

Exploratory Data Analysis G2M CAB INDUSTRY DATA ANALYSIS

21/5/2025

Agenda

Executive Summary

Problem Statement

Approach

EDA

EDA Summary

Recommendations



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.

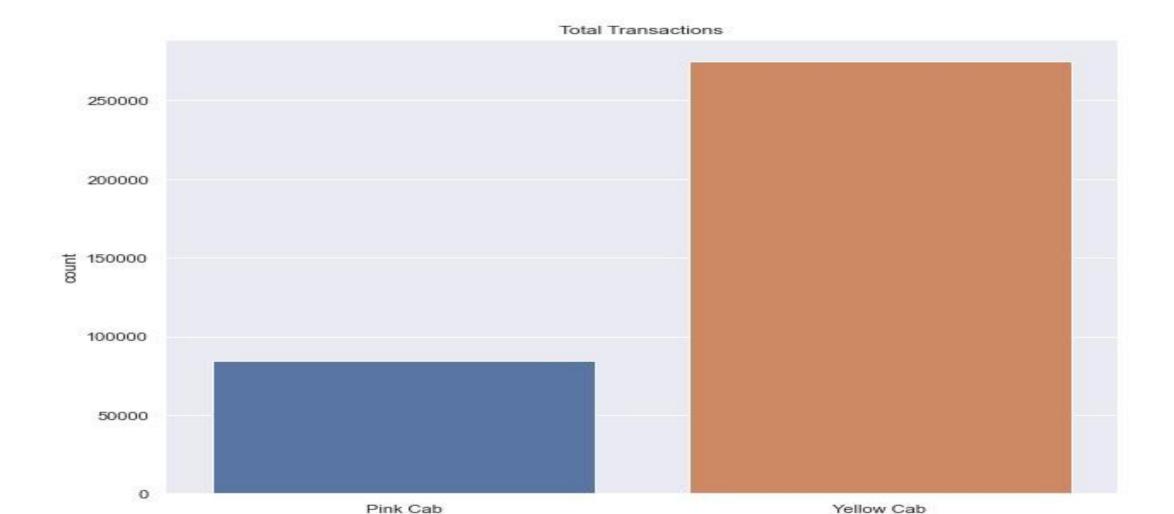
The analysis has been divided into four parts:

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

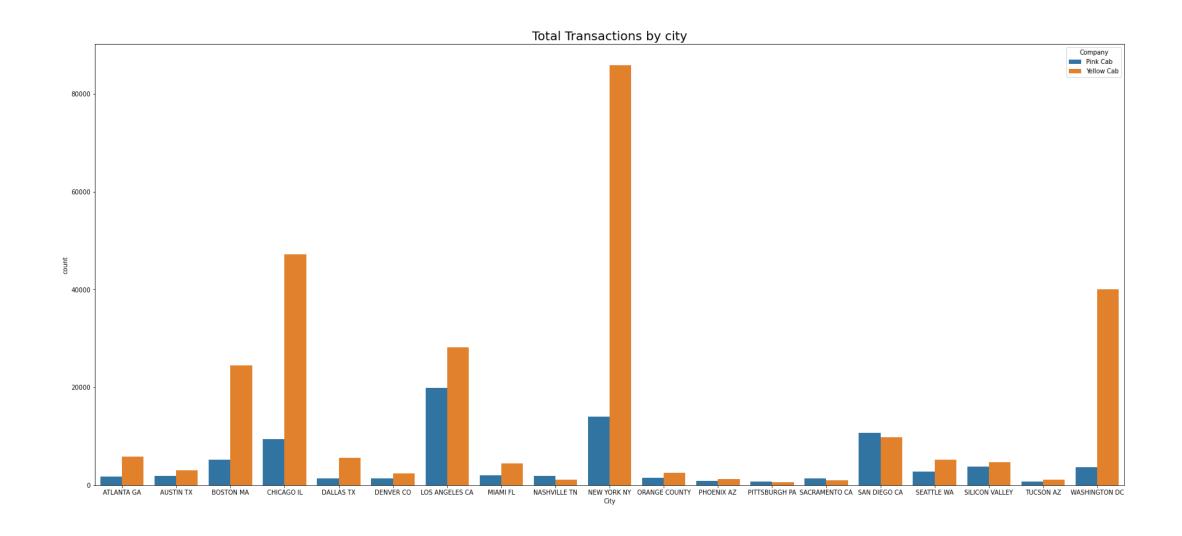
Data Exploration

- 24 Features(including 9 derived features)
 Timeframe of the data: 2016-01-31 to Cab_Data.csv Customer_ID.csv City.csv City.csv USholiday.csv
 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.

