



**Data Glacier**

Your Deep Learning Partner

# G2M Case Study

Virtual Internship

30-Jun-2022

# Background –G2M(cab industry) case study

- 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:

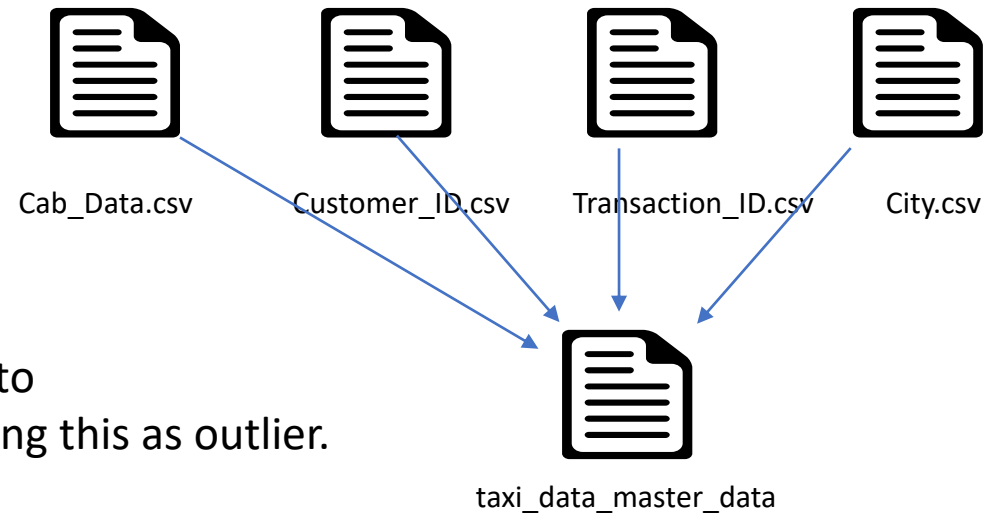
- Data Understanding
