Data Glacier

Your Deep Learning Partner

G2M Case Study

Virtual Internship

21-Jul-2023

Data Exploration

- 14 Features(including 9 derived features)
- Timeframe of the data: 2016-01-31 to 2018-12-31
- Total data points :355,032

Cab_Data.csv   Customer_ID.csv   Transaction_ID.csv   City.csv

Final cab data

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)
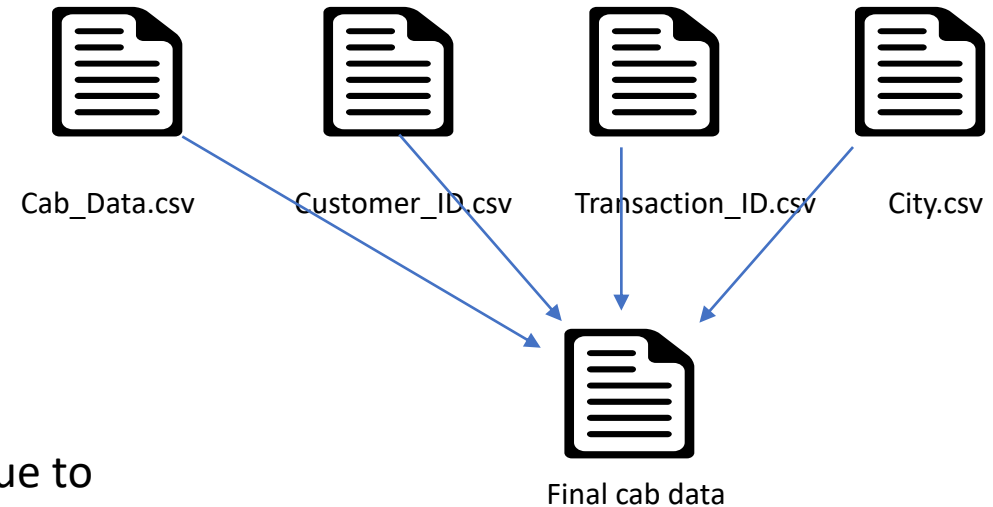
# Background –G2M(cab industry) case study

- 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 three parts:

- Data Understanding

- Finding the most profitable Cab company

- Recommendations for investment

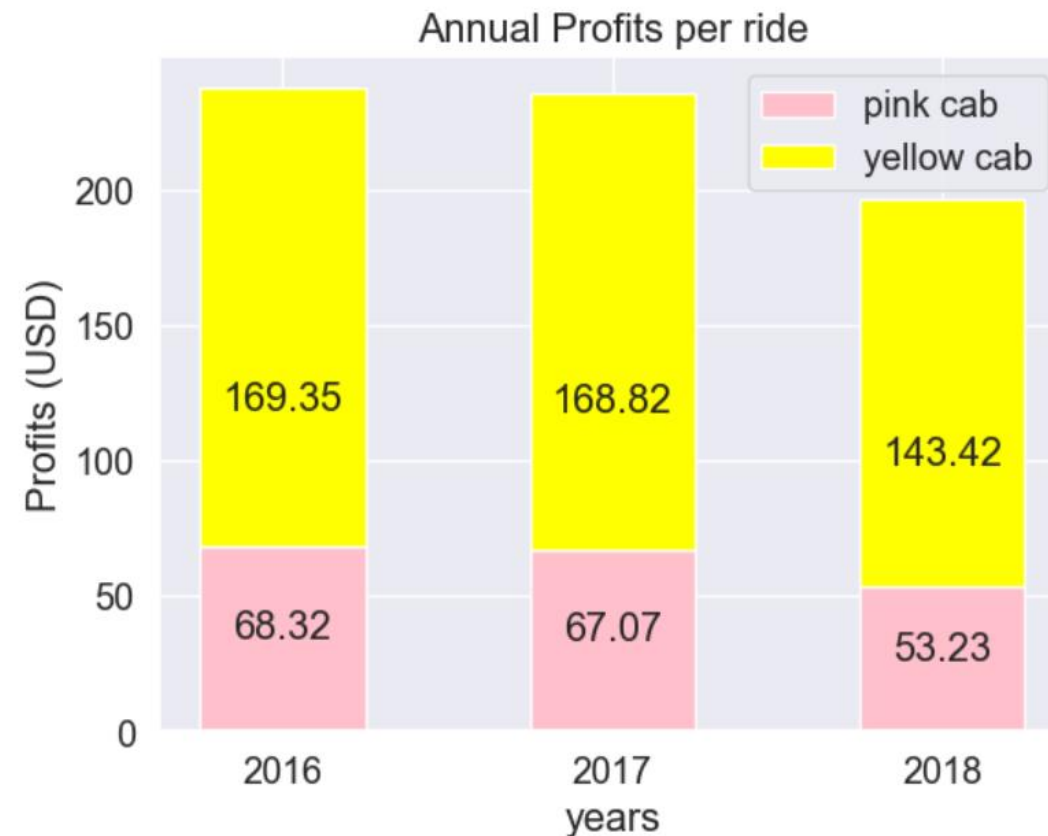# Area of investigation 1: Profit analysis

