



**Data Glacier**

Your Deep Learning Partner

# Exploratory Data Analysis

G2M insight for Cab Investment firm

27/06/2022

# Agenda

Executive Summary

Problem Statement

Approach

EDA

EDA Summary

Recommendations

# Introduction

## **Executive Summary:**

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.

## **Problem Statement:**

XYZ is firm, want to understand the market in order to invest in Cap industry as per G2M Strategy before taking the final decision.

## **Objectives:**

To Provide actionable insights that help them identify the right company to make their investment and understand the Cab Industry market in US.

## **Approach :**

1. Review the Source Documentation.
2. Understanding data (the field names and data types).
3. Identify relationships across the files.
4. 3.Cleanning & Preparing data.
5. Features Analysis.
6. Dataset Relation.
7. Summary.

# Data Exploration

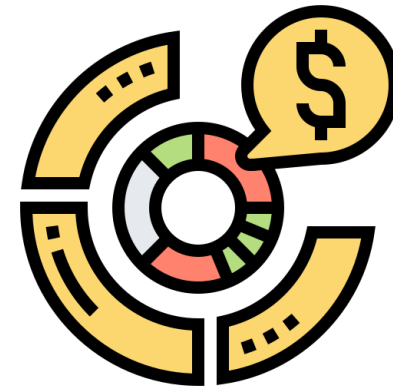
## Data Set:

There have been provided 4 individual data sets. Time period of data is from 31/01/2016 to 31/12/2018. Below are the list of datasets which are provided for the analysis:

- Cab\_Data.csv
- Customer\_ID.csv
- Transaction\_ID.csv
- City.csv

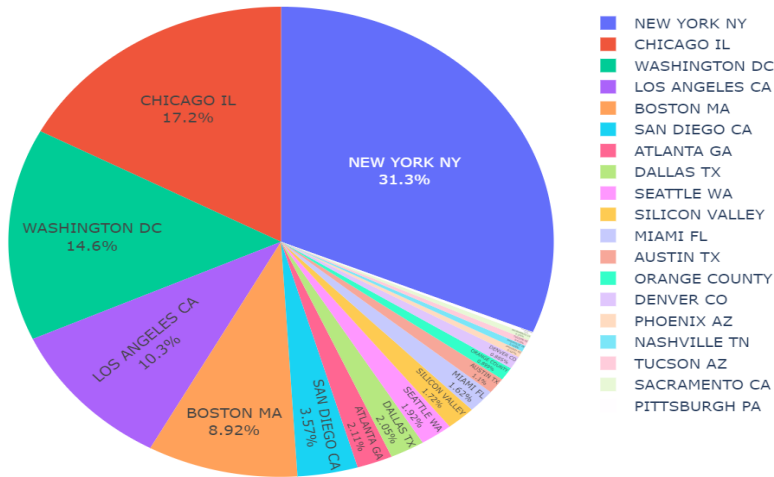
**The main goal is to compare Yellow Cab and Pink Cab from Different Aspects:**

1. How is the performance of Yellow Cab and Pink Cab firms?
2. Which Cap firm is preferred by the customers?
3. Which Cap firm covers more in the Cities?
4. Which Cab firm have bigger market share?
5. Which Cap firm has increased profit?

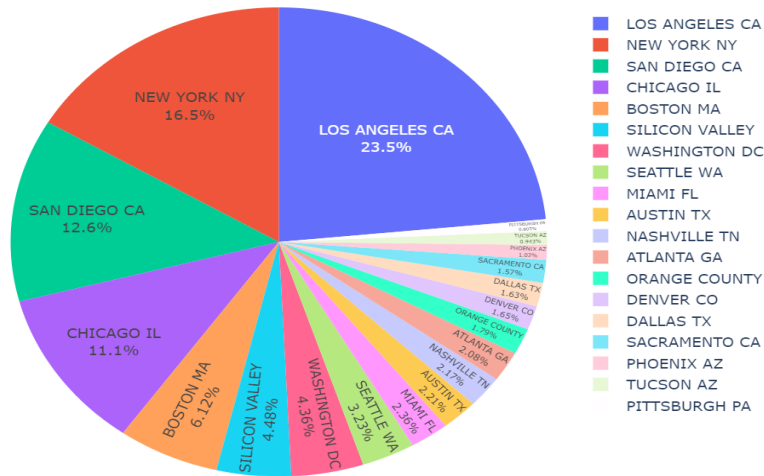


# Transaction Analysis

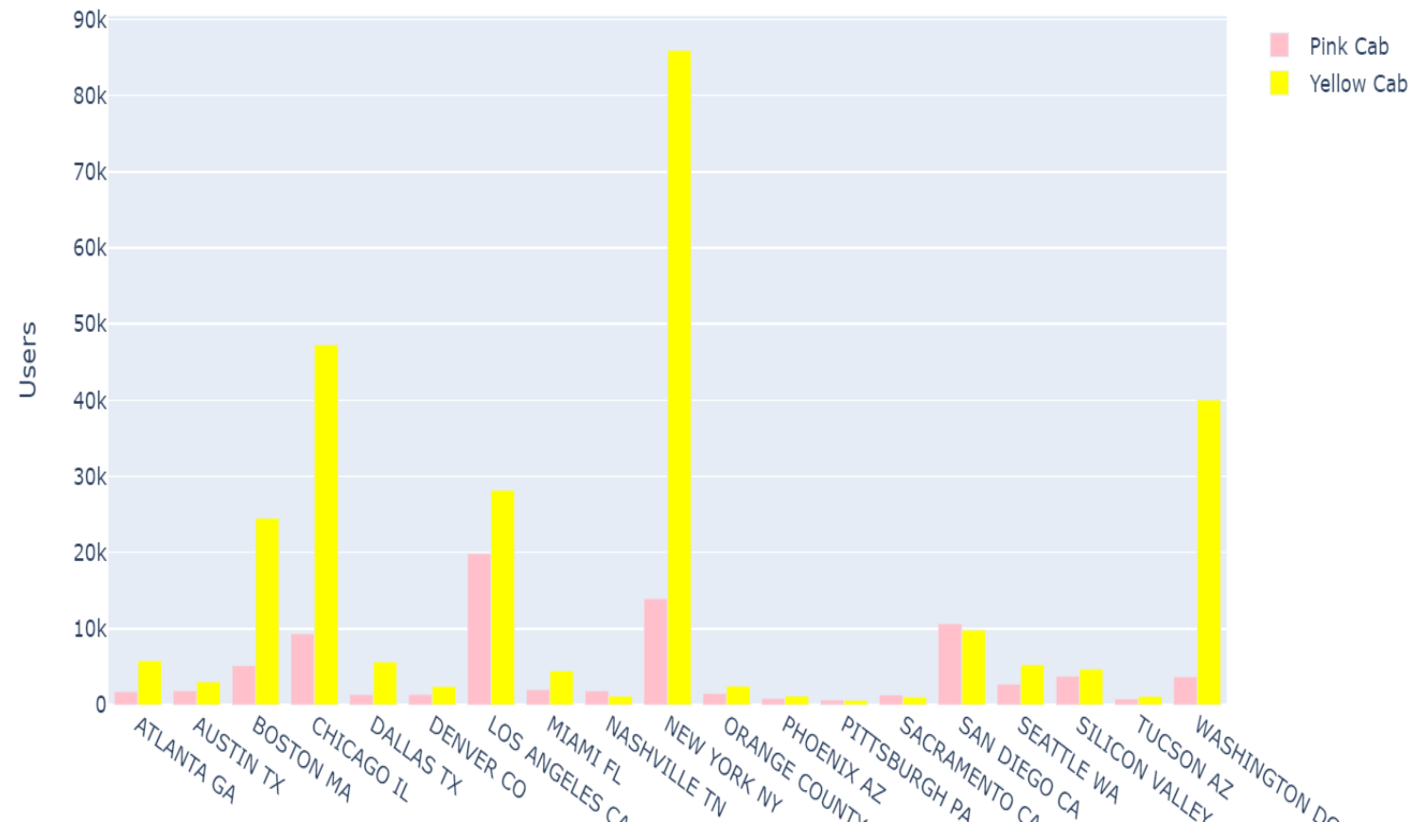
Total transactions by City per yellow cap



