



Data Glacier

Your Deep Learning Partner

XYZ Investment Case Study

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April 2023

BACKGROUND

XYZ Company

XYZ is a private equity firm in US that is planning on investing in the cab industry due to remarkable growth in the Cab Industry in last few years and multiple key players in the market.

Objective

Provide actionable insights to help XYZ firm in identifying the right company for making investment.

XYZ Co.

Data Questions

I. Insights

1. Which company has the most rides all-time (from 2016-2018)?

A. Demographics

1. What are the different cities?
2. How many trips by cab company
3. What is the income range of the customers?
4. Gender composition by cab company.
5. City composition.

B. Profit Analysis

1. Profit Table Insights
2. Average profit per km
3. Profit by year
4. Profit contribution by income class.
5. Profit contribution by gender.

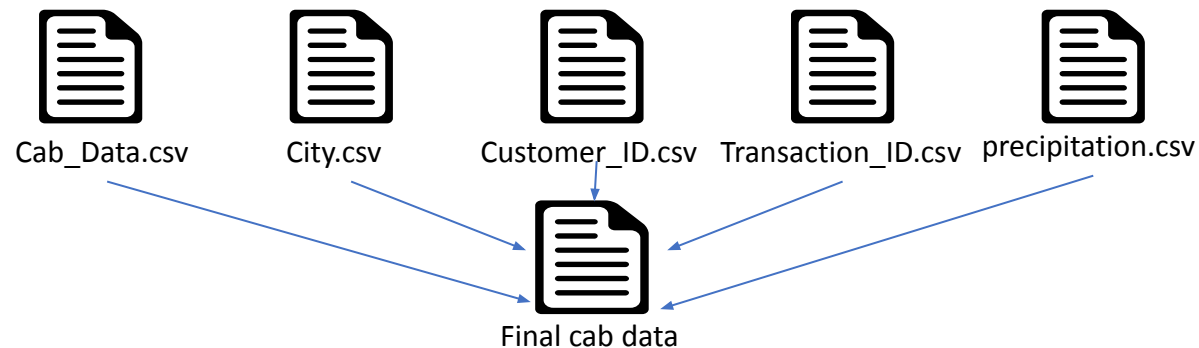
C. Precipitation

1. Which cab service is called more often when it rains?

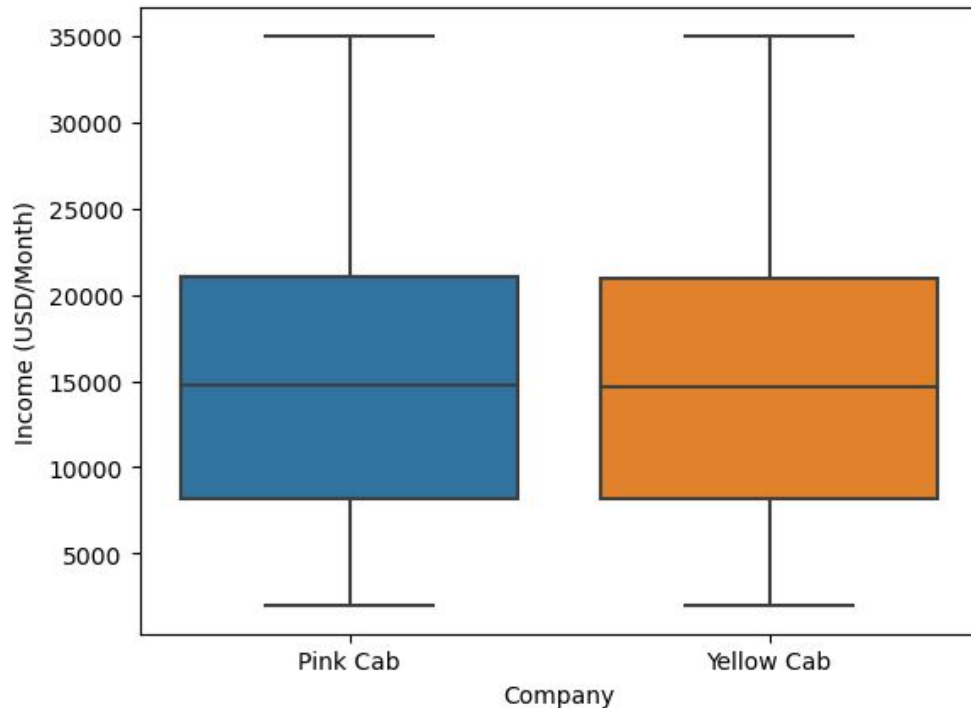
Data Information

Data is taken from 01/01/2016 to 12/31/2018.

