

# Exploratory Data Analysis Cab Industry Analysis

"Yellow Cab vs. Pink Cab"

## Agenda

Introduction **Transaction Volume Profit Analysis User Trends Over Time Payment Methods Pricing Distribution** Average User Income City Presence **User-to-Population Ratio** Profit by City Recommendations



#### Introduction

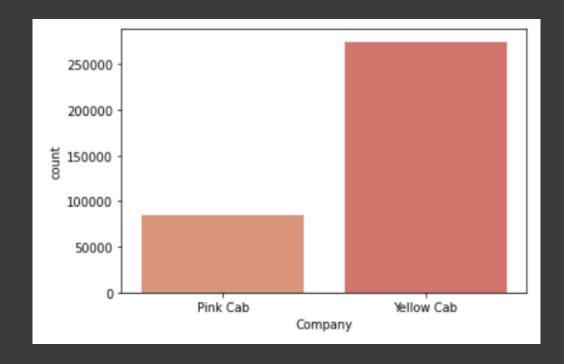
- Client: XYZ is a private firm in US. Due to remarkable growth in the Cab Industry in last few years and multiple key players in the market, it is planning for an investment in Cab industry and as per their Go-to-Market(G2M) strategy they want to understand the market before taking final decision.
- Objective: Our objective is to perform Exploratory data analysis on given datasets that contain information on 2 cab companies and provide valuable insights to client and help in decision making.
- Datasets: We are using 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 this file includes details of transaction for 2 cab companies
- 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
- City.csv this file contains list of US cities, their population and number of cab users.

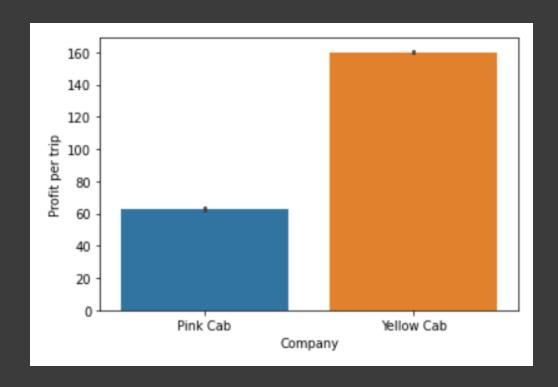


#### Transaction Volume



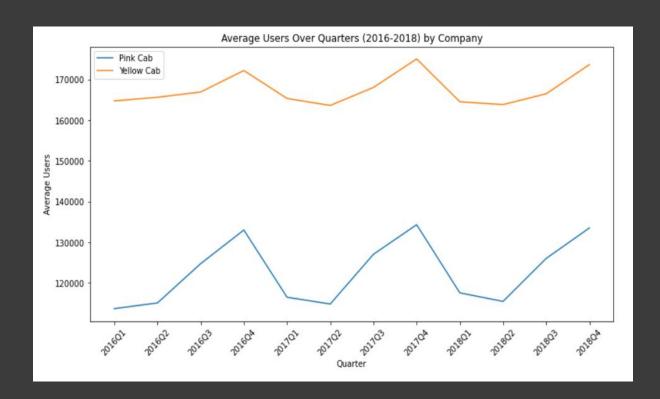
Yellow Cab consistently outperforms Pink Cab in terms of transaction volume, indicating a stronger market presence.

#### Profit Analysis



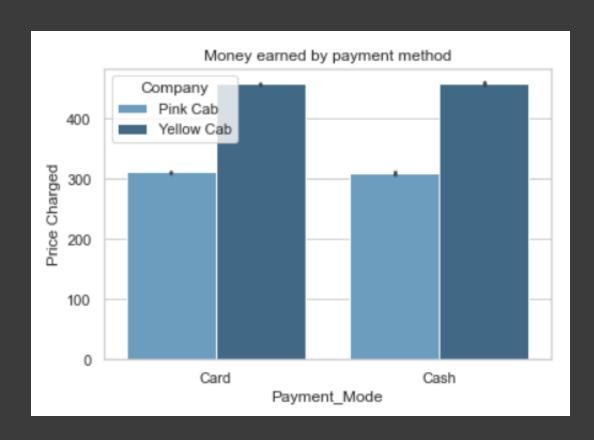
Huge difference in Average profit per trip is observed between both companies. Yellow Cab boasts a substantial advantage with an average profit per trip of \$160 compared to Pink Cab's \$60, emphasizing its superior profitability.