i. Profits against time
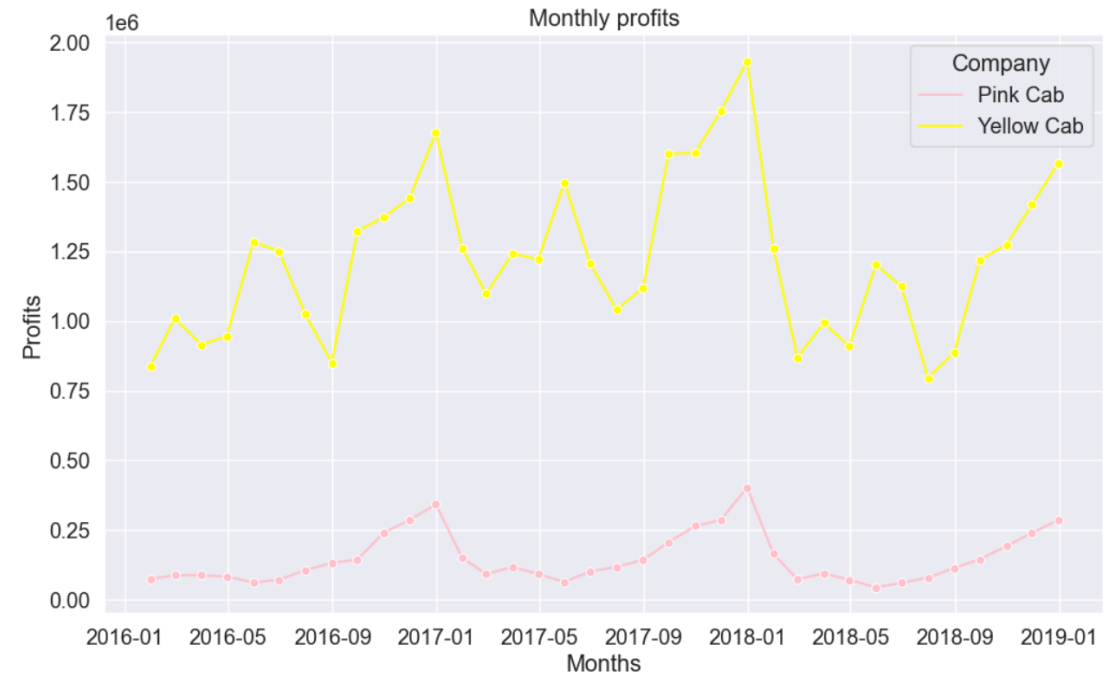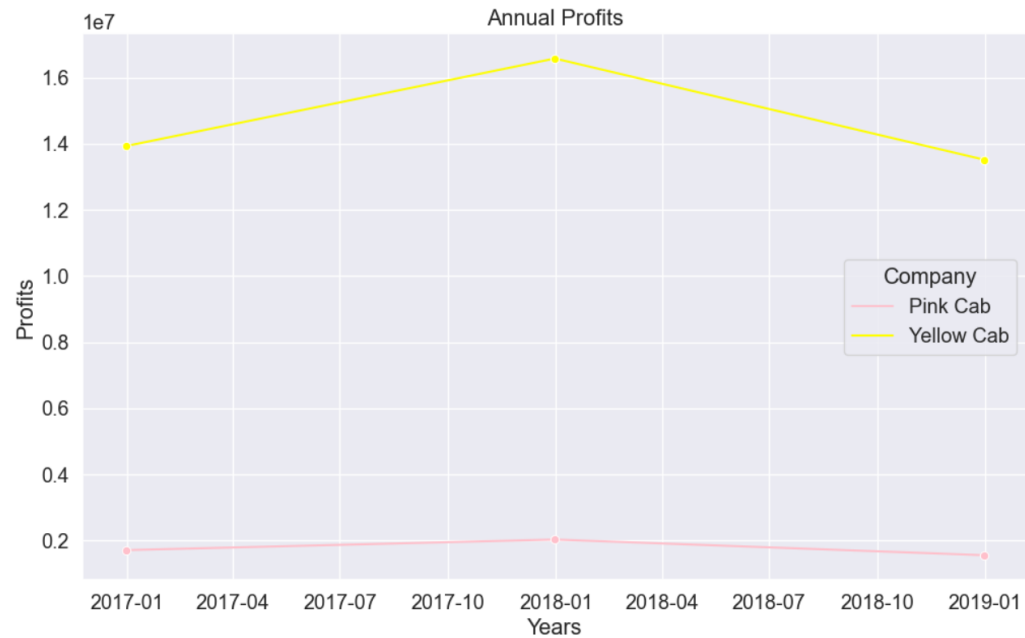
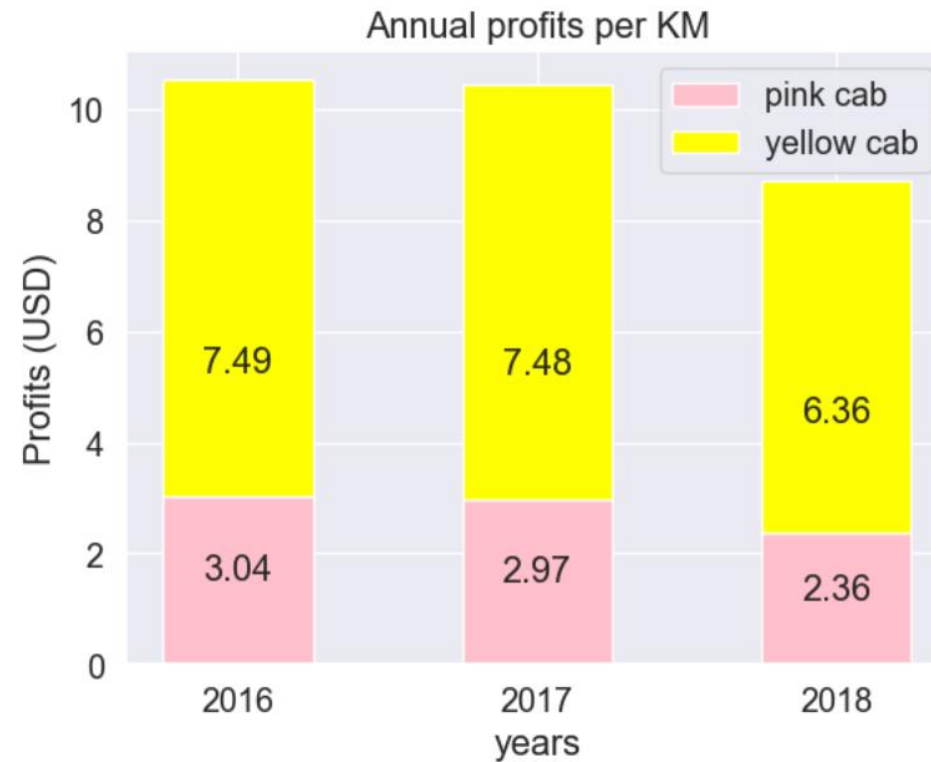# Area of investigation 1: Profit analysis