Dataset	Details
Cab_Data.csv	this file includes details of transaction for 2 cab companies
City.csv	this file contains list of US cities, their population and number of cab users
Customer_ID.csv	this is a mapping table that contains a unique identifier which links the customer's demographic details
Transaction_ID.csv	this is a mapping table that contains transaction to customer mapping and payment mode
precipitation.csv	this is the rain depth in inches from 2016 - 2018



DEMOGRAPHICS

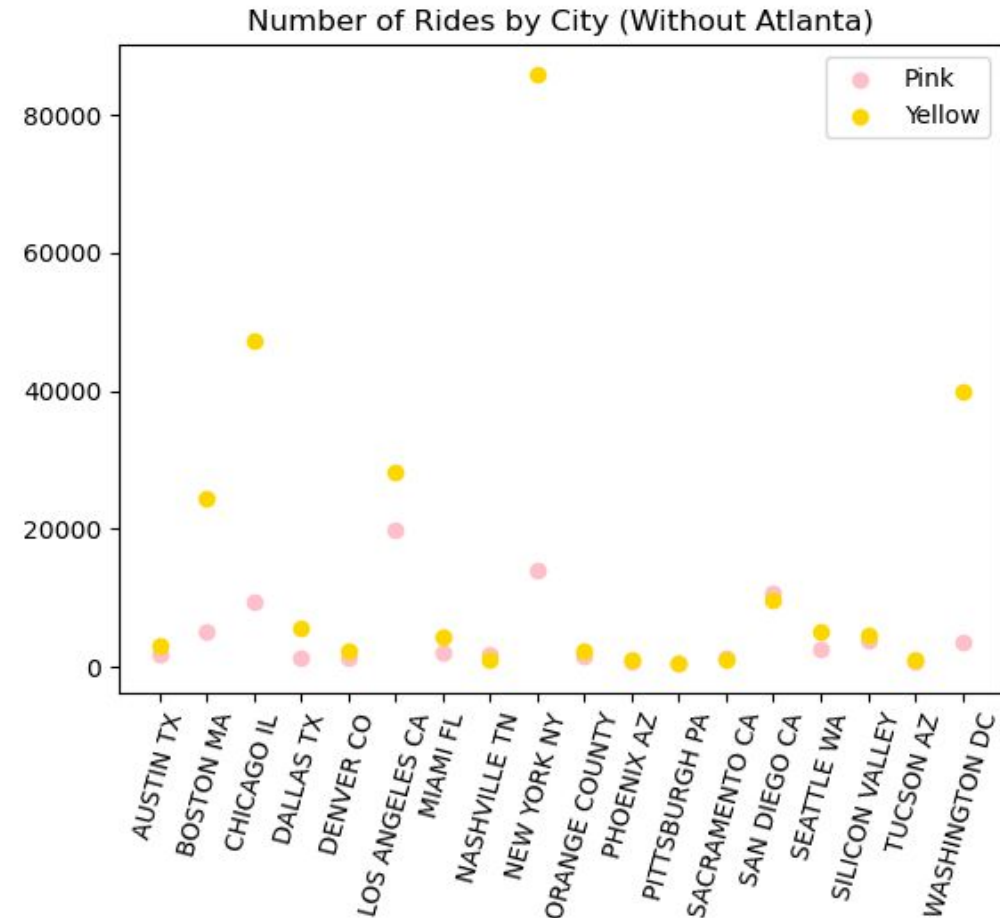
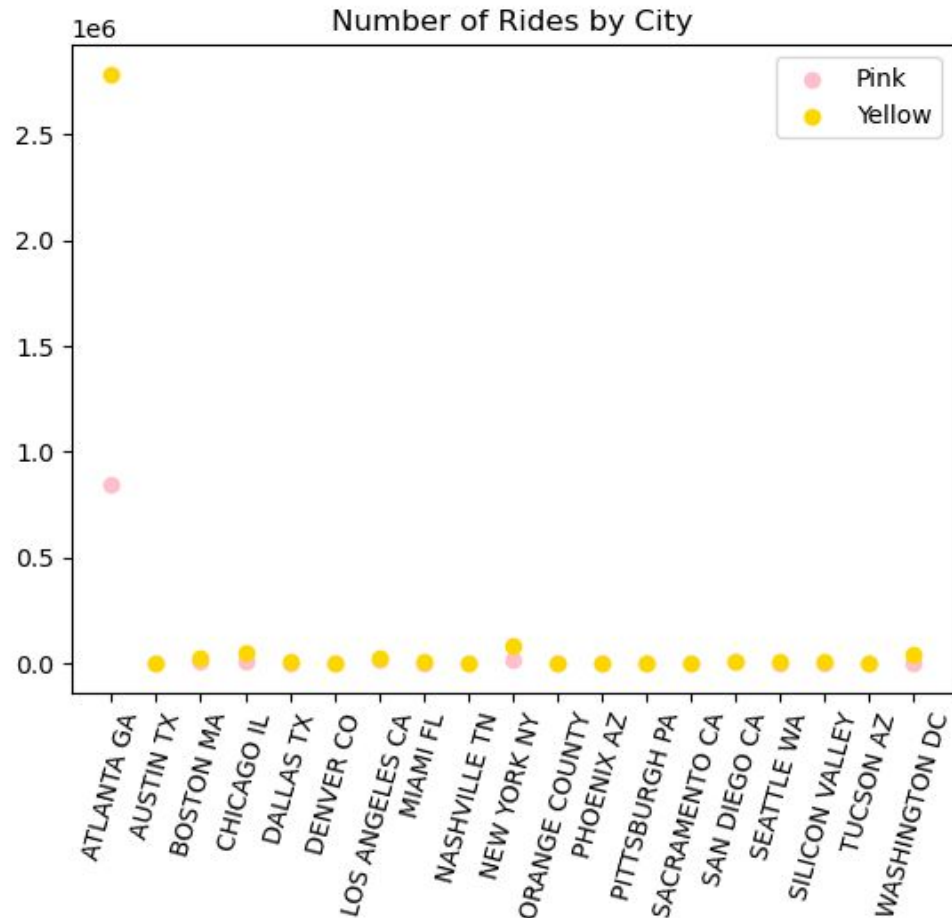


