



Data Glacier

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G2M Case Study

A Comparative Analysis of Pink Cab and Yellow Cab

18th April 2025

Introduction

- The cab/taxi market serves as a vital means of mobility. In regulatory challenges and amid various competition, it remains an essential mode of travel/transport (**statista 2024**)
- This report compares the customer behaviours, financial performance, operational patterns and usage trends of two cab companies, Pink Cab and Yellow Cab.
- The actionable insights derived from the analysis aim to guide decision-making, marketing strategies, investment plans and opportunities.

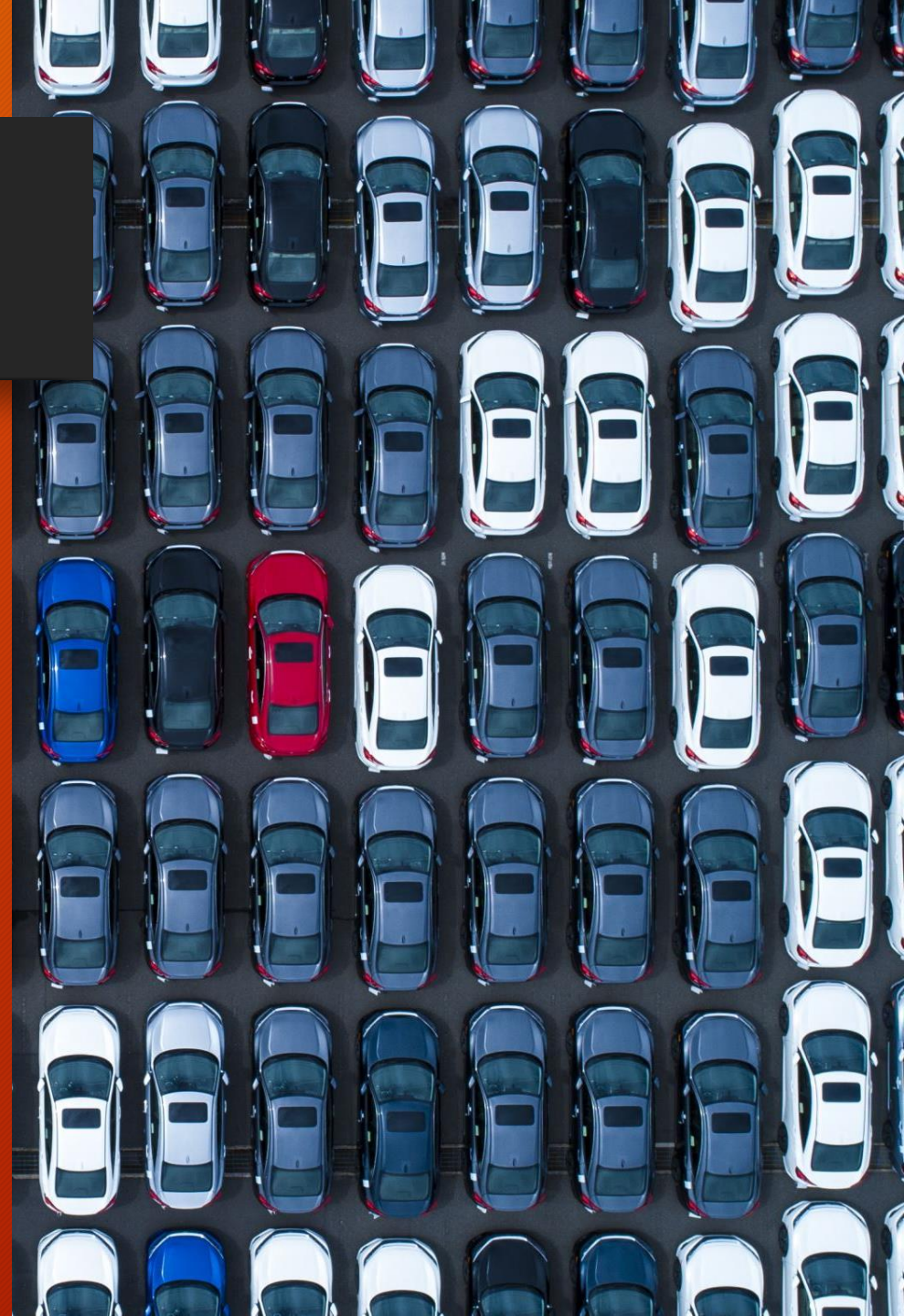


Problem Statement

In the transportation industry, cab companies research and obtain new ways to enhance services, increase customer satisfaction and retention while maintaining a high quality of service, and maximise profits.

