G2M Case Study

Virtual Internship

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Background –G2M(cab industry) case study

- XYZ Private Equity is set to explore an exciting investment opportunity with the dynamic growth in the taxi sector in recent years and the increase of key players in the market. This US-based company aims to become an influential player in the taxi sector by making a strategic move.

- Objective: To help XYZ identify the right company by providing comprehensive, tangible and actionable insights to make the most appropriate investment in this fast-growing sector.

The analysis is divided into four sections:

- Data Understanding
- Analyses for each taxi type
- Finding the most profitable taxi company
- Recommendations for investment

Data Exploration

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

Assumptions:

Market Coverage: It is assumed that the cities analyzed represent a comprehensive sample of the overall market and customer preferences for taxi services.
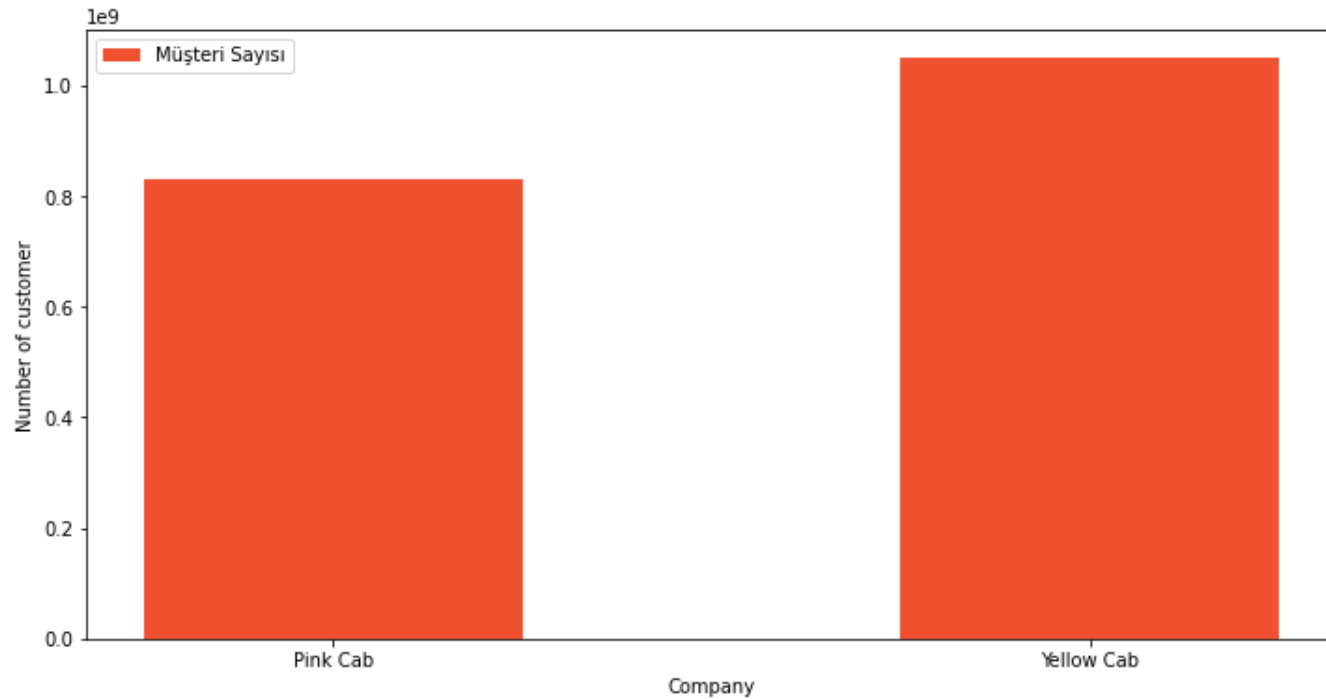Data Accuracy: The data used for customer preferences, income analysis, and age group distributions are assumed to be accurate and collected from reliable sources.
Consistent Pricing: It is assumed that pricing structures for Yellow Cap, Pink Cap, and Green taxi services are comparable, and any differences in preference are not significantly influenced by fare variations.
Customer Behavior: It is assumed that customer preferences are driven by factors such as convenience, service quality, and brand reputation rather than external influences like promotions or discounts during the analysis period.