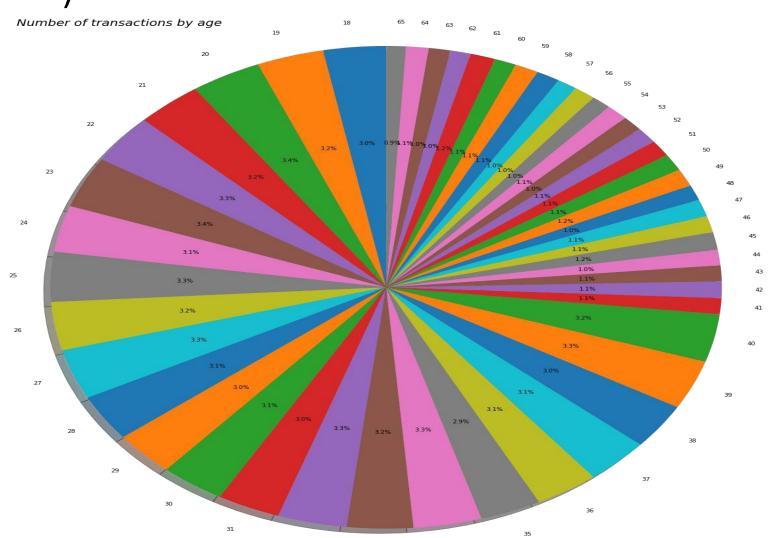
Users by Company Pink cab user<Yellow cab users



Number of Transactions

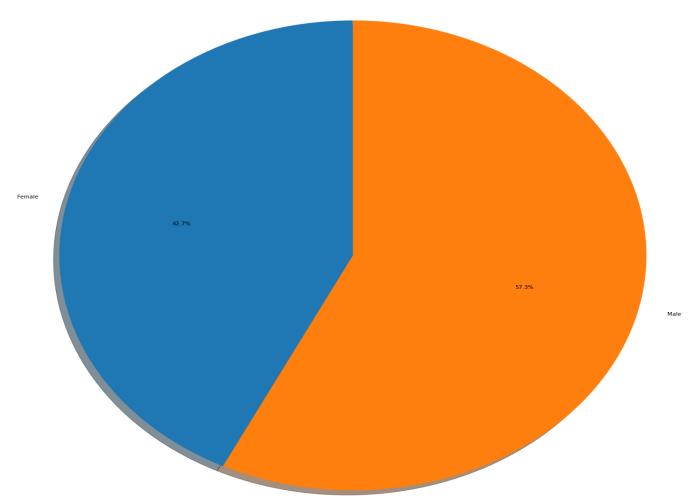


Number of Transactions by Age Rate of user by age (18-40)-Higher and above 40(lower)