Objective:

- To compare and analyse the operations of two cab companies, Pink Cab and Yellow Cab, exploring their financial performance, customer demographics, usage and trip patterns to drive growth opportunities and data-backed recommendations



Dataset Description

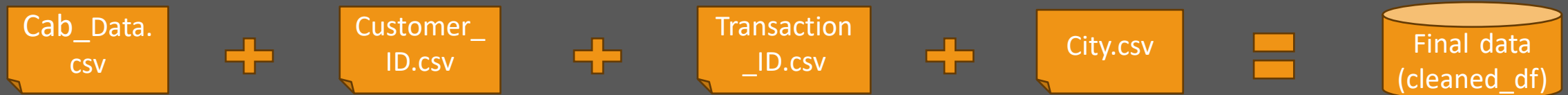
The dataset consists of information obtained from two cab companies, Pink Cab and Yellow Cab, which are derived from four (4) individual datasets as follows;

Cab_Data.csv – this file includes details of transactions 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 a list of US cities, their population and the number of cab users.



Data Sources: Two cab companies' datasets merged into one.

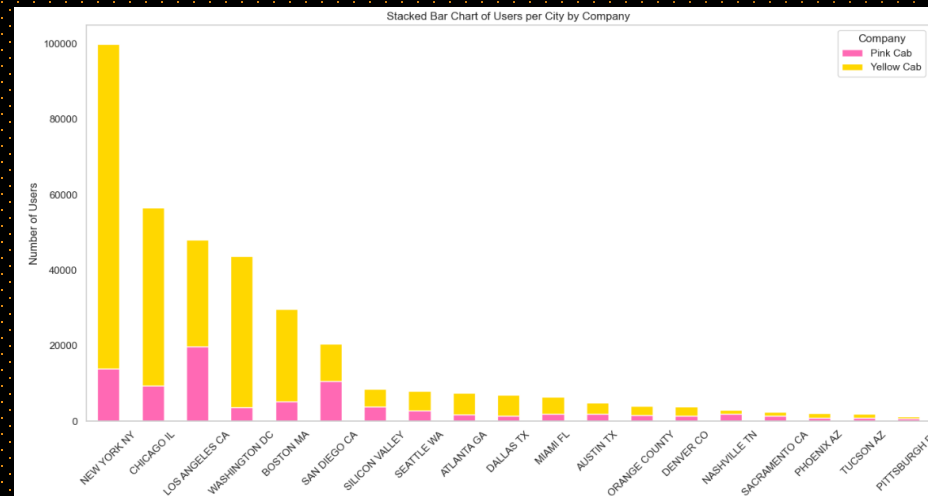
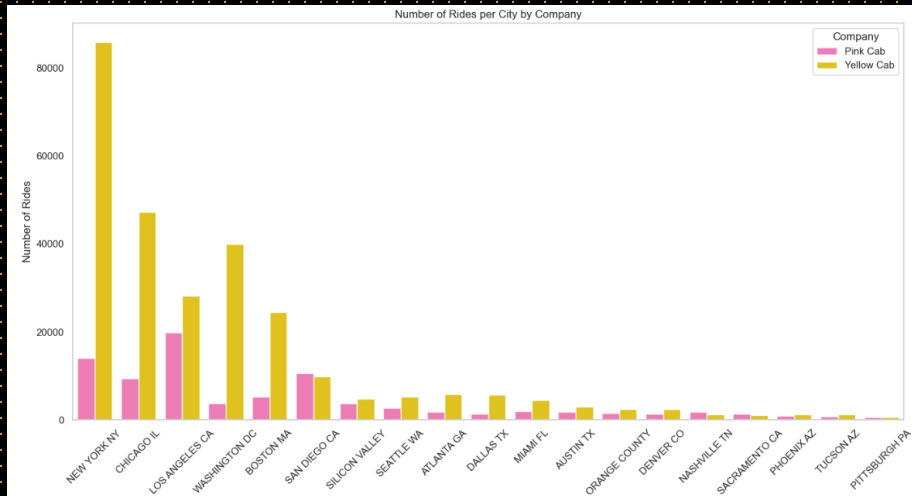
Total Records: 440,098 trips/ observations

Final records/ Data Points: 359392

Number of features: 18 (including 3 derived features)

Key Features: Date of Travel, City, Age, Gender, Payment_Mode, Income, Distance, Cost of Trip, Profit, Company.