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

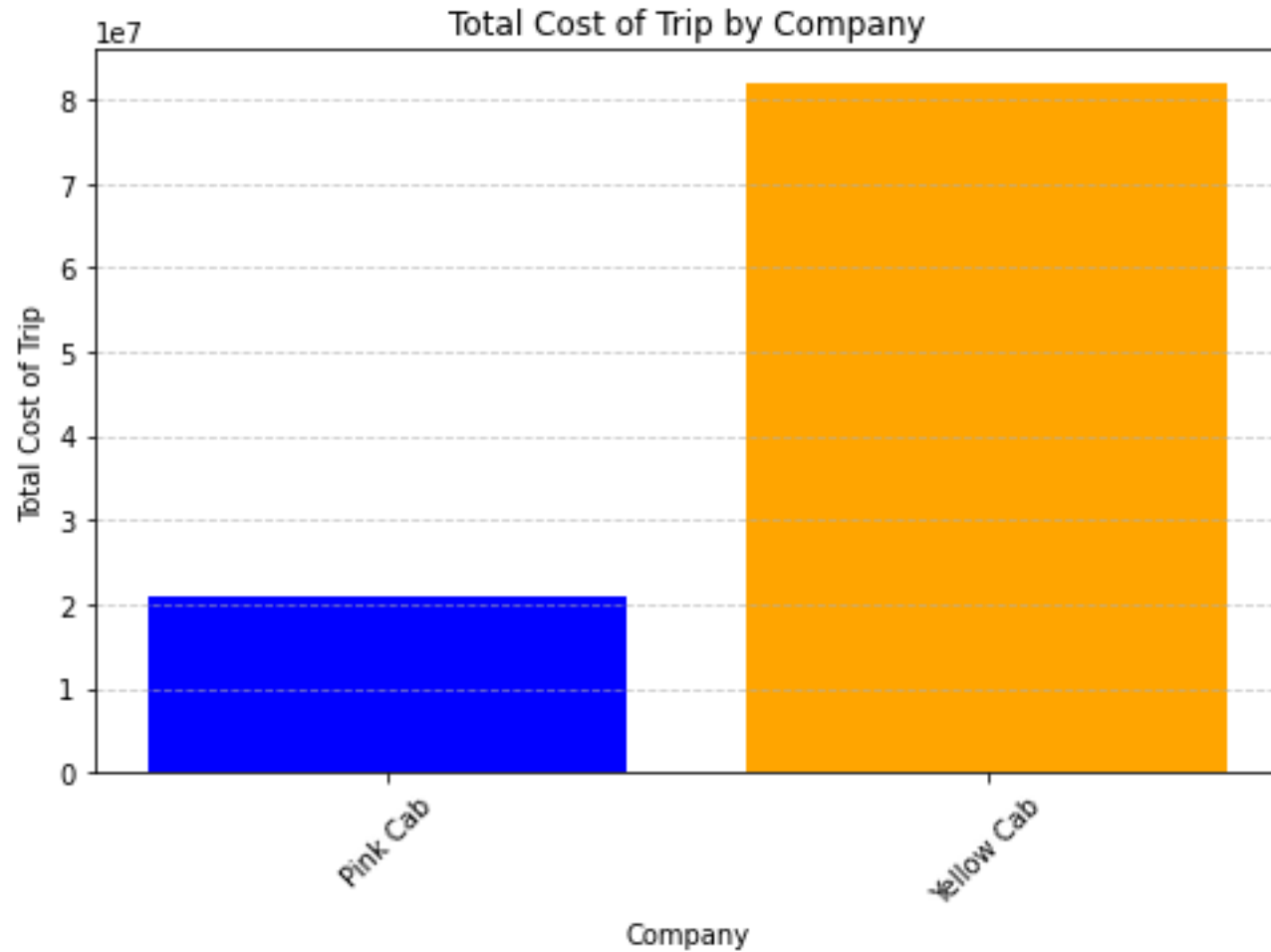Final cab data
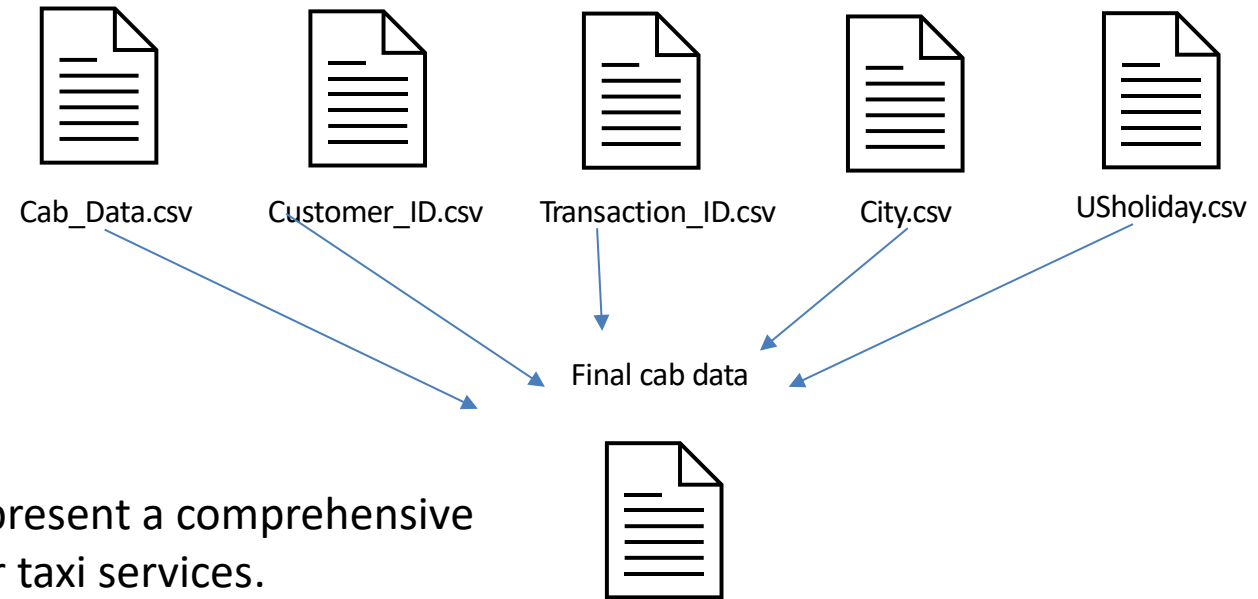
Profit Analysis