Total transactions by City per pink cap

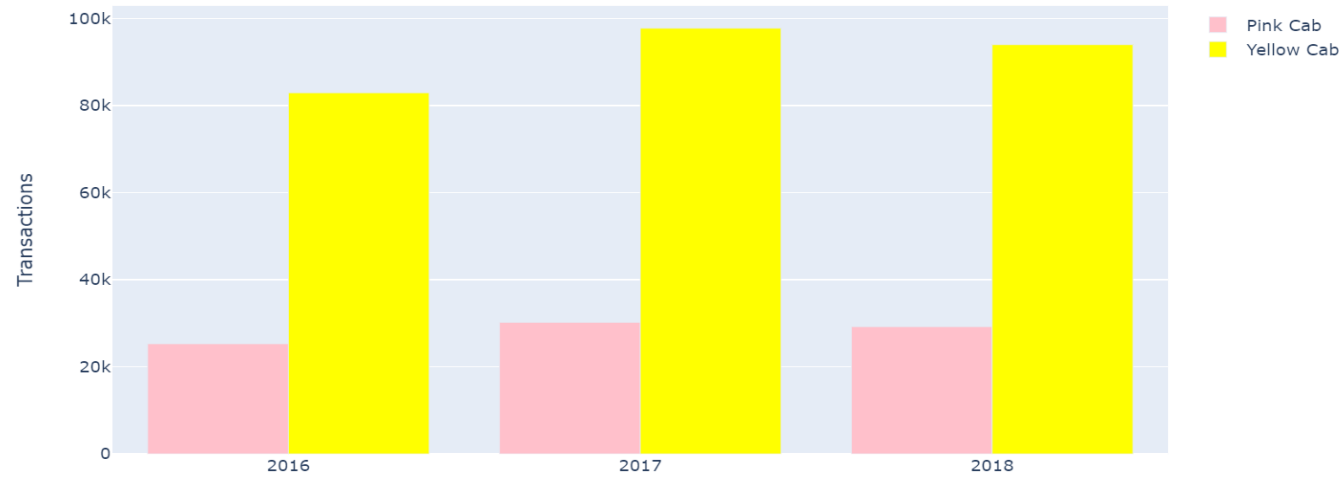


Pink & Yellow Cab Firm Transactions Distribution per City

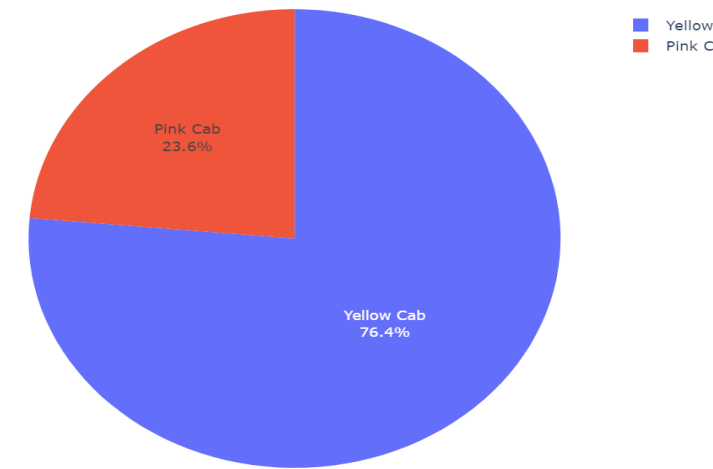


# Transaction Analysis

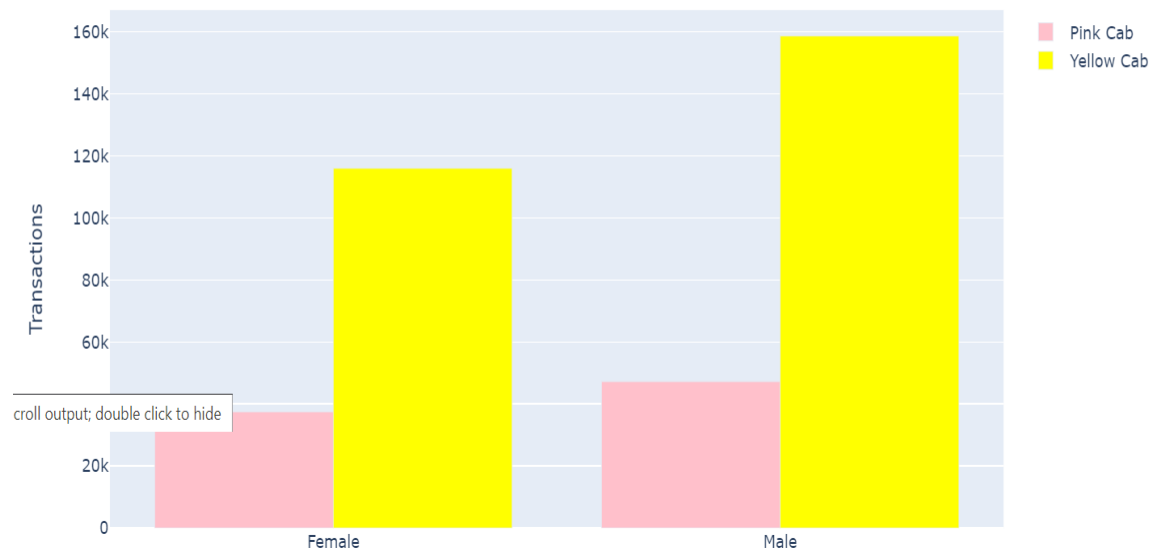
Yearly Pink & Yellow Cab Firm Transactions Distribution