Rides by City



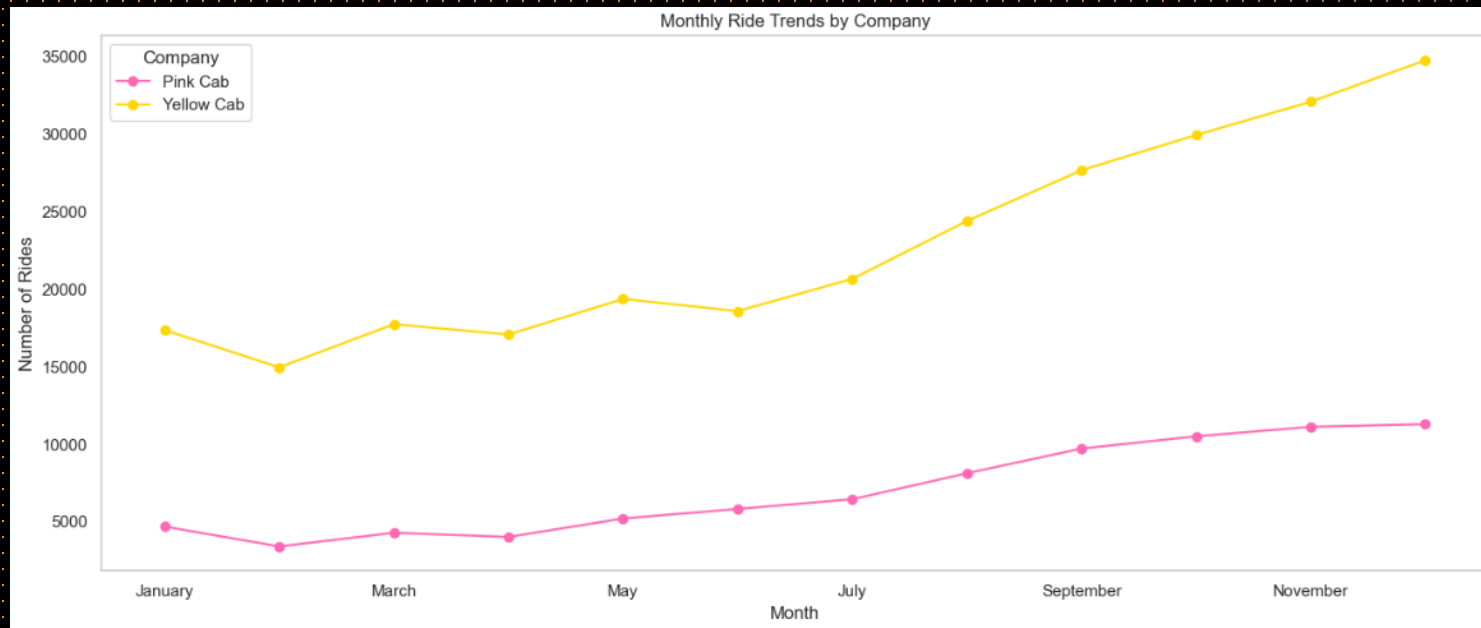
Company Distribution

Yellow Cab	274681
Pink Cab	84711

Insight:

- Top 5 cities include New York, Chicago, Los Angeles, Washington DC, and Boston MA.
- Yellow Cab dominates in high-density cities.