For 2 companies, firstly the number of customers was analysed. As seen here, the number of customers using yellow cape is more than the number of customers using pink cap.

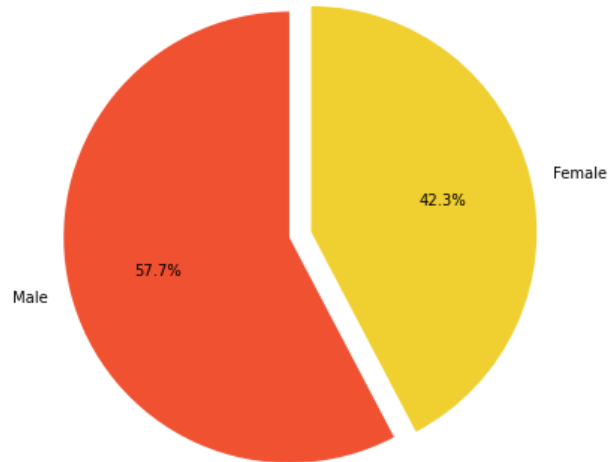Pink Cape = 831664558
Yellow Cape = 1049163053
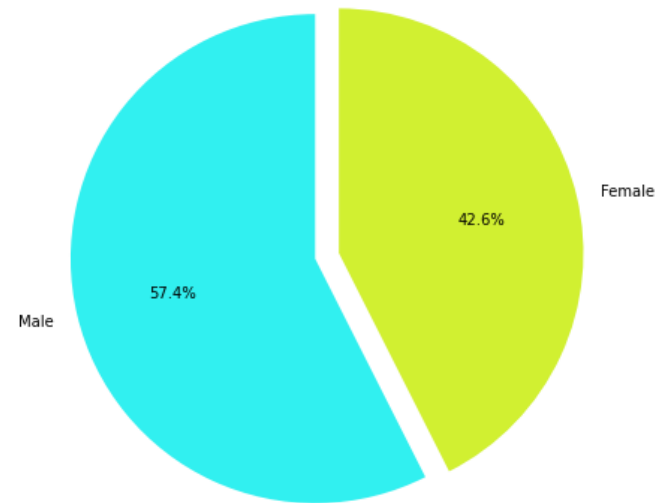
Gain Analysis