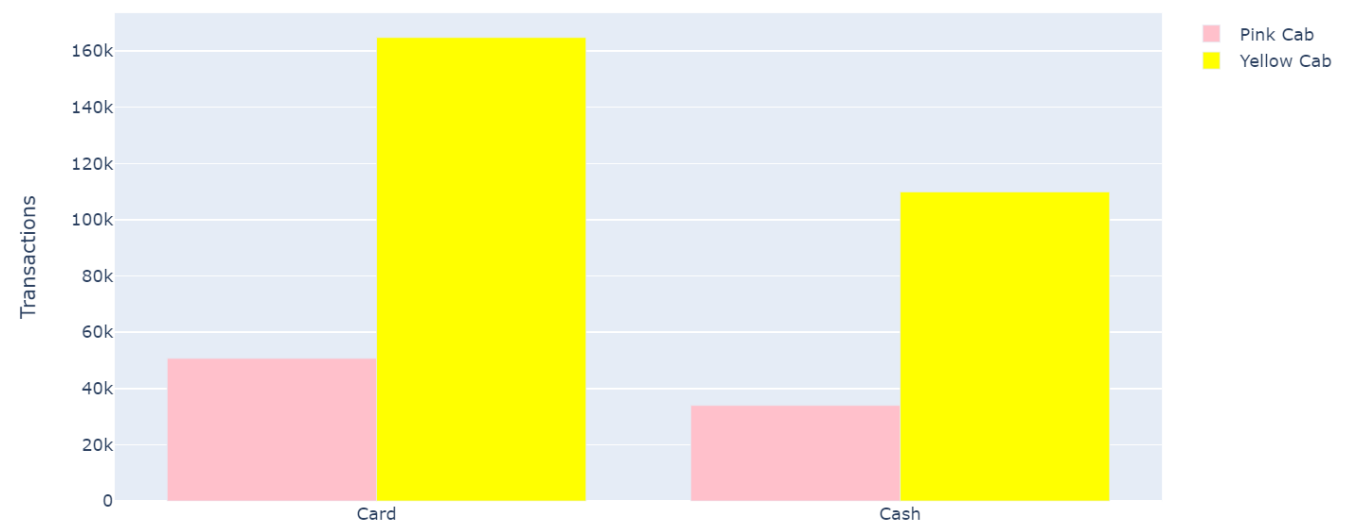
Total transactions by Cab Firm



Pink & Yellow Cab Firm Transactions Distribution Over Gender

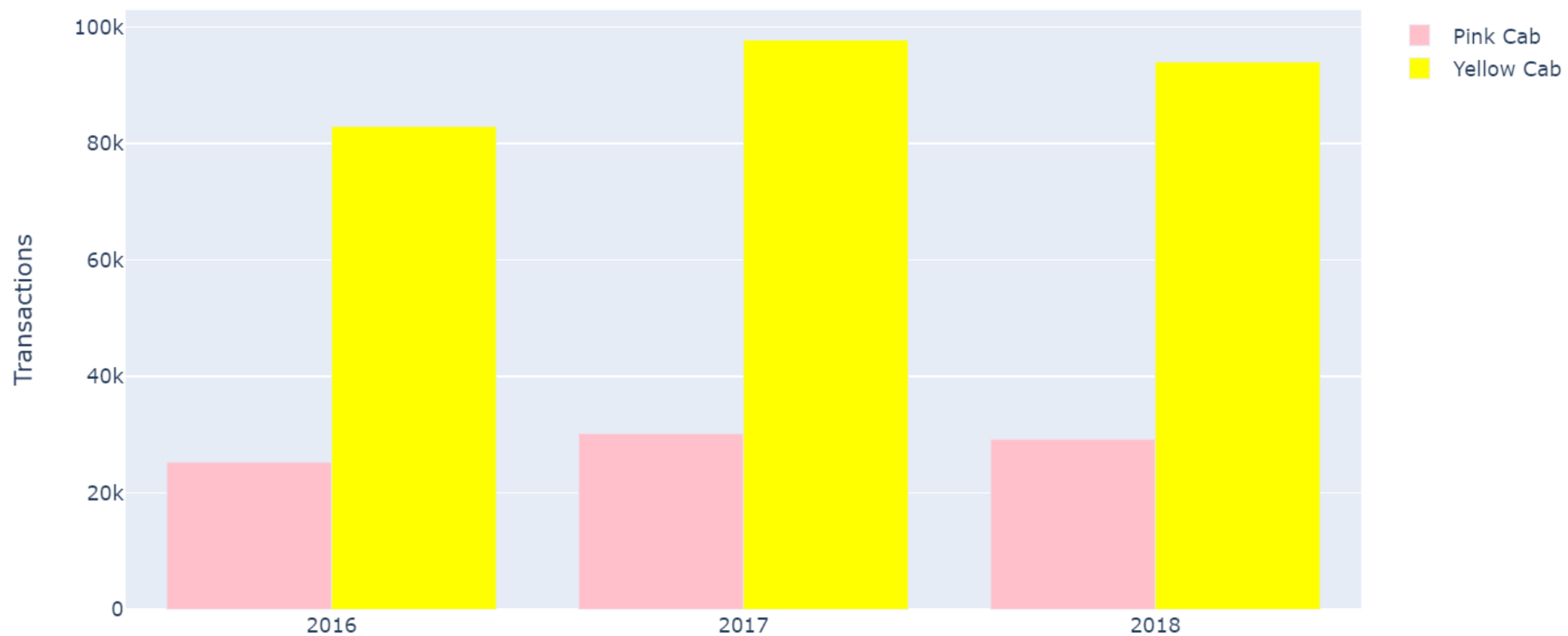


Pink & Yellow Cab Firm Transactions Distribution Over Payment\_Mode