- Customers of both taxi services have the **similar stats on income**.
- There is **no difference** between both sets of customers.

Company	Gender	Number of Customers
Pink Cab	Female	459365
Pink Cab	Male	469413
Yellow Cab	Female	1477958
Yellow Cab	Male	1575695

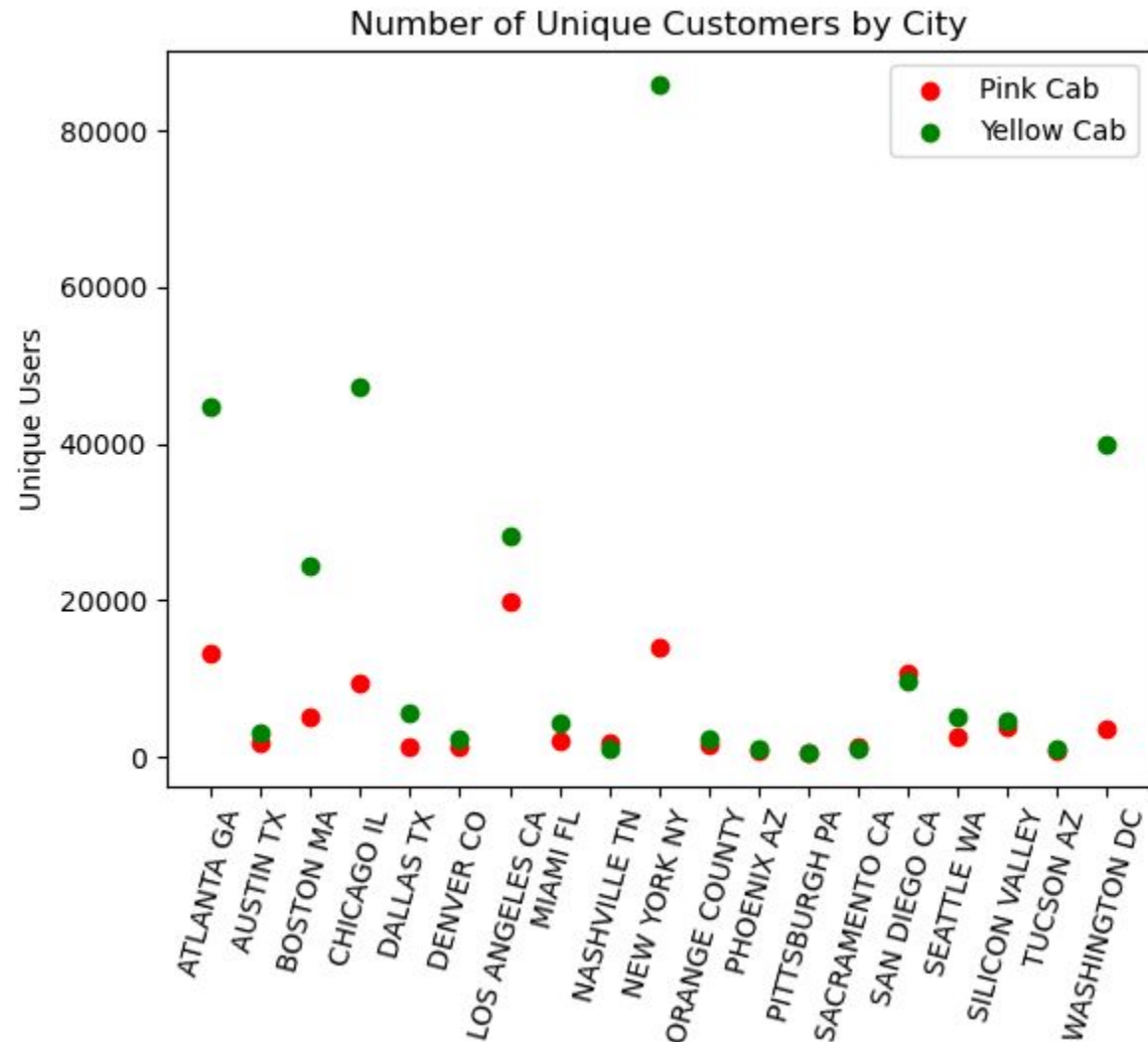
- **Yellow Cab has more customers** than the Pink Cab Company (3x more)
- Yet, **both companies have more male customers** than female customers.