ii. Profits per ride

Company	Total_profits	Total_rides	Average_profits_per_rides
Pink Cab	5.307328e+06	84711	62.652174
Yellow Cab	4.402037e+07	274681	160.259986

Annual Profits per ride

iii. Profits per KM Travelled

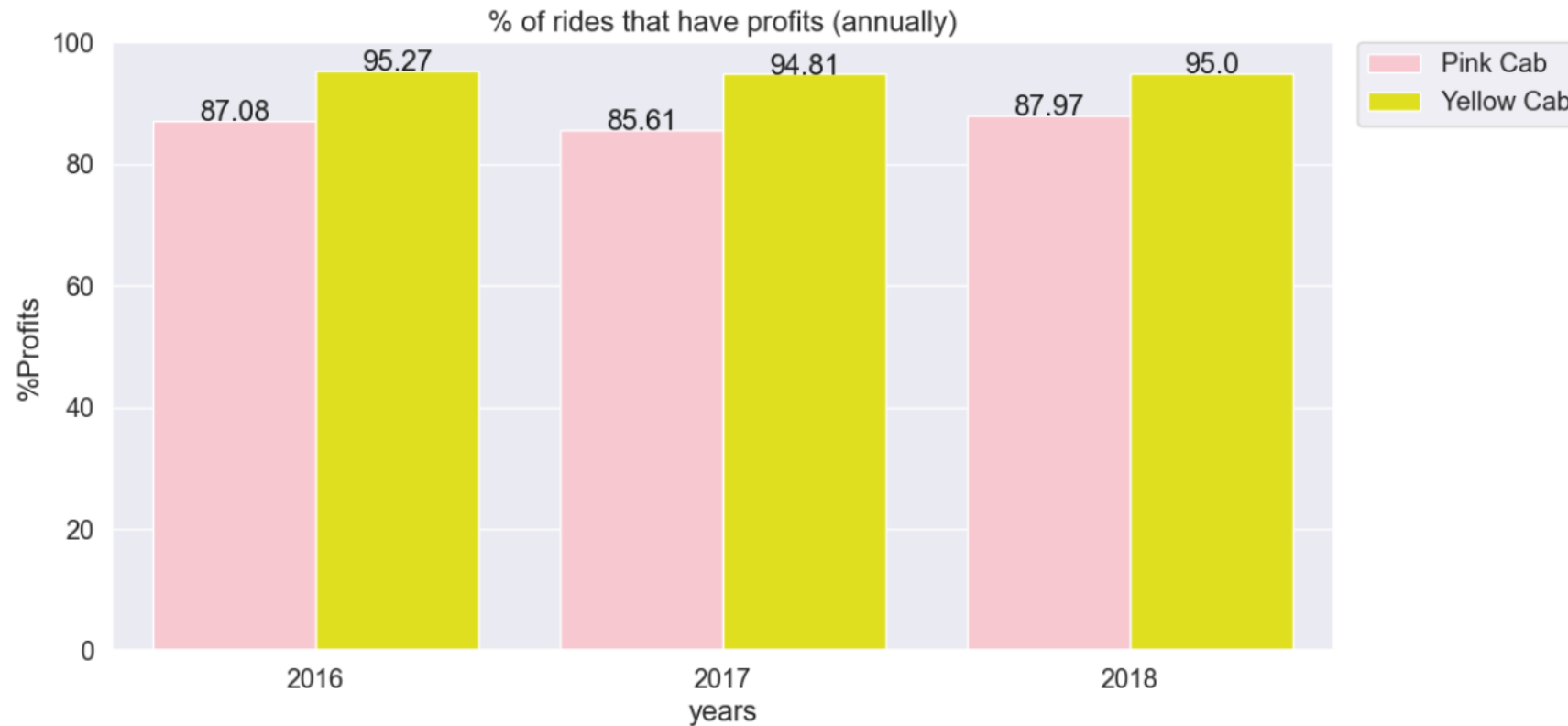| Company	KM_Travelled	Profits	Average_profit_per_km
Pink Cab	1911073.11	5.307328e+06	2.777146
Yellow Cab	6199417.47	4.402037e+07	7.100727