- Forecasting profit and number of rides for each cab type
- Finding the most profitable Cab company
- Recommendations for investment

# Data Exploration

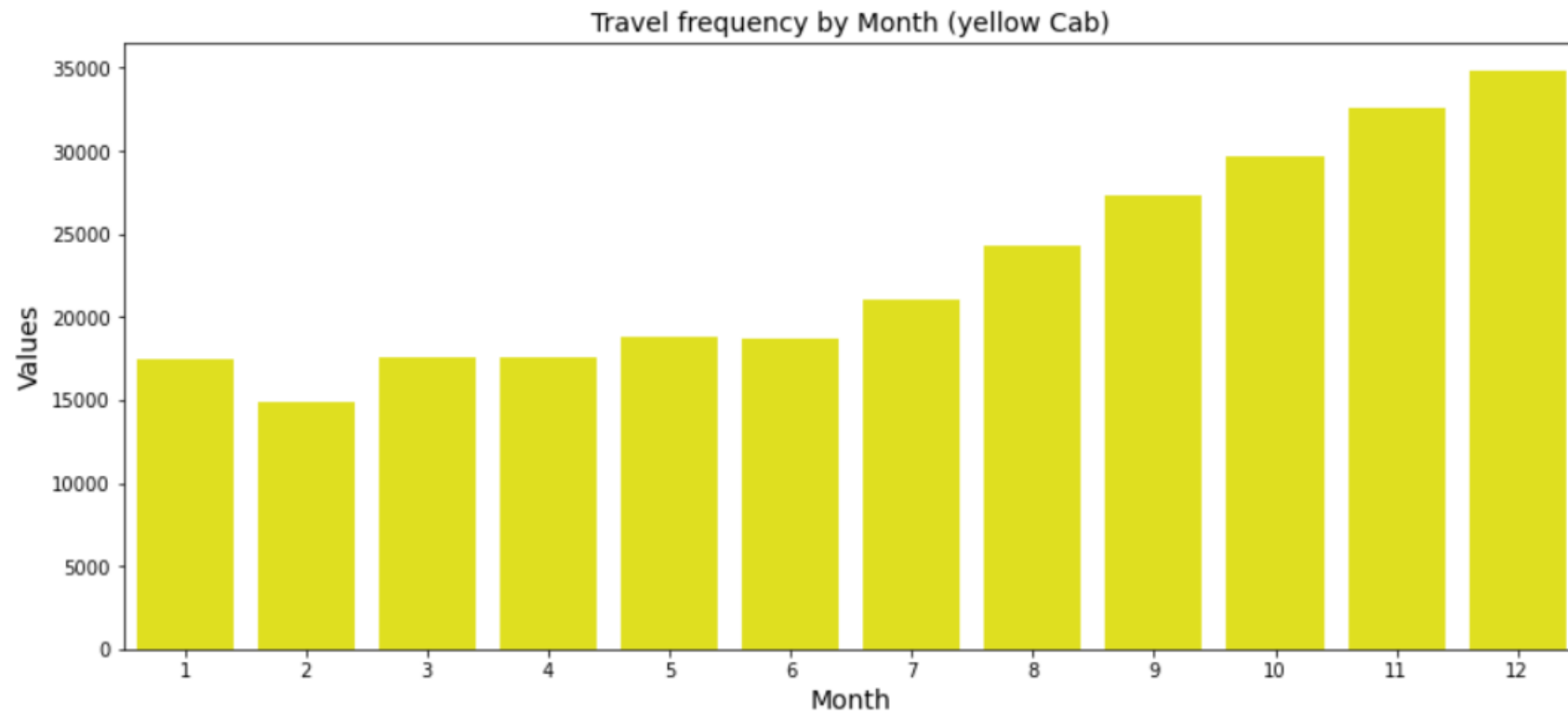
- Timeframe of the data: 2016-01-31 to 2018-12-31
- Total data points :359392