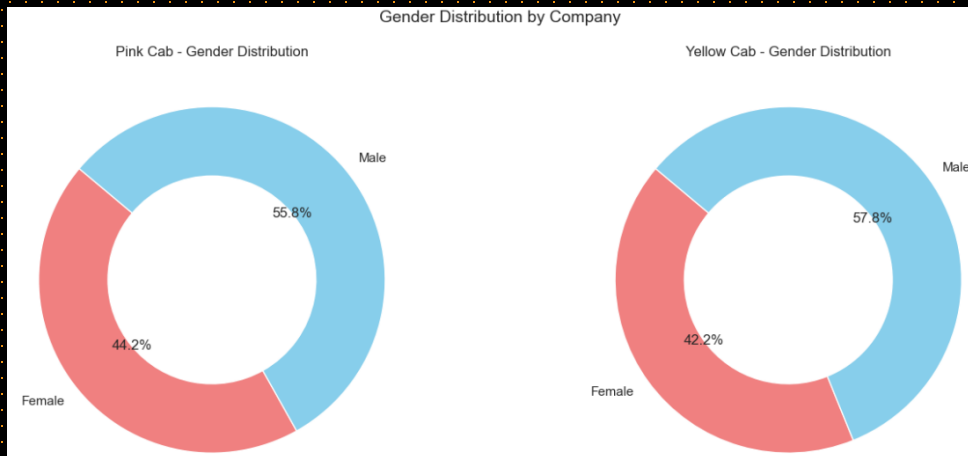
Monthly Ride Trends



Insight:

- Yellow Cab has consistently higher ride volume than Pink Cab.
- Seasonal trends show demand spikes in specific months (especially holiday months).

Customer Cab Usage

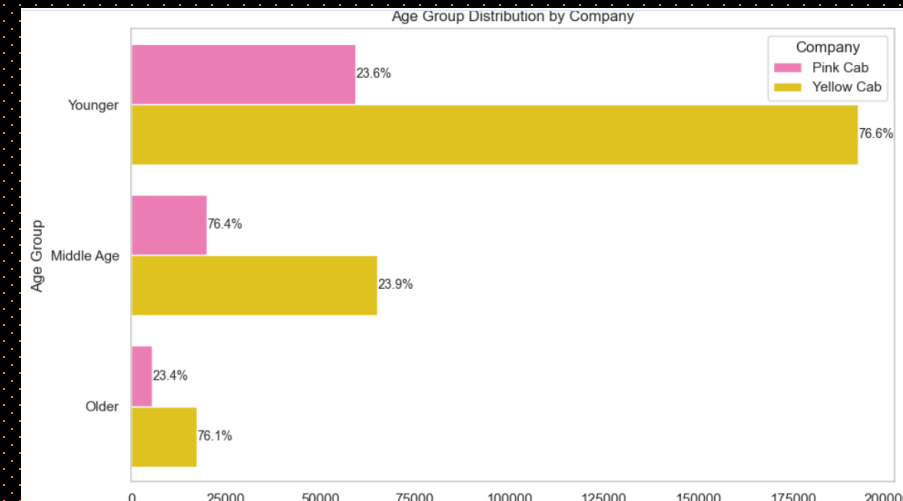


Insight:

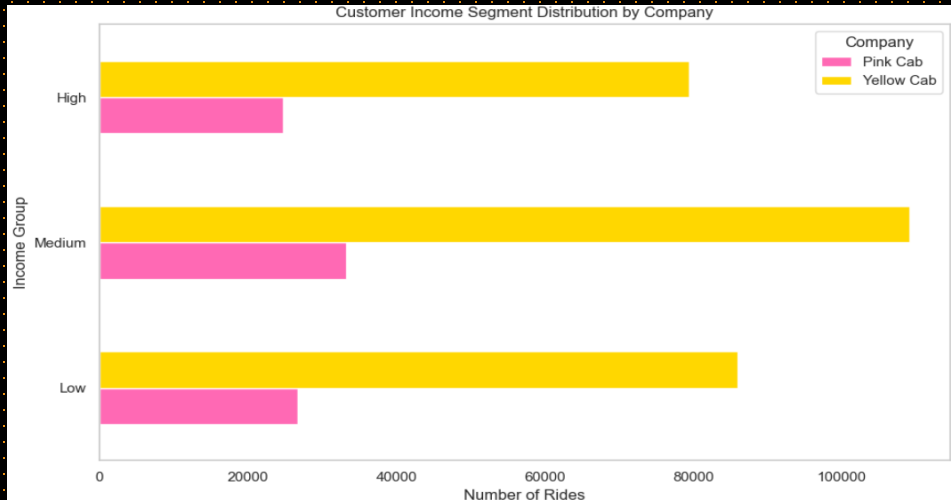
- Young and Middle-aged users form the bulk of cab customers, with the younger age group dominating.
- Yellow Cab is preferred across all age groups.
- N.B.: 18-39: Younger, 40-59: Middle Age, 60-65: Older