#### User Trends Over Time



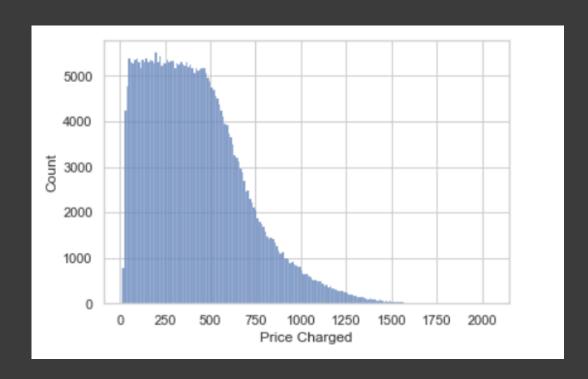
- 1) Average users over the years is highest for Yellow cab
- 2) Seasonal pattern is observed for both companies
- \* Average users count increase from Q2 to Q4 and peak is observed at Q4
- \* Average users count decrease from Q4 to Q1 and stay stable from Q1 to Q2

#### Payment Methods



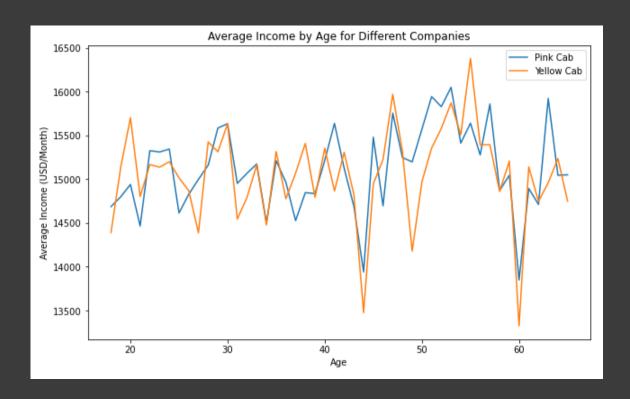
Money earned by Yellow cab is highest compared to money early by Pink cab. However, Money earned through card and cash payments is nearly equivalent for both companies, highlighting customer payment preferences.

## Pricing Distribution



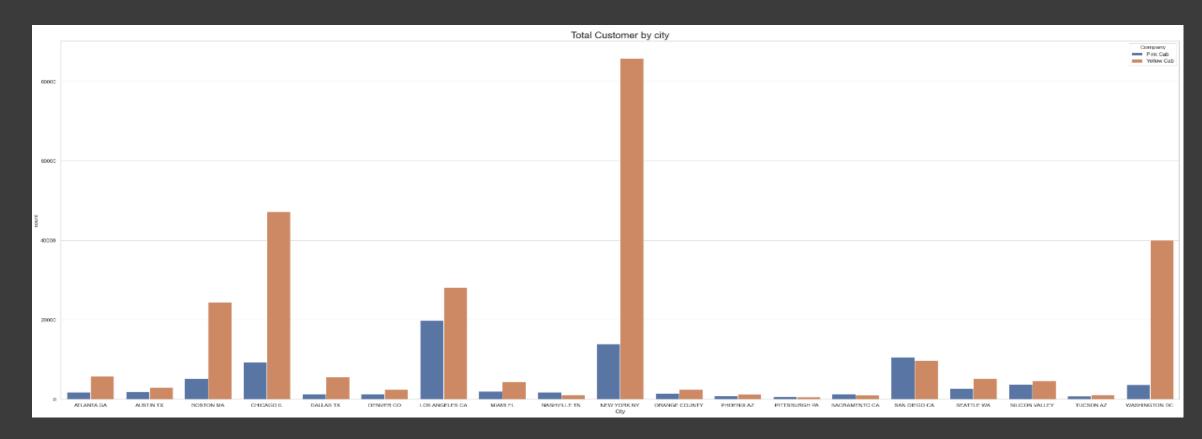
The right-skewed price charged distribution suggests that most trips are priced lower, aligning with market demand.

### **Average User Income**



Both companies cater to users with similar average incomes, implying similar target demographics.