## Assumptions:

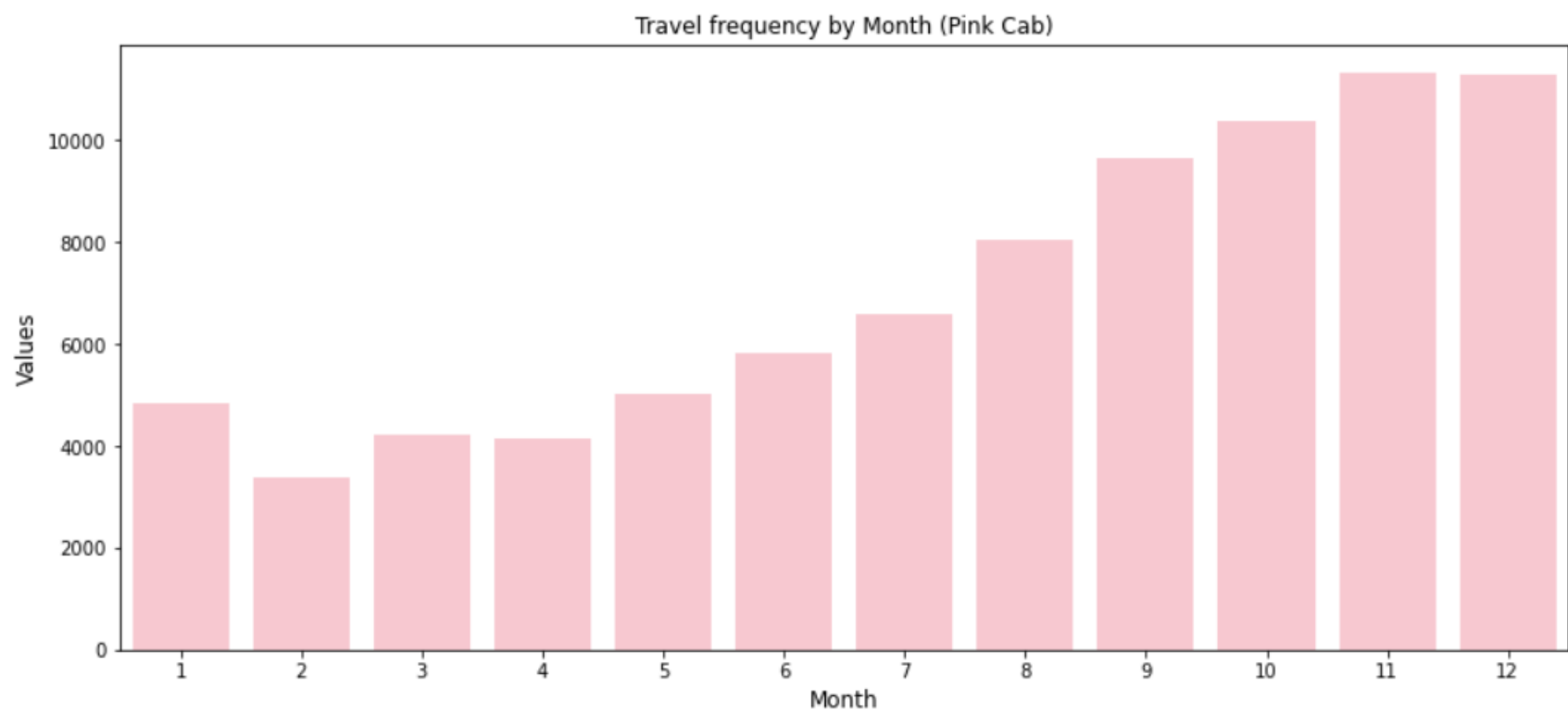
- Outliers are present in Price\_Charged feature but due to unavailability of trip duration details ,we are not treating this as outlier.
- Profit of rides are calculated keeping other factors constant and only Price\_Charged and Cost\_of\_Trip features used to calculate profit.
- Users feature of city dataset is treated as number of cab users in the city.  
we have assumed that this can be other cab users as well(including Yellow and Pink cab)