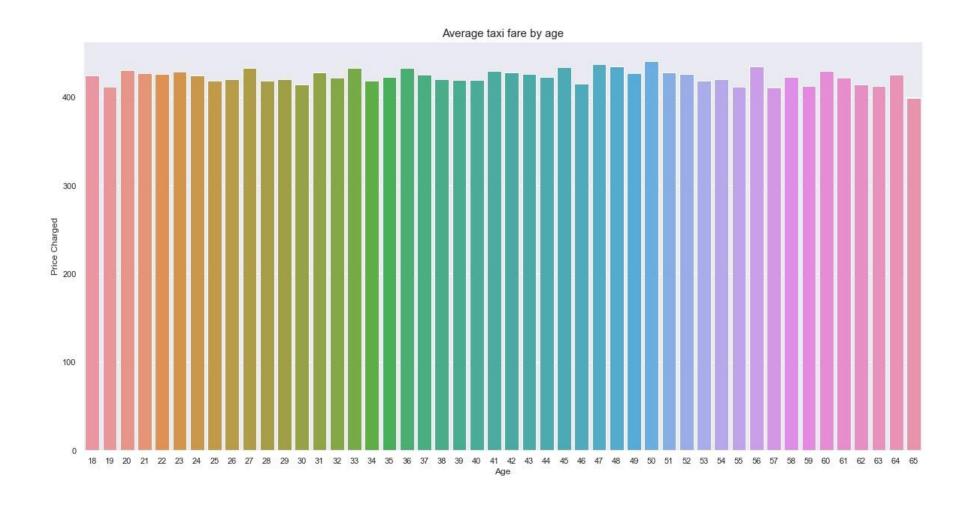


Transactions by gender Men>Women

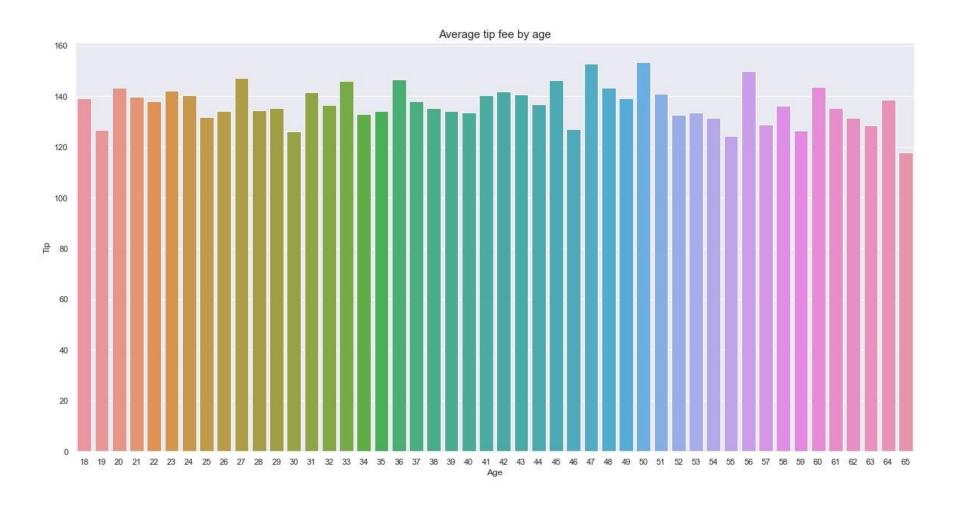




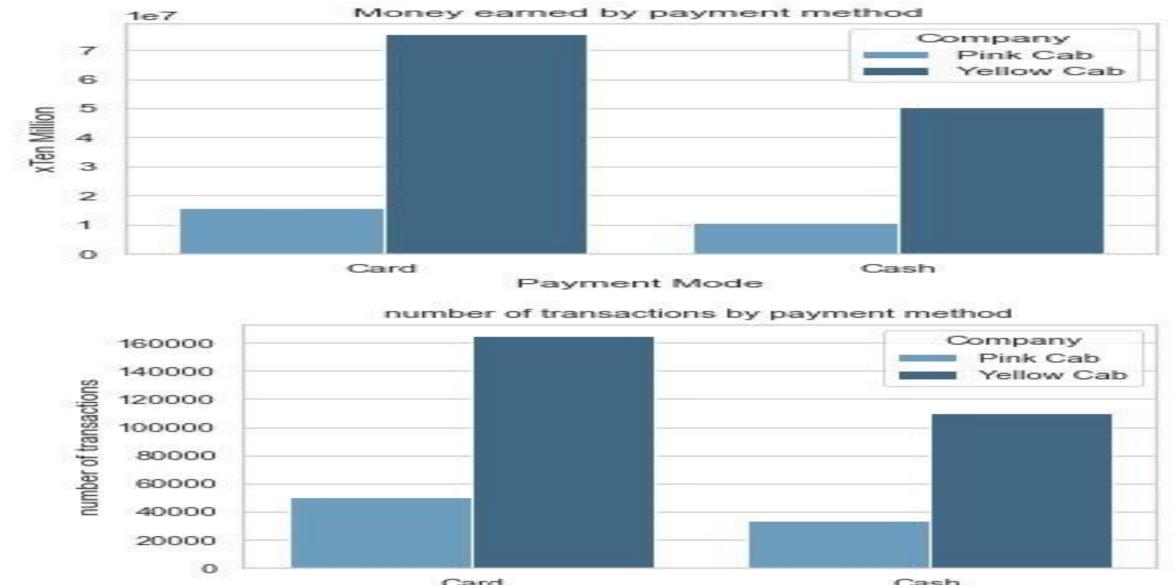
Average amount pay by age



Tip fee by age



Transactions by payment method



Recommendations

- Yellow cab has higher customer reach in 25 cities while Pink cab has higher customer reach in 4 cities. We have also observed that Yellow cab is doing good in covering other cab users as compared to Pink cab.
- Yellow Cab serves customers across all age groups, showing strong popularity among both younger riders and senior riders, with comparable usage observed in both segments.
- Yellow Cab's average profit per kilometer is nearly three times higher than that of Pink Cab, indicating significantly better cost efficiency and revenue generation.
- Based on the significantly higher profit per kilometer, we recommend investing in Yellow Cab, as it demonstrates stronger financial performance and better return potential compared to Pink Cab.

Thank You