City Composition



- Yellow Cab has more rides in 19 cities (larger difference in Chicago, New York, and Washington DC)
- Atlanta composes most the rides per city.

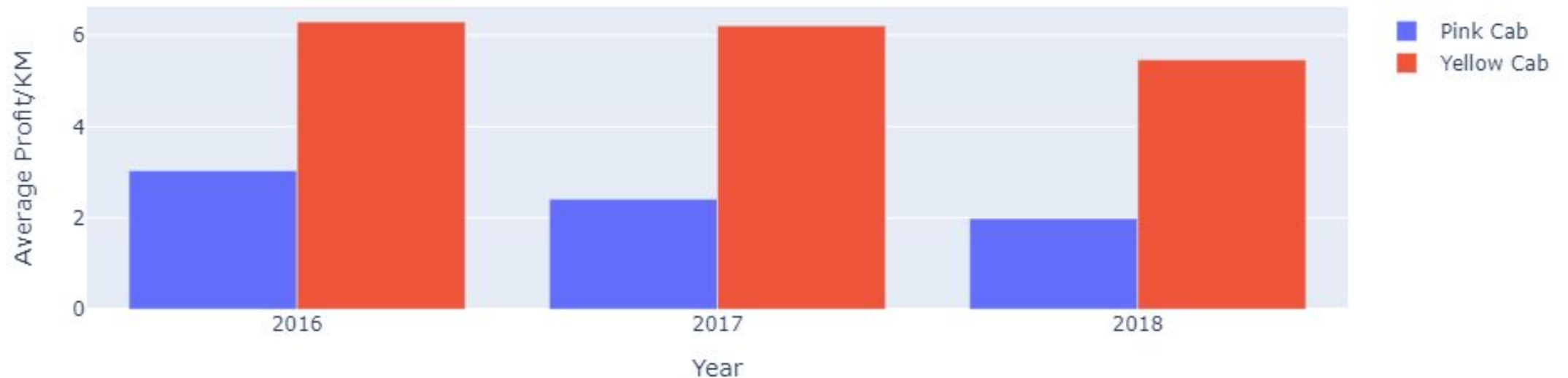
City Composition



- Yellow Cab Company has more unique customers at every city except for San Diego
- Yellow Cab has a significantly more customer reach in Atlanta, Chicago, New York, and Washington DC.