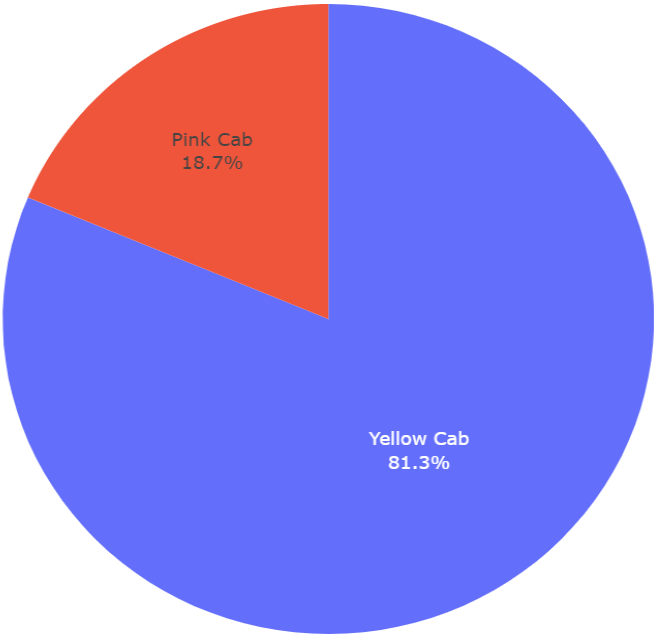
# Transaction Analysis

Yearly Pink & Yellow Cab Firm Transactions Distribution



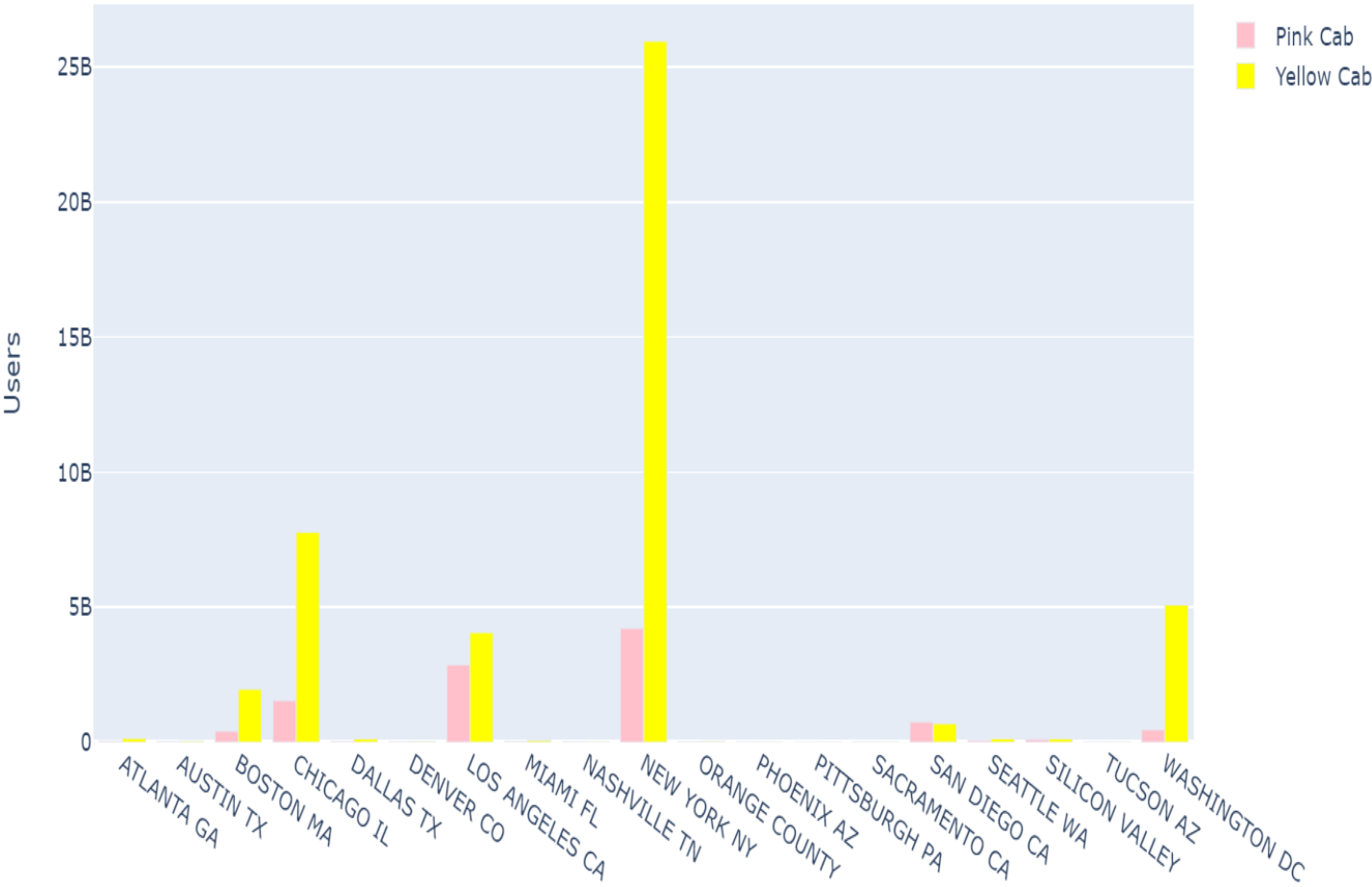
# User Analysis

Total users by Cab Firm