Insight:

- Usage is nearly balanced, but Yellow Cab shows higher male patronage, while the females make a little bit more use of the Pink Cab



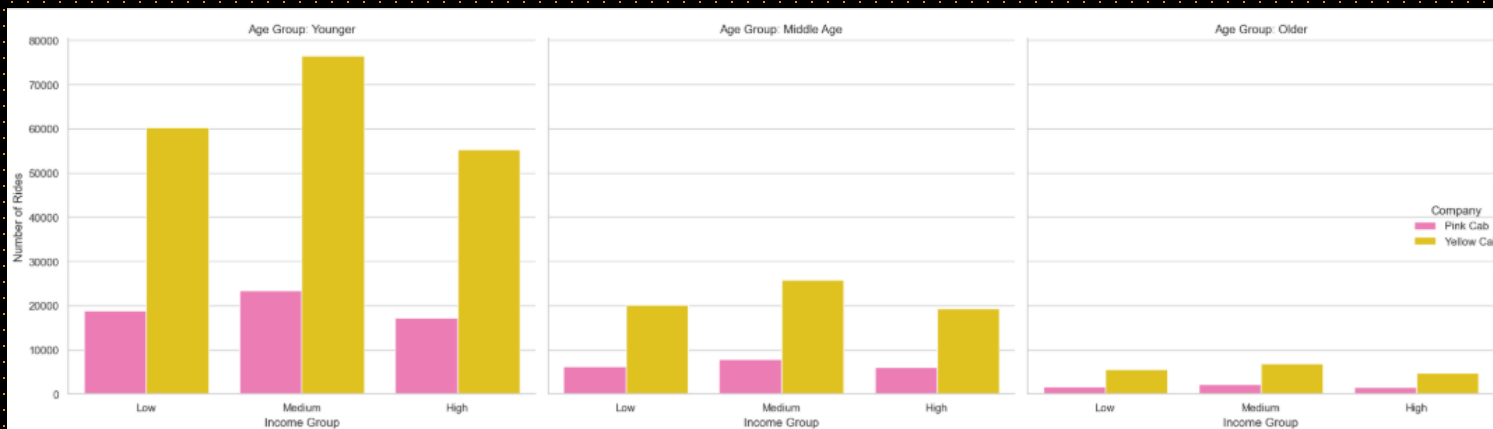
Income Segmentation



Insight:

- Yellow Cab appeals more to medium-income customers.
- Pink Cab usage is a bit balanced across the high- and low-income levels
- Income patterns show age influences usage.
- Younger-aged, medium-income earners dominate Yellow Cab's usage.

• N.B.: Income labels: 2000-9999: Low, 10000-19999: Medium, 20000-35000: High

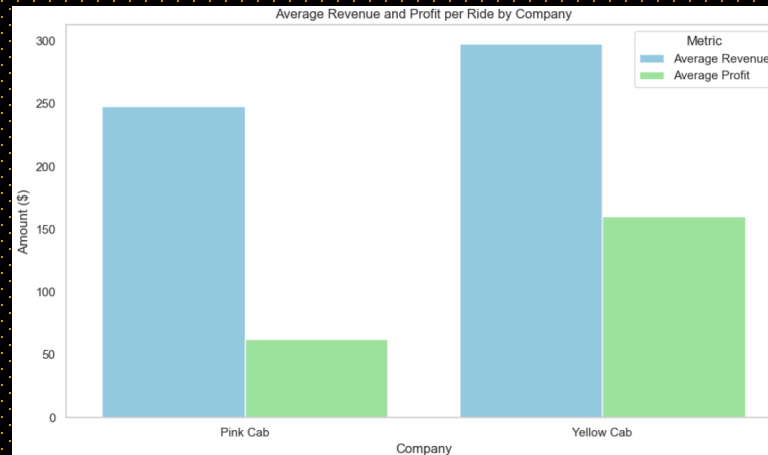


Revenue and Profit Comparison

a)



b)