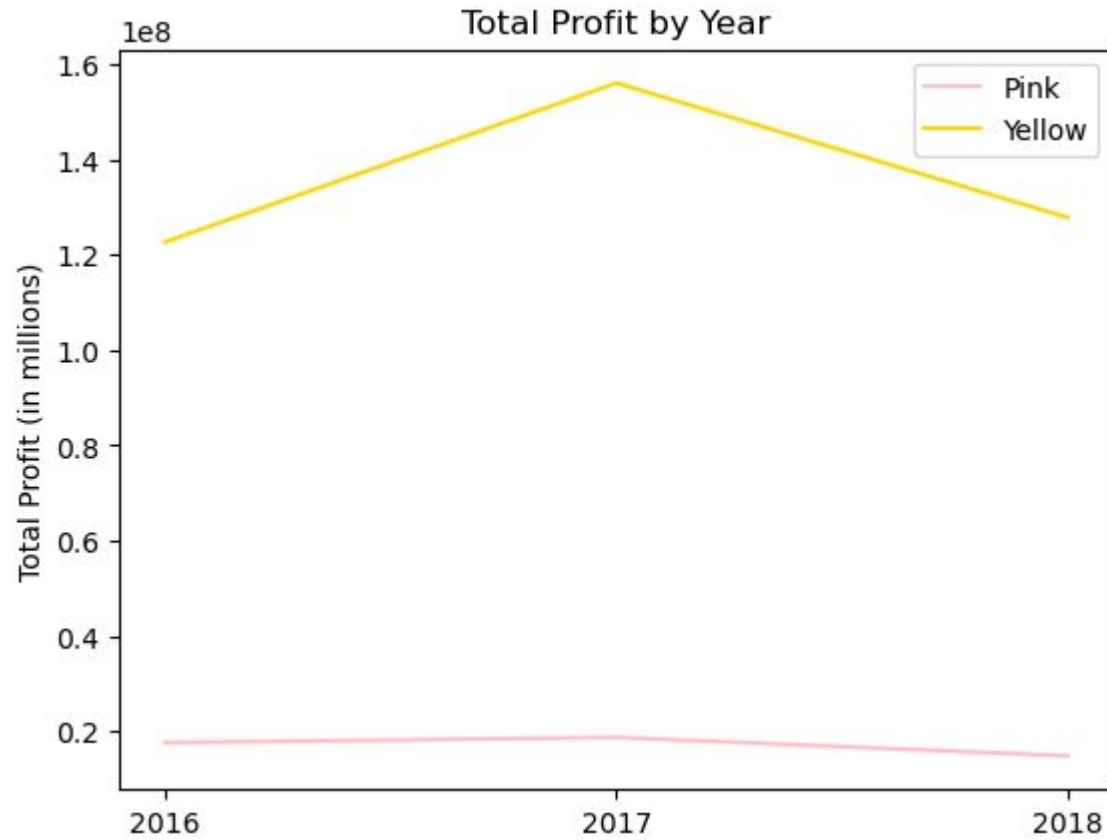
PROFIT ANALYSIS

Company	Profit	Number of Rides	Average Profit Per Ride
Pink Cab	51114072.86	928778	55.03
Yellow Cab	406615377.57	3053653	133.16



