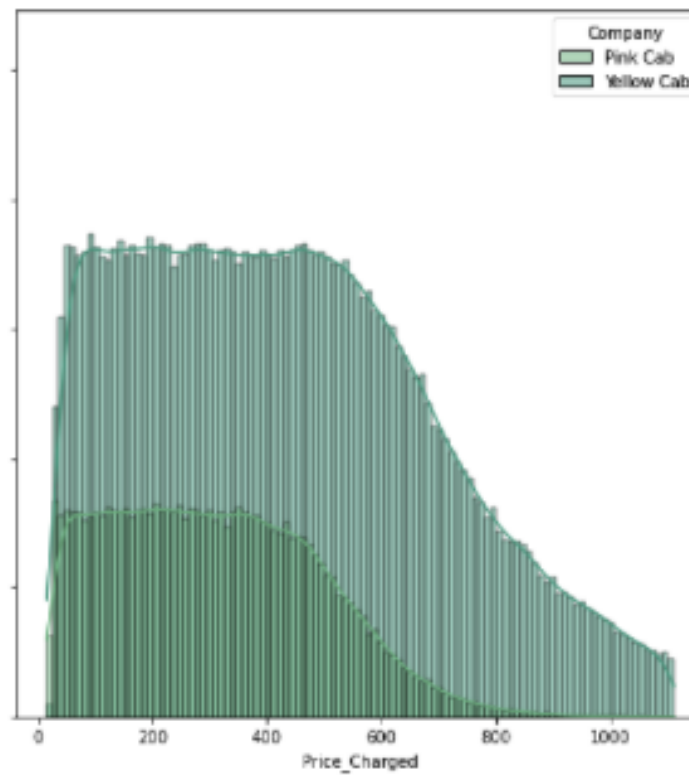
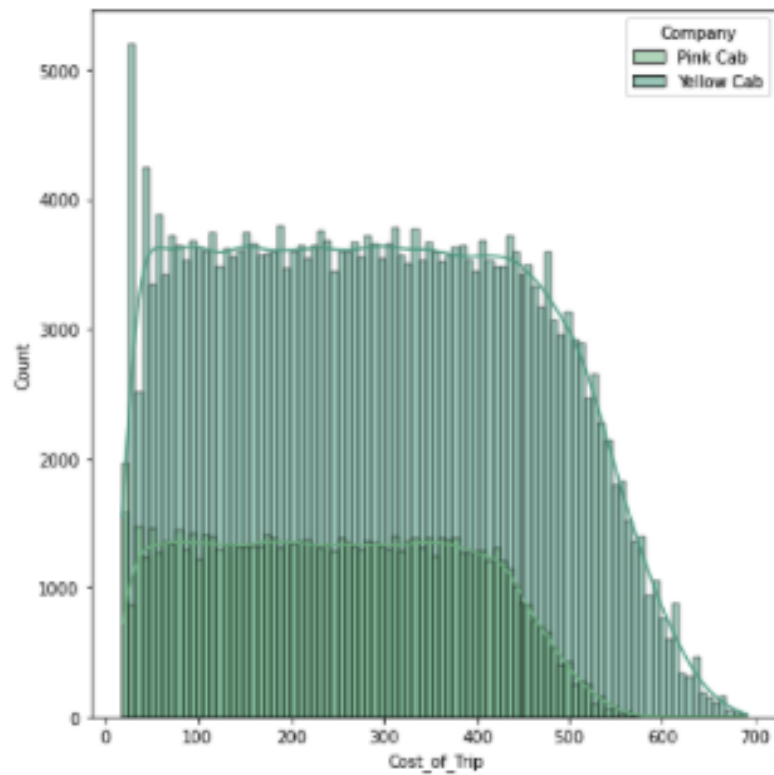