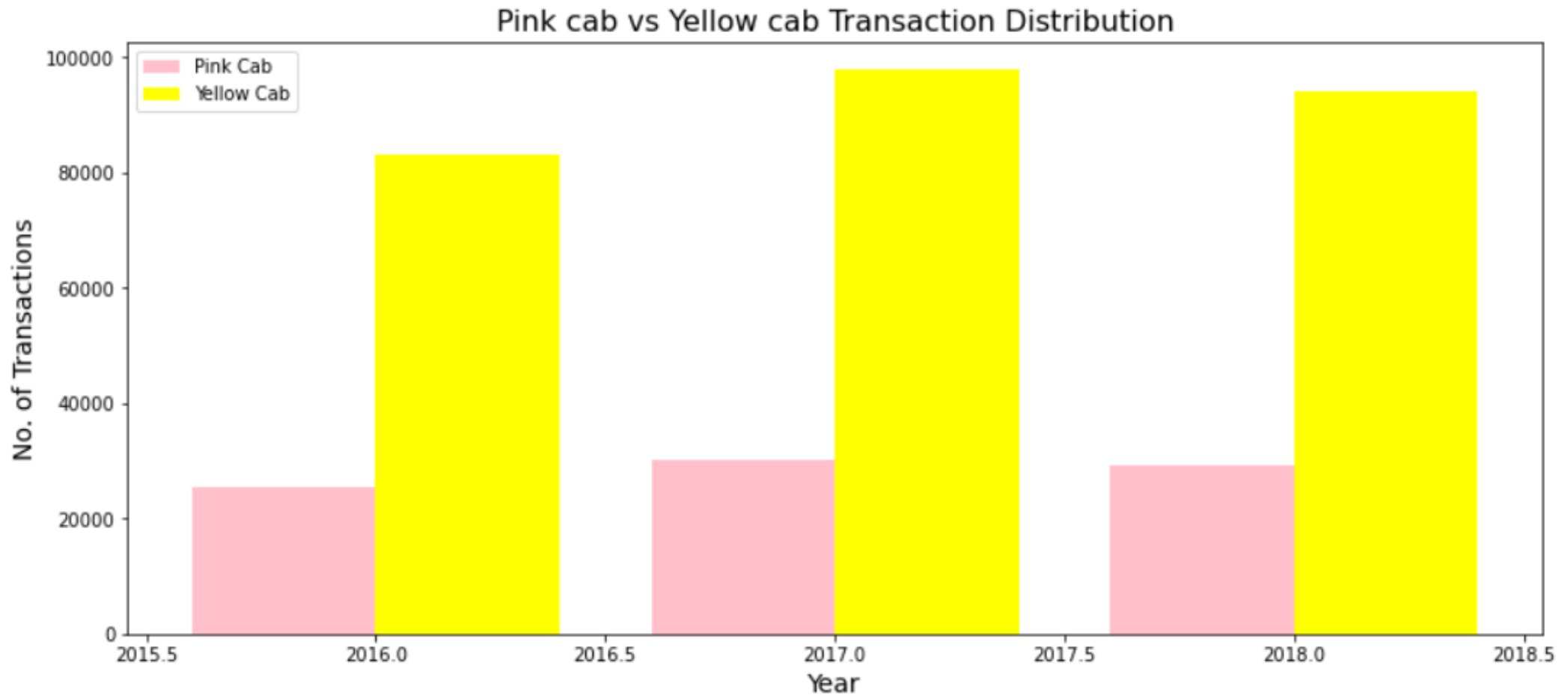
# Company spread analysis



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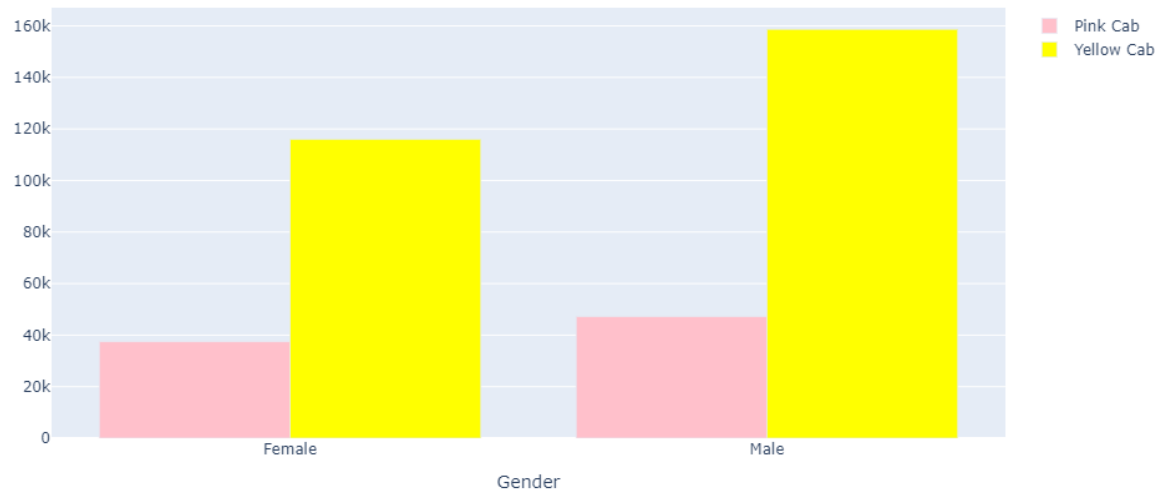