Annual profits per KM

Area of investigation 1: Profit analysis

iv. Profits per gender
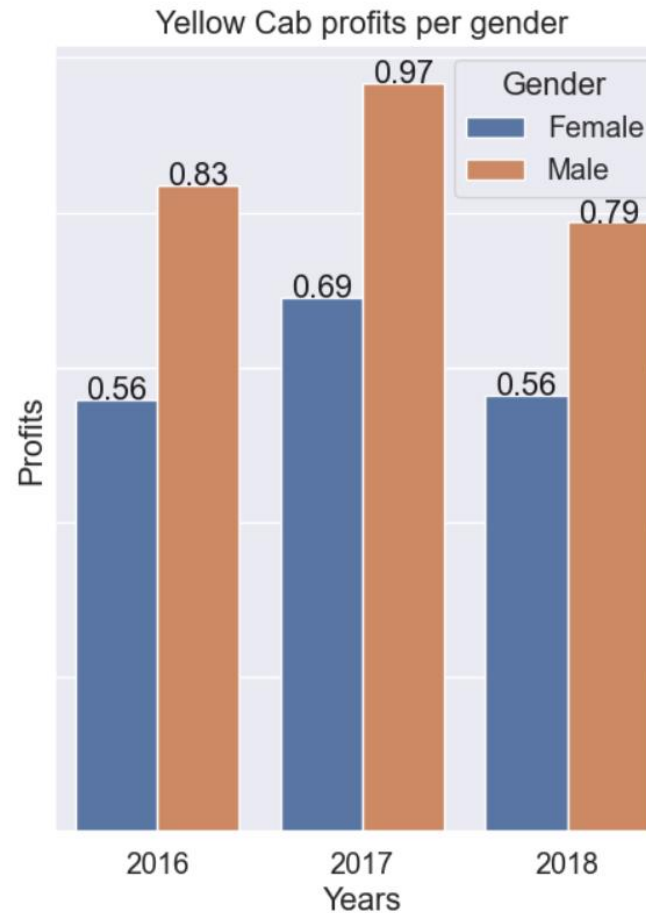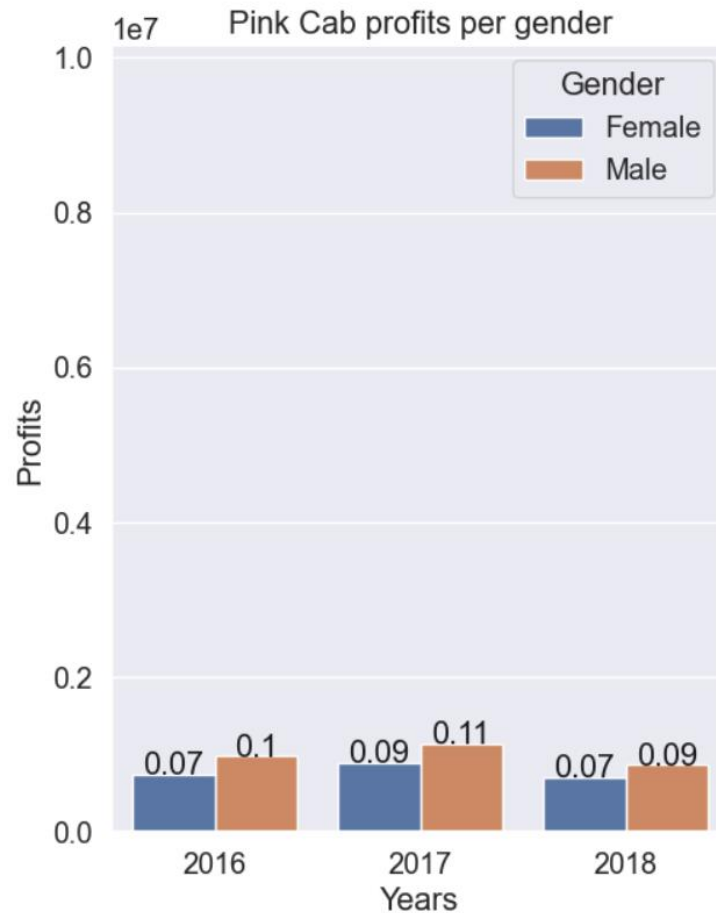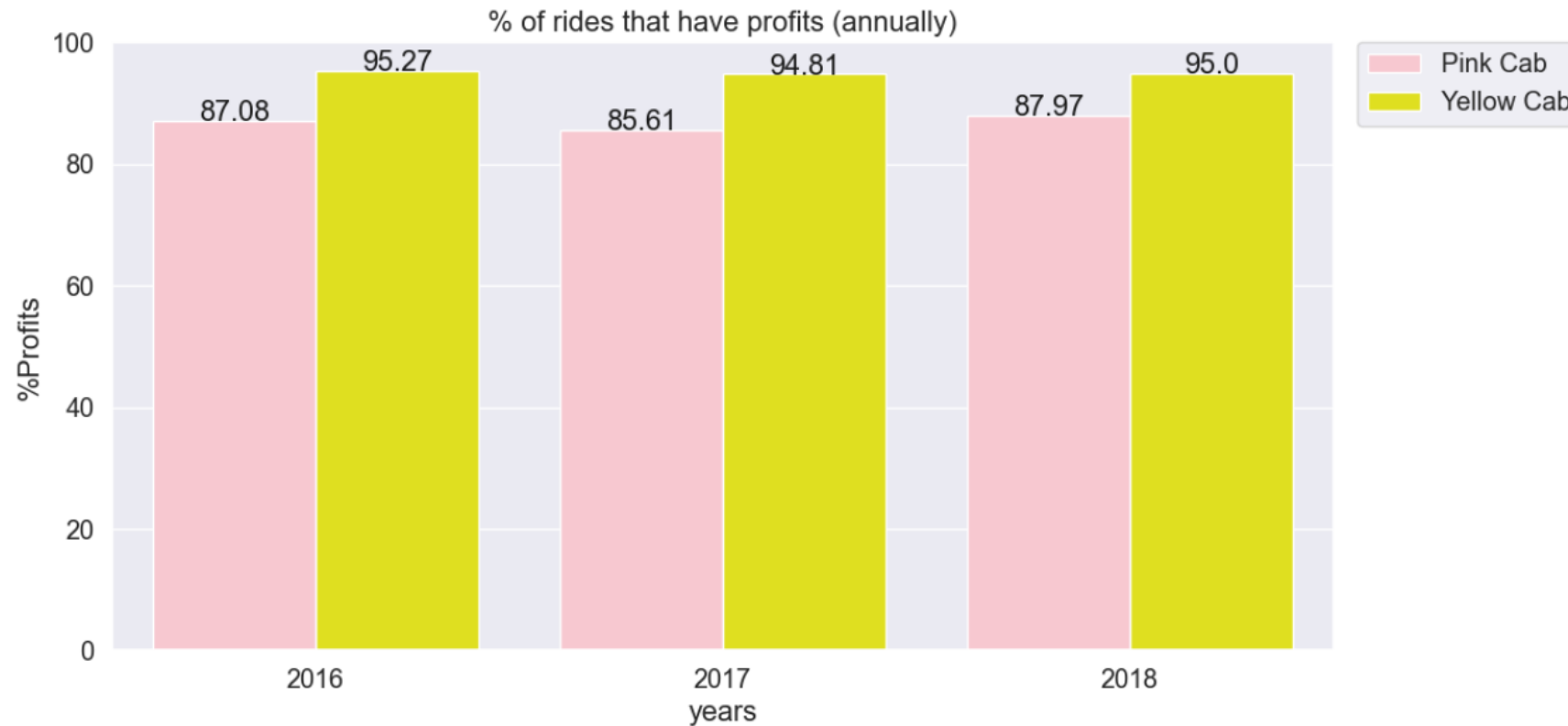