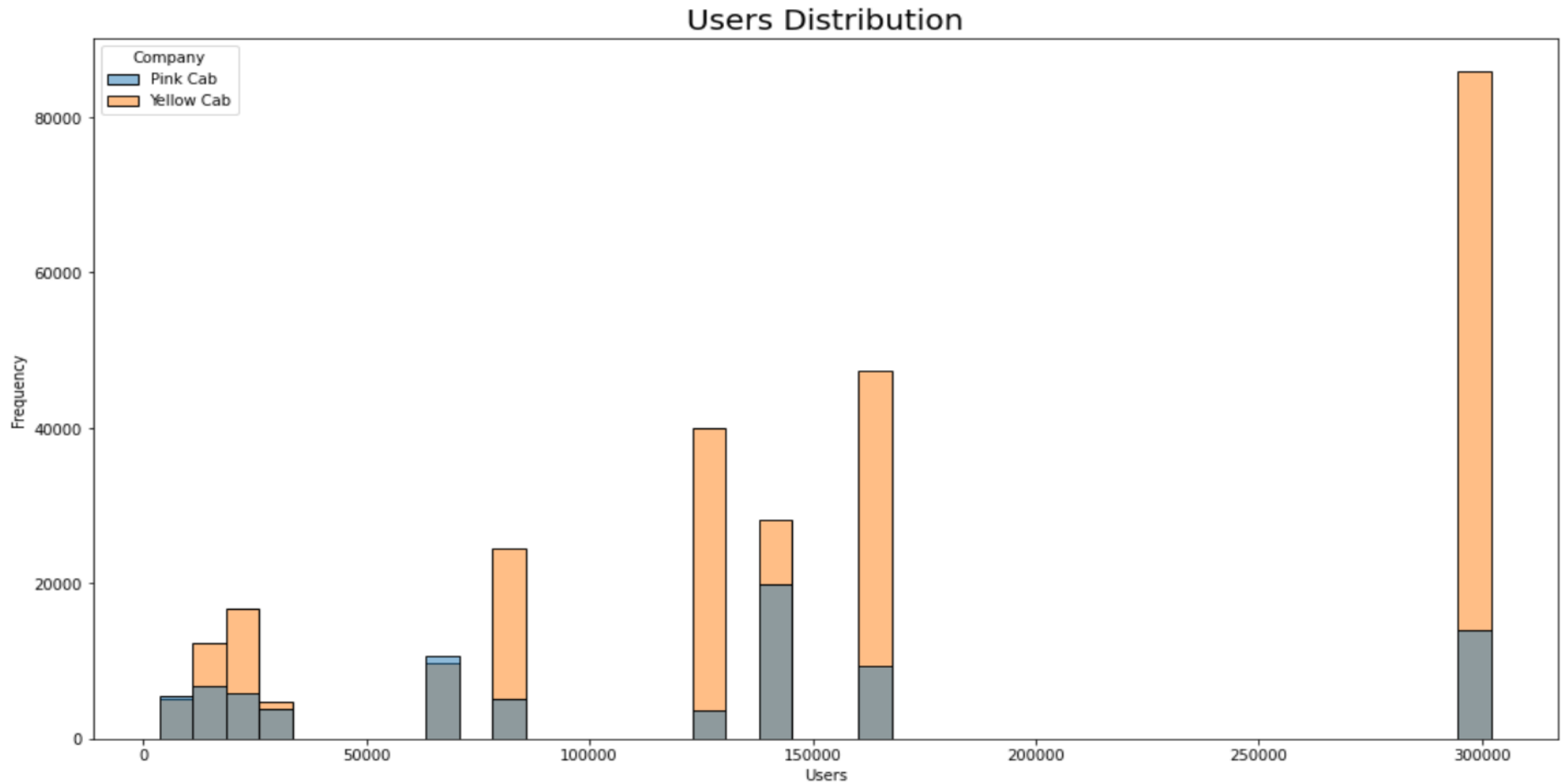
Yellow Cab  
Pink Cab

Pink & Yellow Cab Firm User Distribution Over City



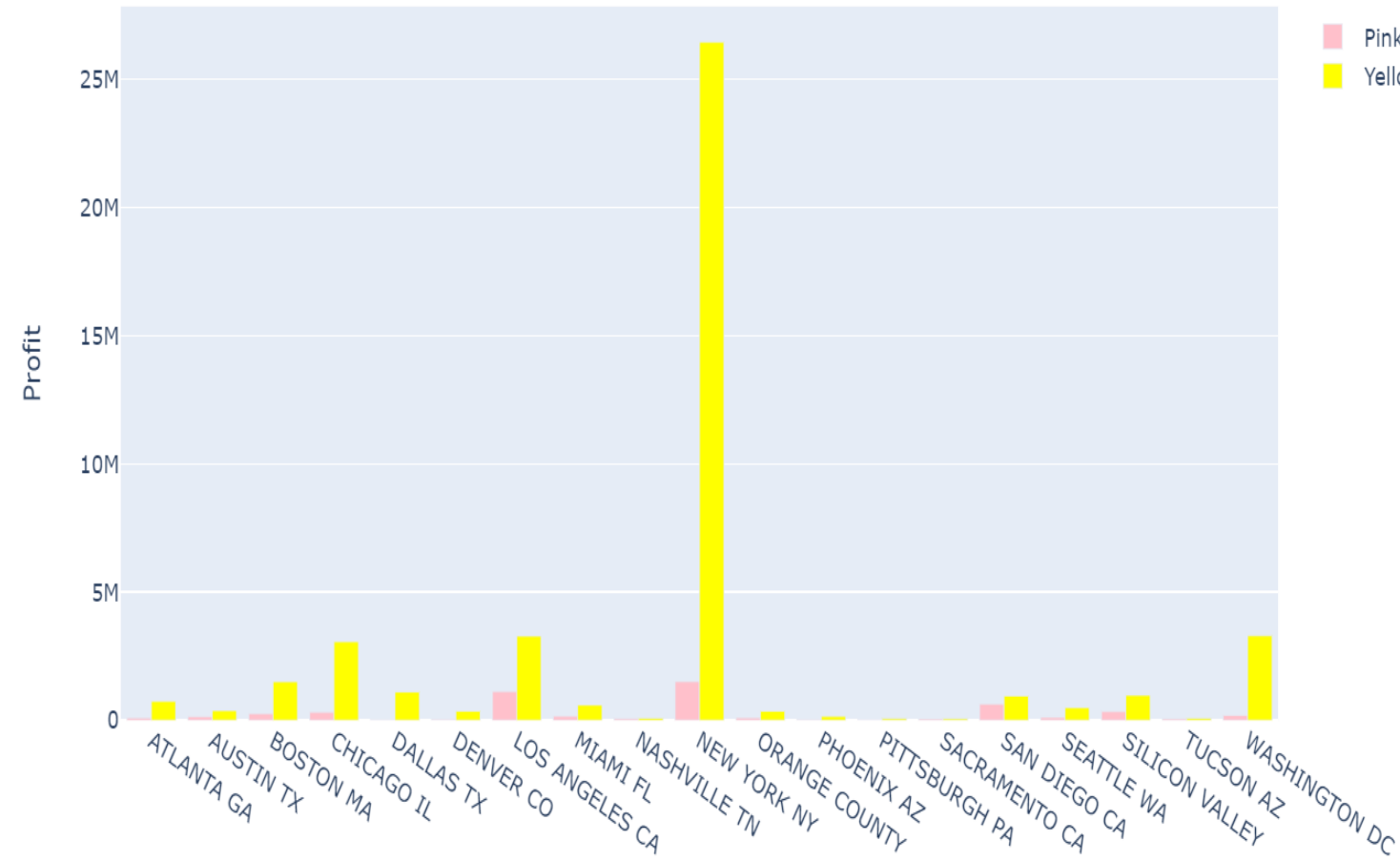


# User Analysis

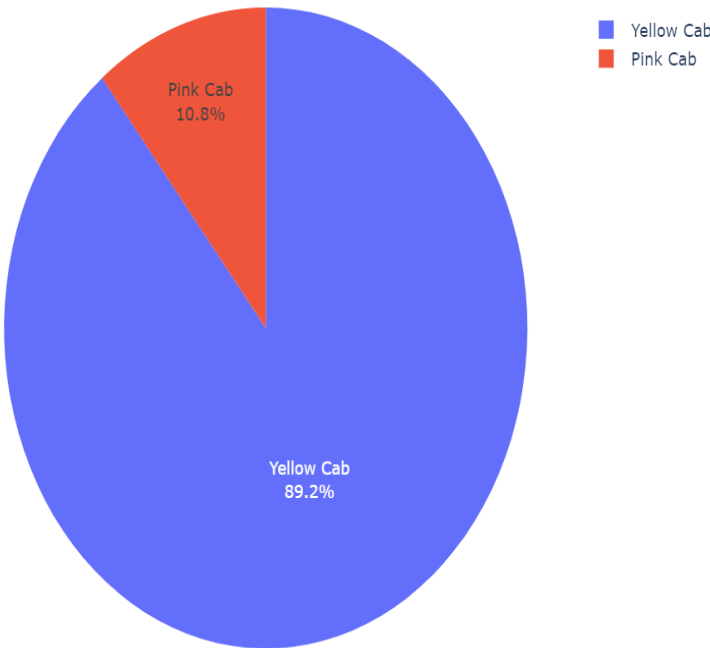