# Company spread analysis

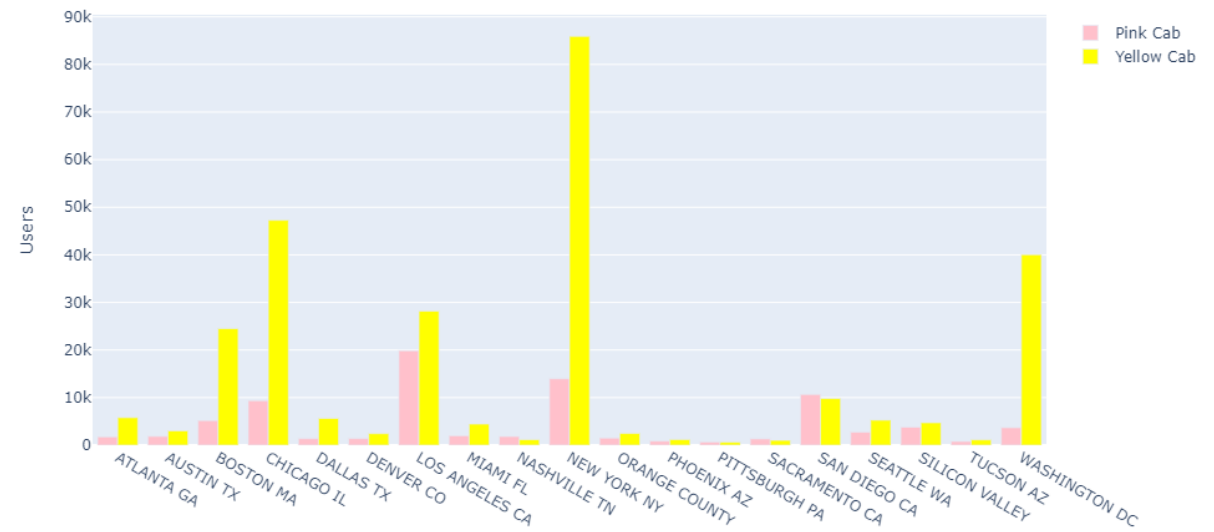


# Users analysis

Distribution of pink & yellow taxi use by gender

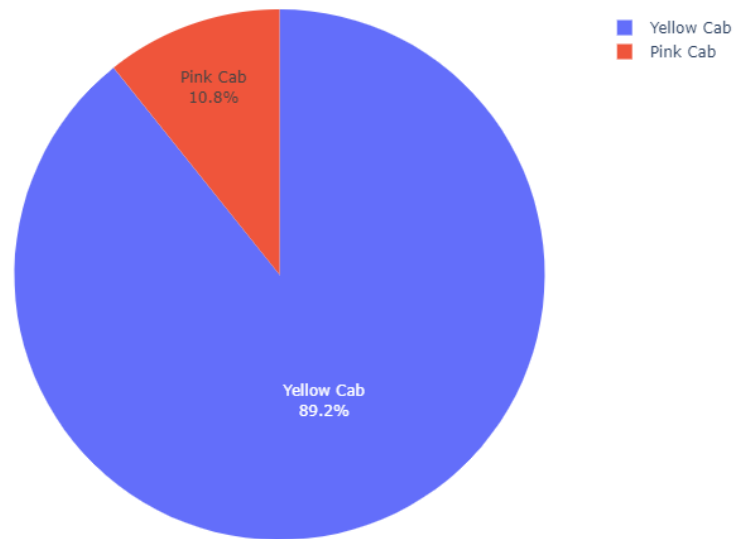


Pink & Yellow Cab Firm Users Distribution Over City

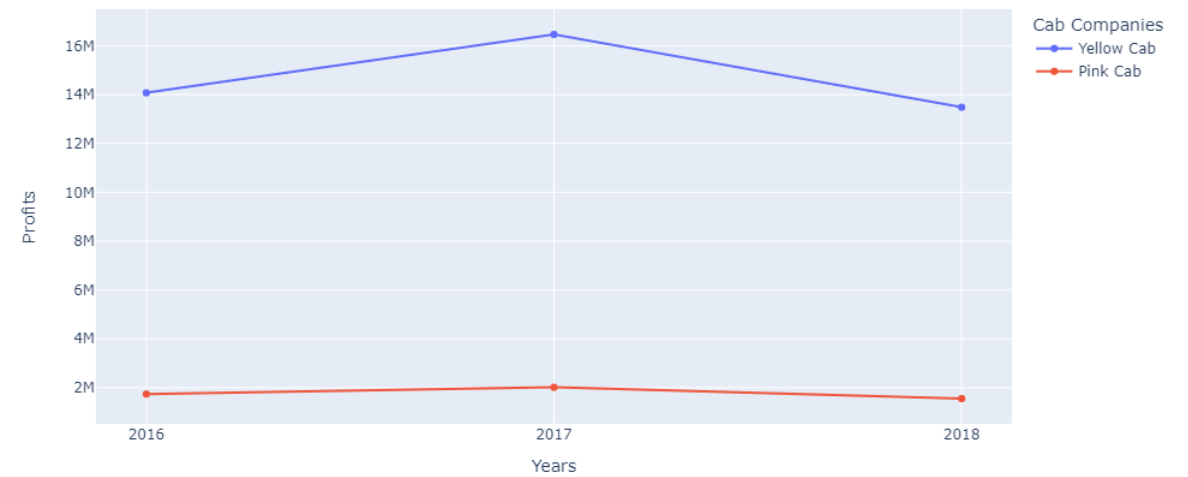


# Profit Analysis

Total Profit of Trip by Cab Firm



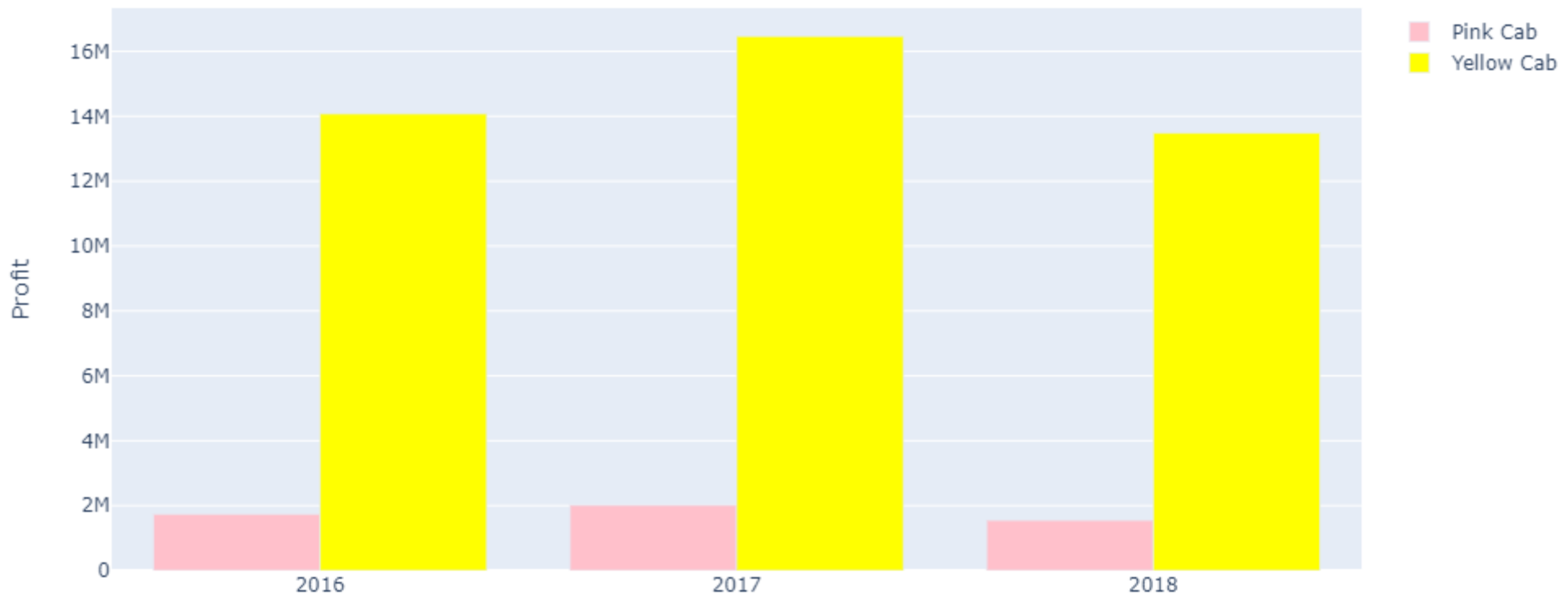
Total Profit per year by Cab Firm





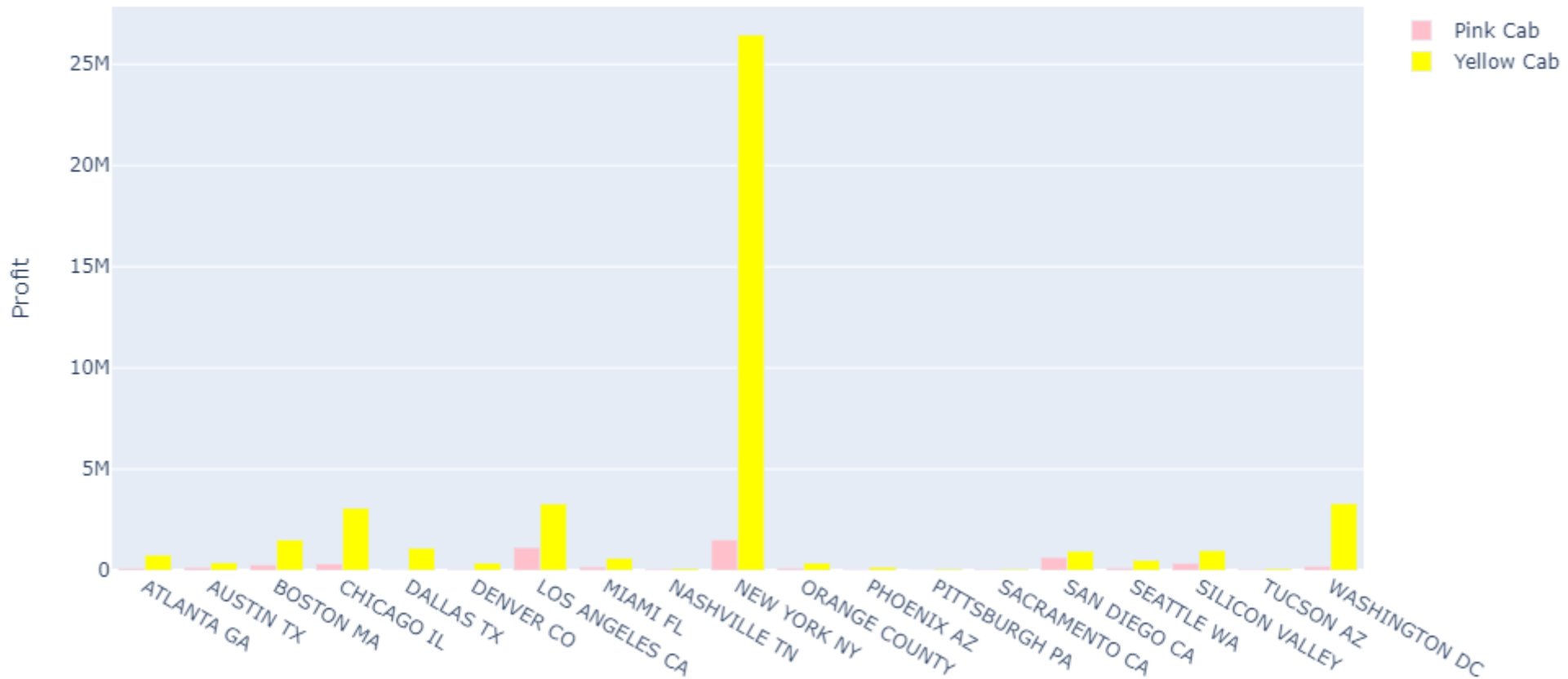
# Profit Analysis

Pink & Yellow Cab Firm Profit during period of study



# Profit Analysis

Yearly Pink & Yellow Cab Firm Profit Distribution Over City



# Recommendations

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

- Customer** : Yellow cab has higher customer than Pink cab. We have also observed that Yellow cab is doing good in covering other cab users as compared to Pink cab.
- Age & Gender**: Yellow cab has customer in all ages and both genders and it's been observed that it's even popular in 60+ age group.
- spread** : yellow cab has more spread over the cities compare with pink cab, that can be seen in the Transaction graphs. The yellow taxi company has a wider spread than the pink taxi during the years, according to the chart
- Profit** : Yellow cab's profit per KM is almost three times the average profit per KM of the Pink cab as can be seen in the graphs. However, According to "Pink & Yellow Cab Firm Profit during period of study" showing that Both companies reached peak profits in 2017, But the yellow taxi company is higher during the entire period.

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

Moath Musallam

# Thank You



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