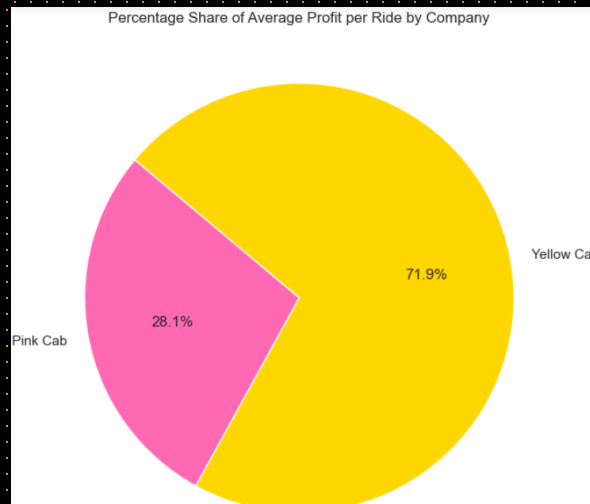
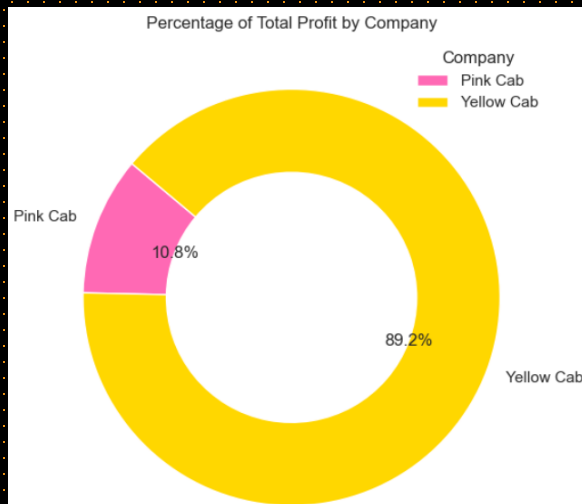
	Company	Average Revenue	Average Profit
0	Pink Cab	310.800856	62.652174
1	Yellow Cab	458.181990	160.259986

Insight:

- Yellow Cab is the dominant player in **revenue** and **profit**, generating higher average revenue and profit.
- Pink Cab, although smaller in total figures, might still have areas where it performs well.

• **N.B.:** Average Revenue and Average Profit in terms of

- a) price charged
- b) cost of trip



Summary of Analysis

1. Ride Distribution by City & Company

- Yellow Cab dominates in ride volume across most cities.
- Pink Cab tends to operate in fewer cities with significantly fewer rides.

2. Monthly Trends

- Both companies show fluctuations in monthly ride volumes.
- Yellow Cab maintains a consistently higher number of rides, indicating greater market share.

3. Customer Demographics

- **Age Group:** Young and Middle-Aged customers are the most frequent users.
- **Gender:** Both companies are used by all genders, but there's a slight edge toward male customers overall.

4. Revenue & Profitability

- Yellow Cab earns on average, ~\$458M in revenue with ~\$160M in profit, while Pink Cab earns an average of ~\$310M in revenue and makes ~\$62M profit.
- Yellow Cab outperforms Pink Cab in terms of revenue and profit by a wide margin.

5. Customer Segments by Income

- Medium-income earners tend to use Yellow Cab more frequently.
- Pink Cab serves a broader mix, for both some high and low-income segments penetration

Recommendations

1. Pink Cab: Explore Expansion Opportunities

- Focus on expanding to high-performing cities dominated by Yellow Cab.
- Conduct customer satisfaction surveys to understand lower ride volume.

2. Yellow Cab: Maintain Market Dominance

- Continue leveraging cities where performance is high.
- Optimise pricing and service quality to retain high-income users.

3. Personalised Marketing

- Segment marketing by **age** and **income group**.
- Target the “Young” and “Middle Age” categories more directly.

4. Customer Experience Improvement

- Both companies should monitor trends in ride satisfaction across months.
- Introduce loyalty or reward schemes to encourage repeat customers.

5. Customer Loyalty

- Introduce reward programs.
- Monitor monthly satisfaction trends.

Reference

1. Market Insights | Statista (2024), Retrieved (16th April 2025).
<https://www.statista.com/outlook/>

Thank You