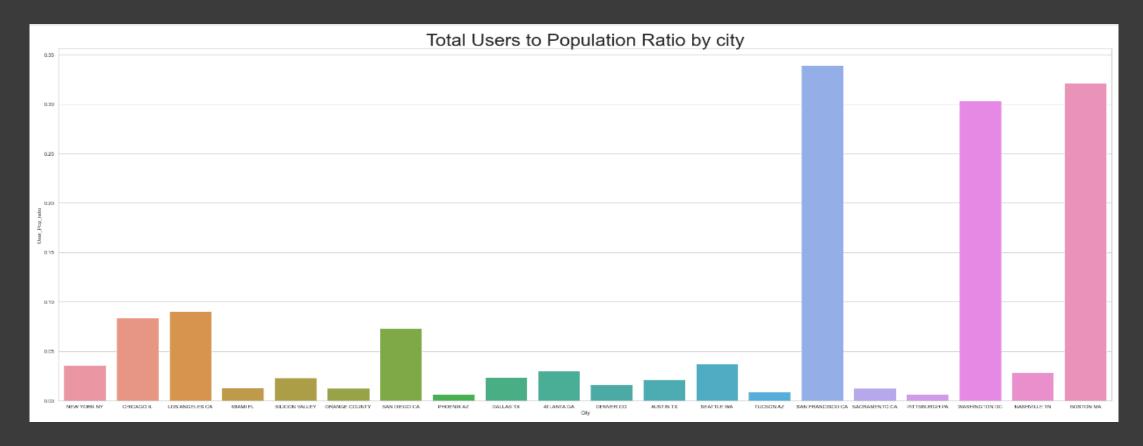
#### City Presence



Yellow Cab operates in a more extensive network, serving 16 cities, whereas Pink Cab dominates in three cities.



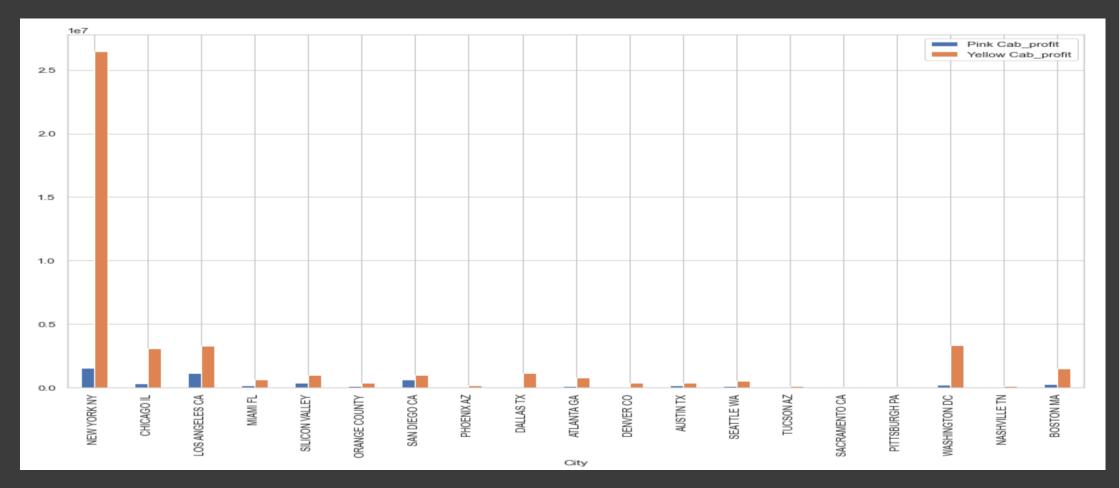
## **User-to-Population Ratio**



San Francisco CA, Washington Dc, Boston MA has highest user to population ratio. High user-to-population ratios in cities present strategic growth opportunities.



## **Profit by City**



Yellow Cab consistently outperforms Pink Cab in terms of profitability across all cities.



#### Recommendation

- In conclusion, our analysis has provided a comprehensive view of the cab industry, with a particular focus on Yellow Cab and Pink Cab. The data-driven insights reveal clear distinctions between the two companies in terms of transaction volume, profitability, city coverage, and user behavior. These insights serve as the foundation for strategic recommendations tailored to XYZ's investment decision.
- We recommend considering Yellow Cab as the preferred choice for investment due to its robust transaction volume and higher profitability. Furthermore, focusing efforts on cities with high user-to-population ratios, optimizing pricing strategies, and maintaining a balance between payment methods can drive long-term success in the cab industry.
- By leveraging these findings and recommendations, XYZ can make a well-informed and strategic investment decision that capitalizes on the growth and potential within the cab industry. We appreciate your attention and welcome any questions or further discussions on this matter.

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# Thank You