# Profit Analysis

Yearly Pink & Yellow Cab Firm Profit Distribution Over City

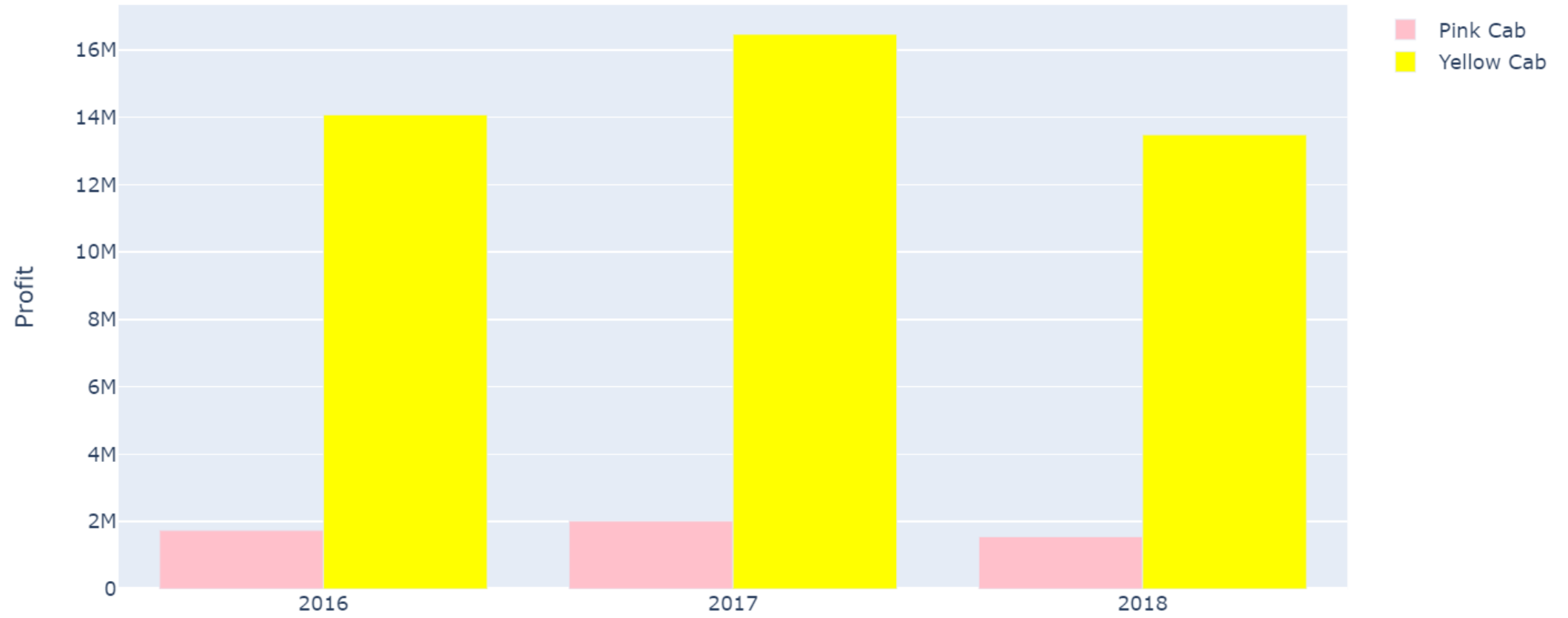


Total Profit of Trip by Cab Firm



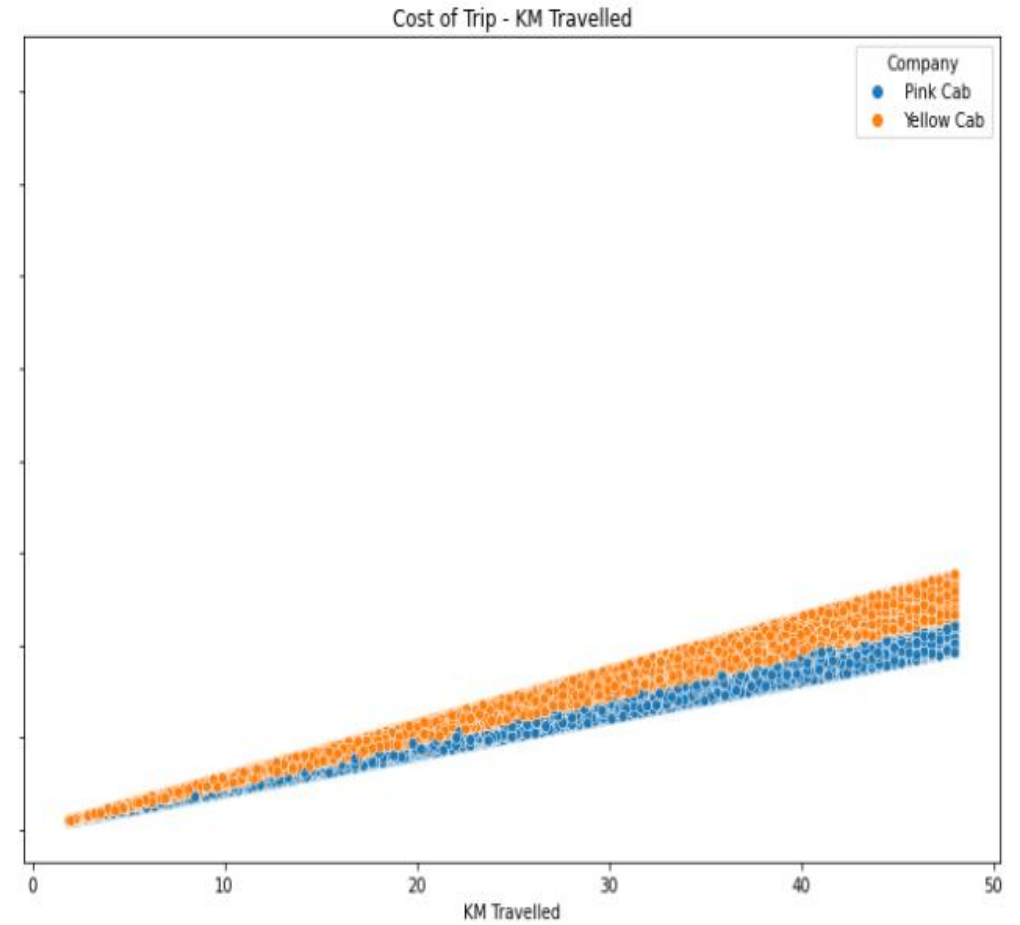
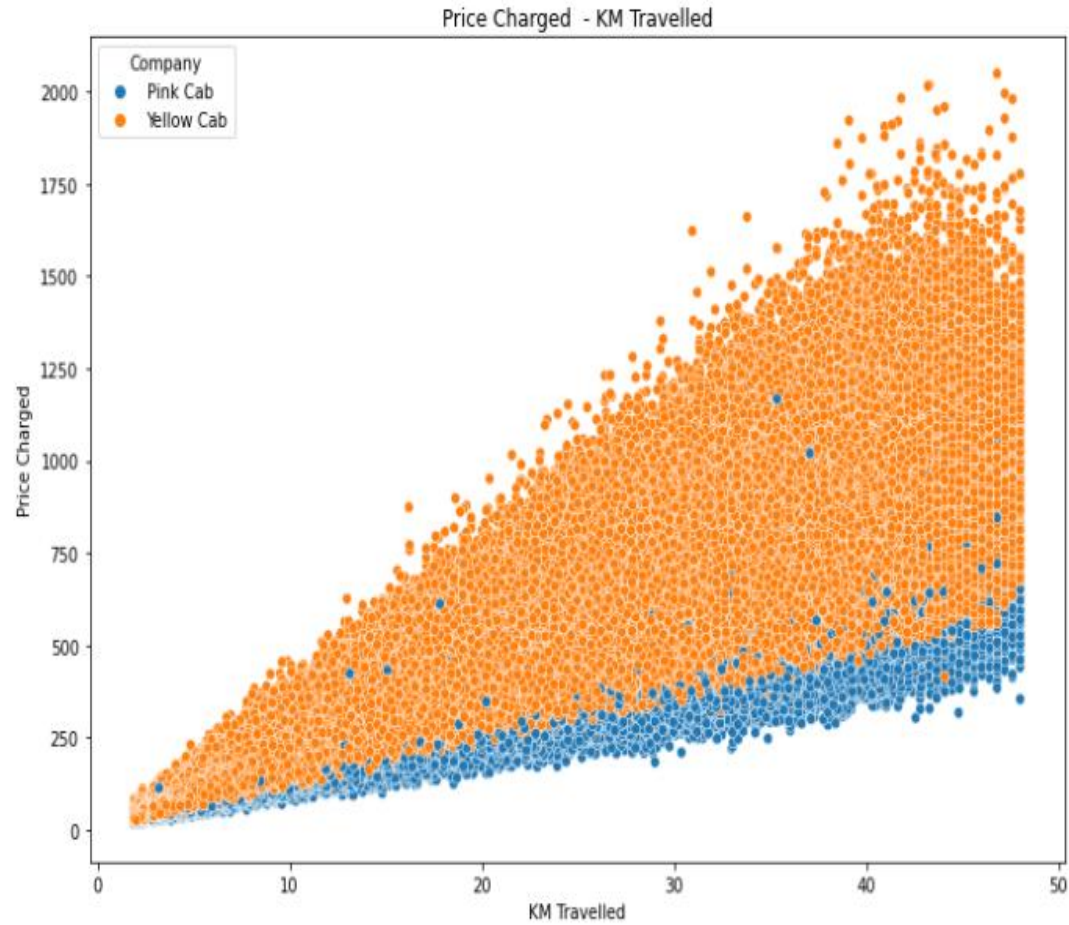
# Profit Analysis