# Profit basis of Age Group by year

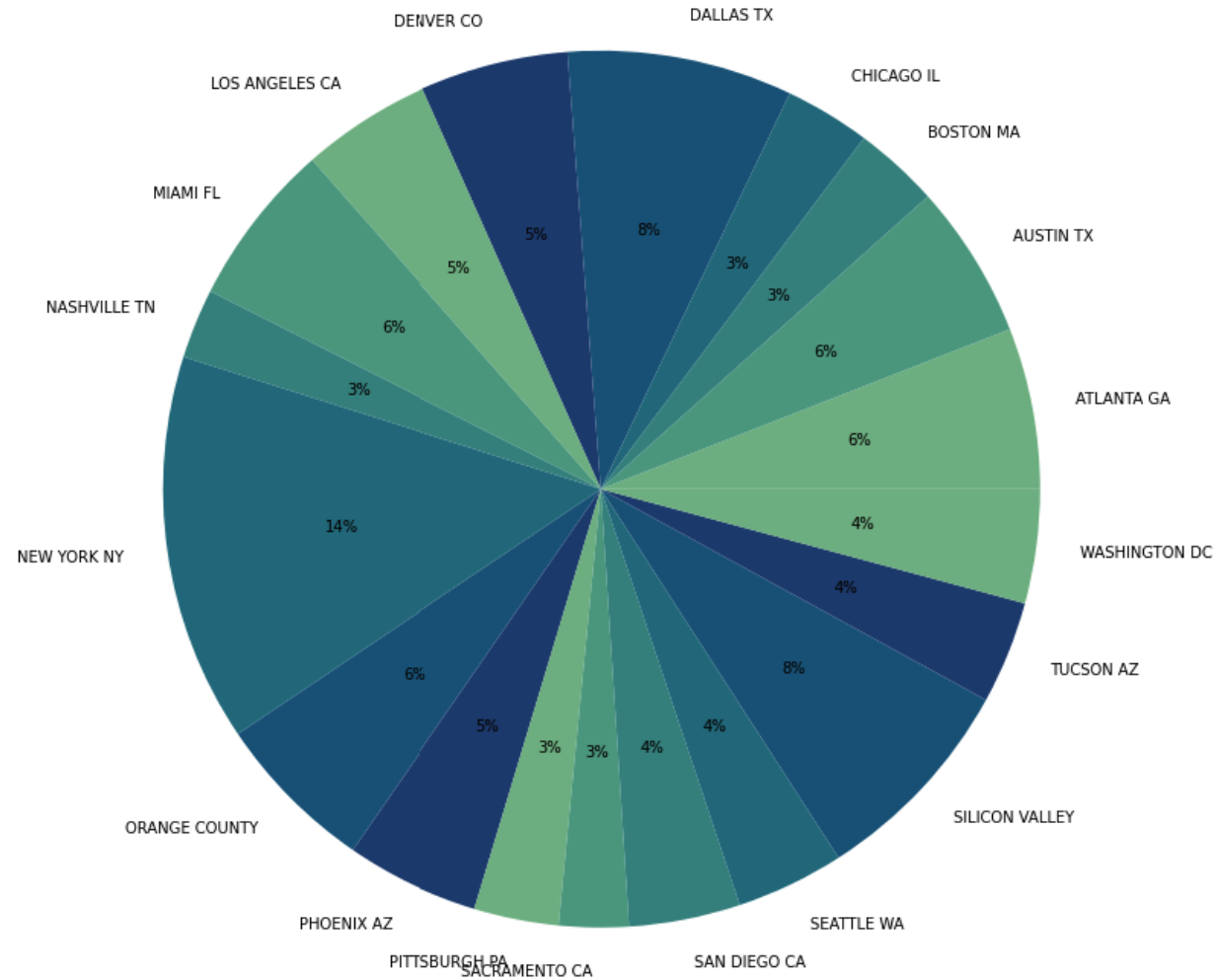




# KDE curves and distribution graphs of Cab firms according to cost of trip, price charged, income



# Average Profit per KM Travelled by Cities





# Recommendations

We have evaluated both the cab companies on following points and found Yellow cab better than Pink cab:

- **Customer Reach** : Yellow cab has higher customer reach in 25 cities while Pink cab has higher customer reach in 4 cities. We have also observed that Yellow cab is doing good in covering other cab users as compared to Pink cab.
- **Customer Retention:** We have analyzed this in two segments : at least 5 drive and at least 10 drive with the same cab company. And we found that Yellow cab is doing far better than Pink cab in both these segments.
- **Age wise Reach** : Yellow cab has customer in all age group and it's been observed that it's even popular in 60+ age group as equally as its in 18-25 age group.
- **Average Profit per KM:** Yellow cab's average profit per KM is almost three times the average profit per KM of the Pink cab.
- **Income wise Reach** :Both the cabs are very popular in high and medium income class but here also Yellow cab is performing better than Pink cab in offering their services to all the three income class group (low, medium and high)
- **Ride count and Profit Forecasting** : Both the companies are facing loss in the profit and no. of ride. Yellow cab's forecasted profit loss is around 1.83% while Pink cab's loss in 3.1%.Pink cab is facing more loss even when its forecasted no of ride loss is lesser than Yellow cab.

**On the basis of above point , we will recommend Yellow cab for investment.**

# Thank You



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