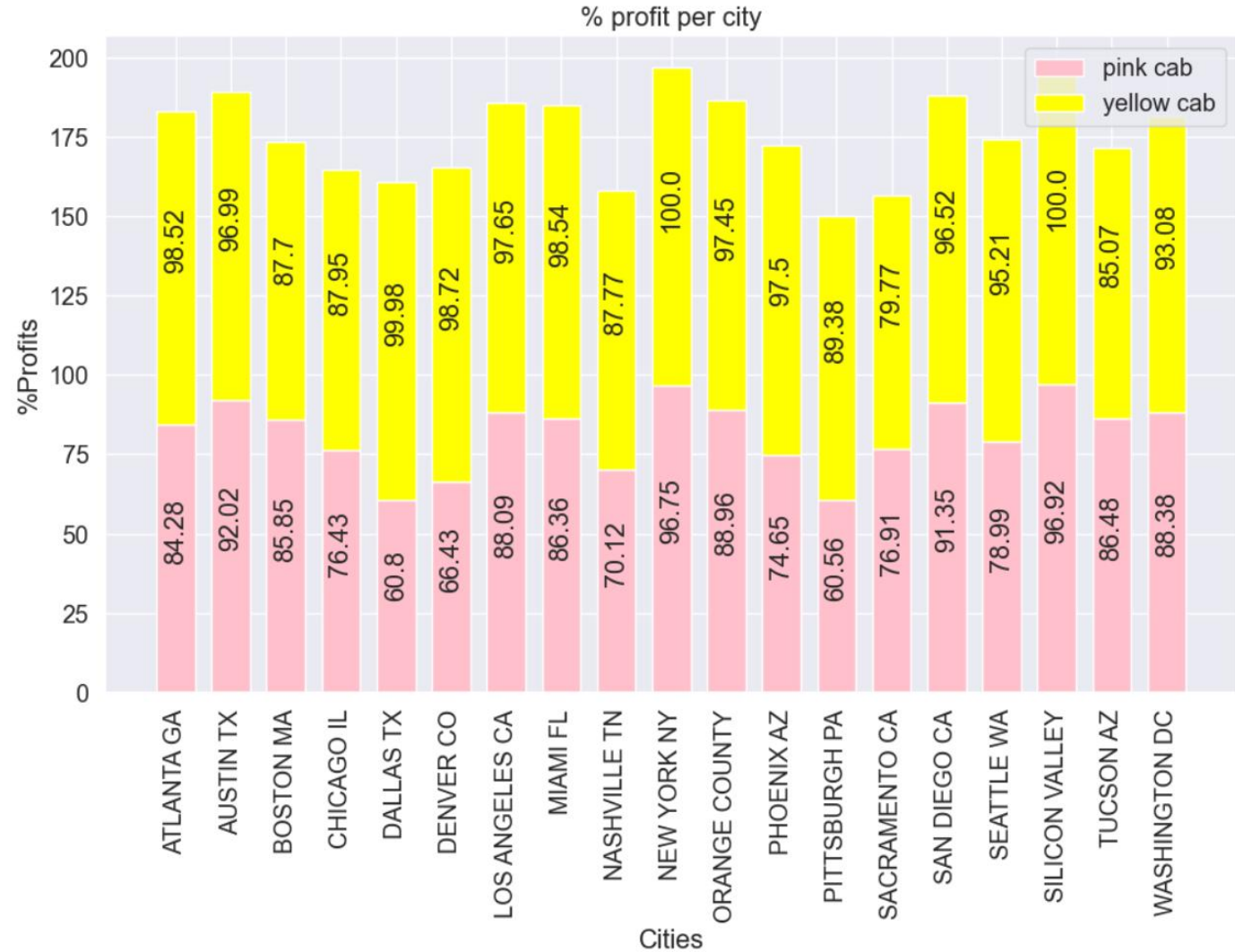# Area of investigation 2: %Profit analysis