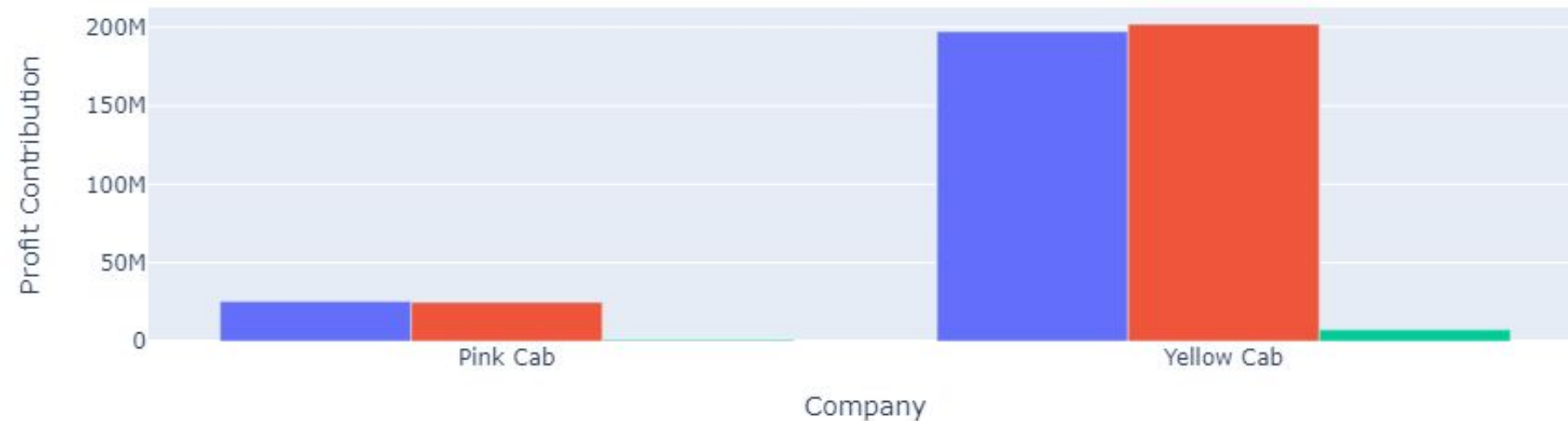
- Yellow Cab has more gained more profit, made more rides, and therefore gains a greater profit per ride compared to the Pink Cab Company
- Yellow Cab had a higher profit per kilometer in 2016, 2017, and 2018.
- Both cab companies have seen a decline in profit from 2016 to 2018.

Profit Analysis



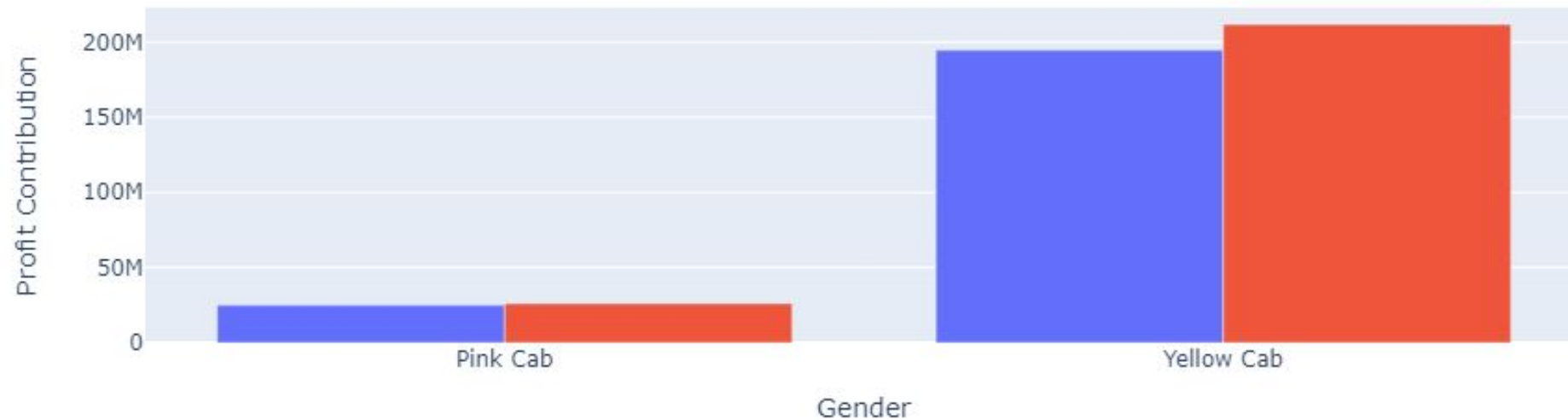
- Yellow Cab has greater total profit per year by a large margin.
- Both taxi cabs have increased profit from 2016 to 2017 but declined from 2017 to 2018.