Yearly Pink & Yellow Cab Firm Profit Distribution

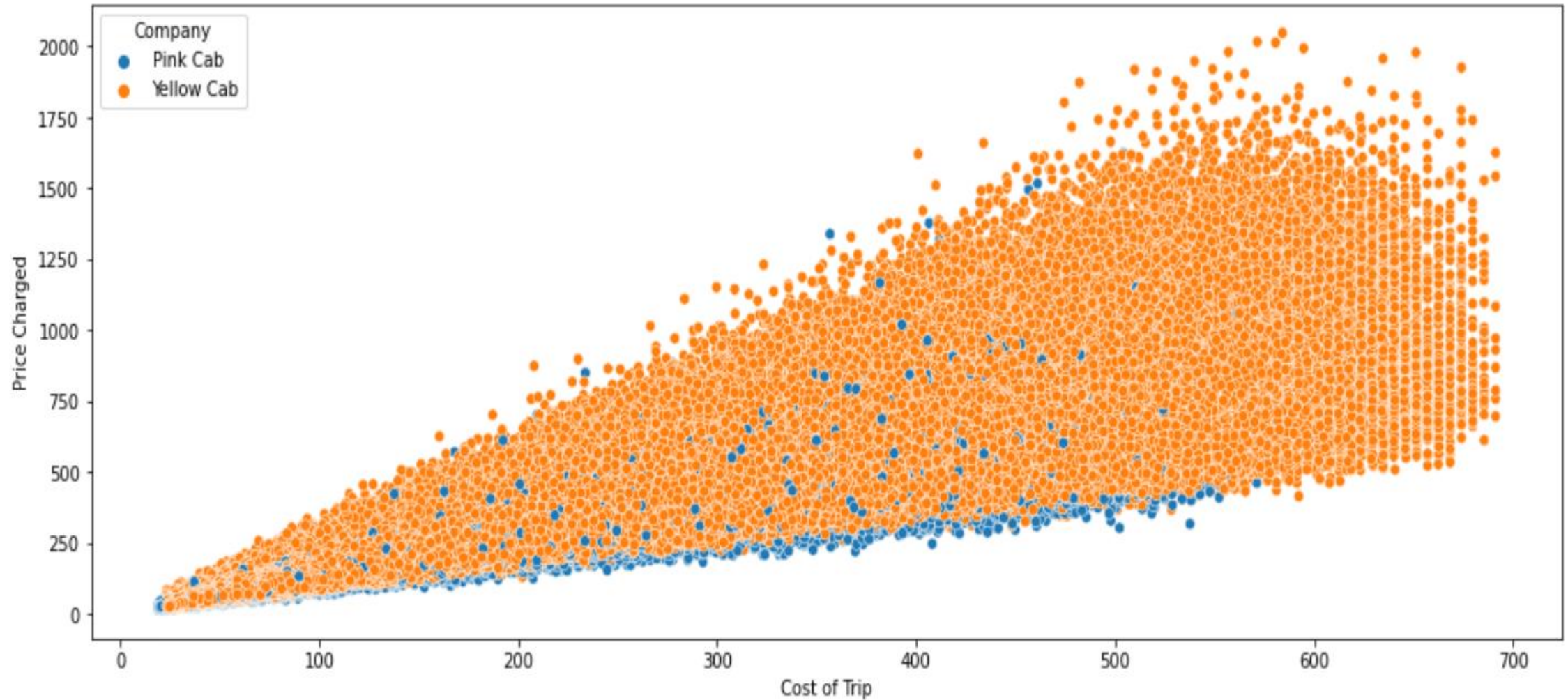


# KM Travel Opposite Price and Cost of Trip

KM Travelled Boxplot Distributions per Price Charged & Cost of Trip

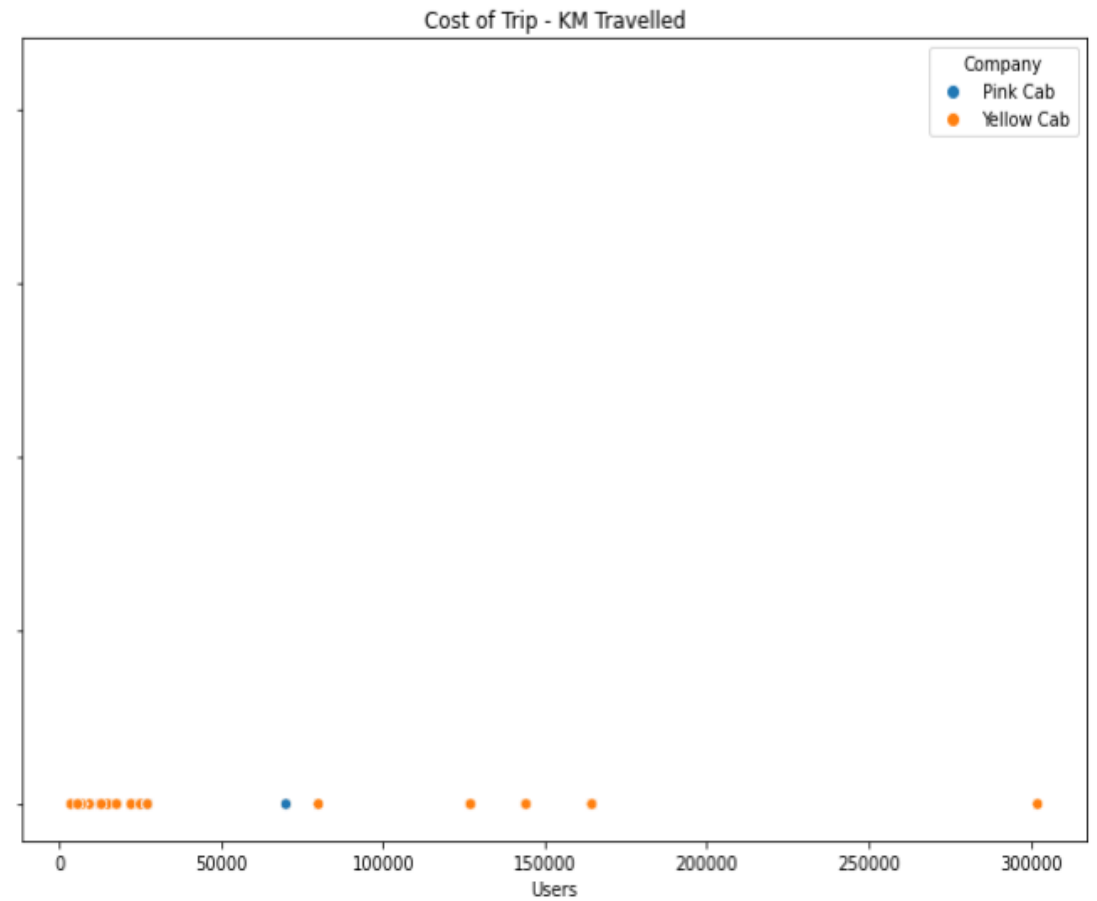
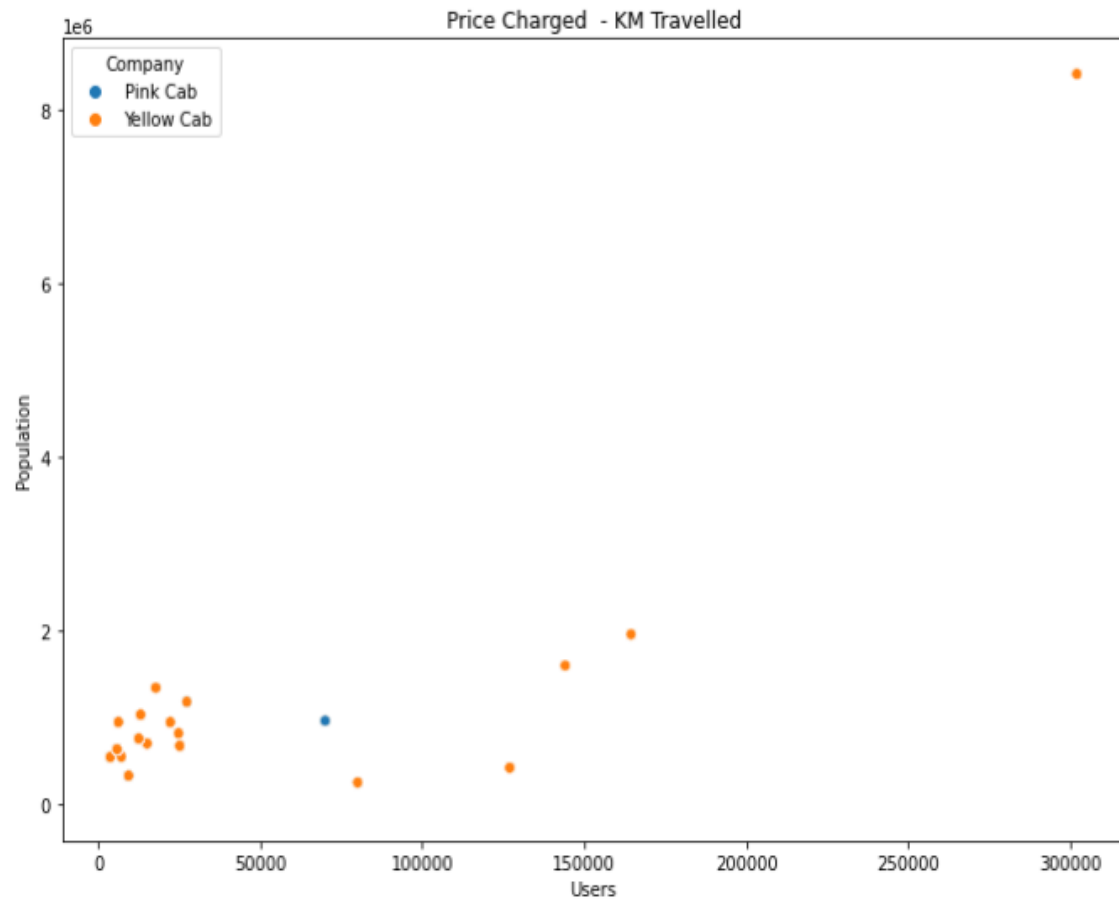


# Price Charged Opposite and Cost of Trip



# Users Opposite Price and Cost of Trip

### Users Boxplot Distributions per Population & Price Charged



# Recommendations:

## **Cap Firms Performance:**

From the above analysis, it seems that Yellow Cap has higher performance, as we can see all distributions of Yellow cap is much higher than Pink Cap.

## **Number of Transactions:**

The Yellow cap has %76.4 and Pink Cap has only %23.6 transactions as whole and throughout the years (2016 - 2017 - 2018), the Yellow cap is approximately five times than Pink Cap for both Customer Gender (Male and Female).

## **Cities Coverages:**

From all visualizations of transactions analysis, it is obvious that Yellow Cap Firm occupies very high percentage of coverage in both big and small cities and the most popular are (NEW YORK NY, BOSTON MA, CHICAGO IL and LOS ANGELES CA). Besides, the most users number are in the Yellow as per the analysis through the cities.

## **Increased Profit:**

According to "Yearly Pink & Yellow Cab

Firms Profit Distribution" it shows that there was variant increasing and decreasing in both cap firms through the three years(2016 , 2017 , 2018) and despite we can see decreasing in the profit of Yellow Cap Firm in 2018 but it still much higher than Pink Cap Firm.

**As a conclusion we can say the Yellow Cap Firm is much bigger in the market share so it is highly recommended. we can say the Yellow Cap Firm is highly recommended.**

# Shaimaa Al-khawlani

# Thank You



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