i. % of rides that have profits

Area of investigation 2: %Profit analysis
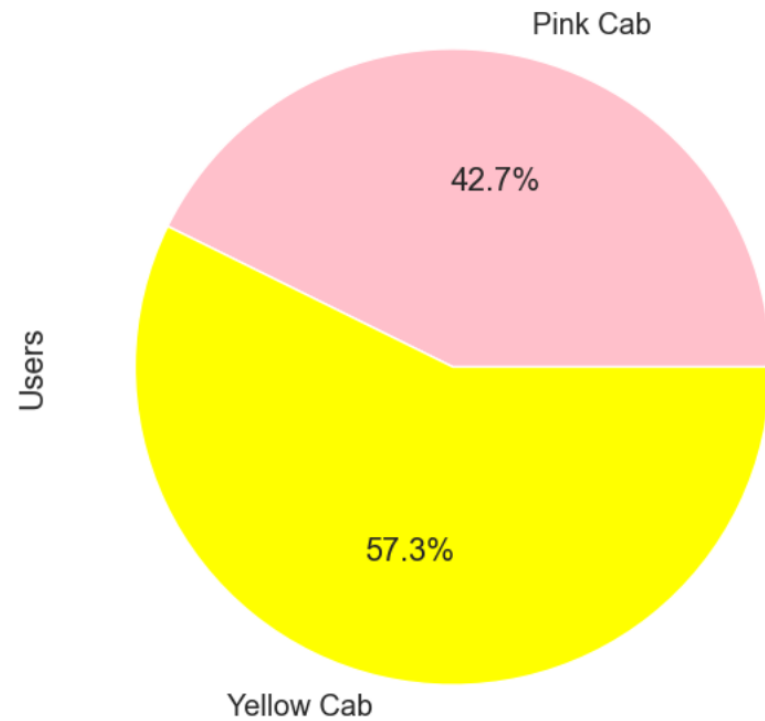
i. % of rides that have profits

Area of investigation 2: %Profit analysis

ii. % profits per city

i. % of user

Recommendations

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

- **Profit based:**
    - Yellow cab has higher yearly and monthly profit than Pink cab.
    - Yellow cab has higher profits per ride than Pink cab.
    - Yellow cab has higher profits per KM travelled than Pink cab
    - Yellow cab has higher profits per gender than Pink cab
- **% Profit based:**
    - Yellow cab has higher profit rate per ride than Pink cab
    - Yellow cab has higher profit rate per city than Pink cab (except in TUCSON AZ)
- **Demand based:**
    - Yellow cab has more users than Pink cab

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

Thank You

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