Profit Contribution



Class 1
Class 2
Class 3

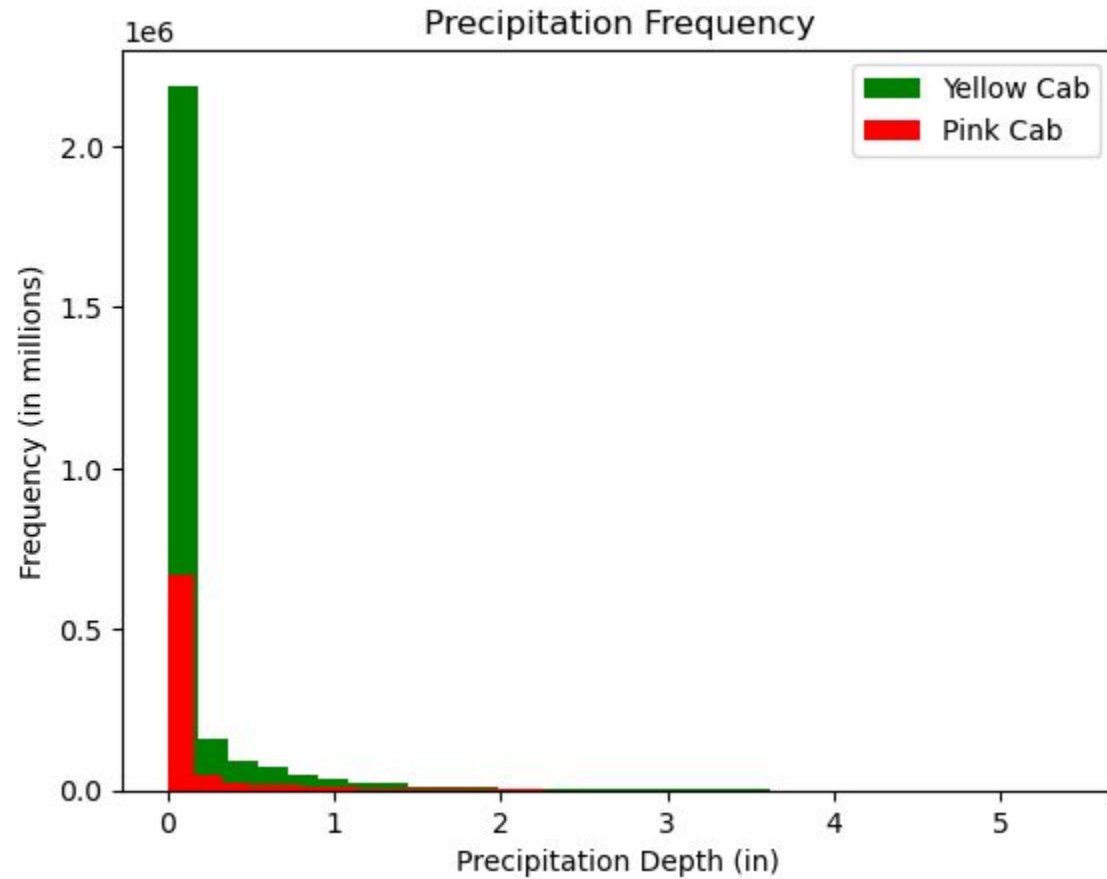
Class	USD/Month
Class 1	> 15000
Class 2	2500 < x < 15000
Class 3	< 2500



Female
Male

- High income (Class 1 and 2) customers contribute more to the cab's profit
- Male customers contribute to the cab's profit more than female customers

Precipitation



- If it ever is raining, more customers are going to call the Yellow Cab for a ride instead of the Pink Cab

RECOMMENDATION

Customer Income: Both companies similar maximum, minimum, and average customer income.

Trip Quantities: Yellow cab completed more trips and has more distinct customers than the Pink cab. There is a greater difference in cities like New York City, Atlanta, Washington DC, and Chicago.

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 (Class 1, Class 2 and Class 3)

Precipitation: Customers are most likely going to use Yellow cab services than Pink cab on a rainy day. Even so, they choose Yellow cab on non-rainy days.

Thank You



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