As can be seen here, when the total gain is compared, the green cabin gain is higher.

Gender Analysis

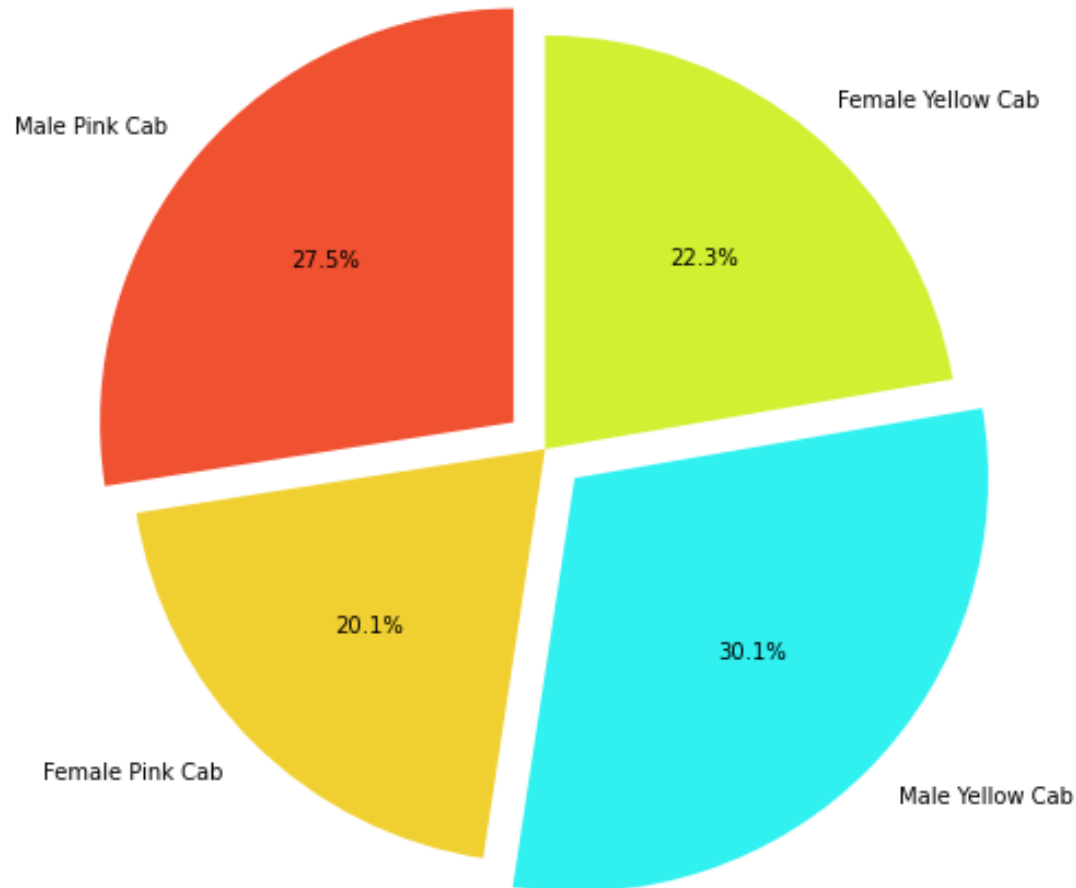Customer Gender Distribution - Pink Cab

Customer Gender Distribution - Yellow Cab

Customer distribution was analysed for Pink and Yellow cap. Since the number of Yellow cap customers is high, the ratios are high. In 2 cap types, male rates are higher.
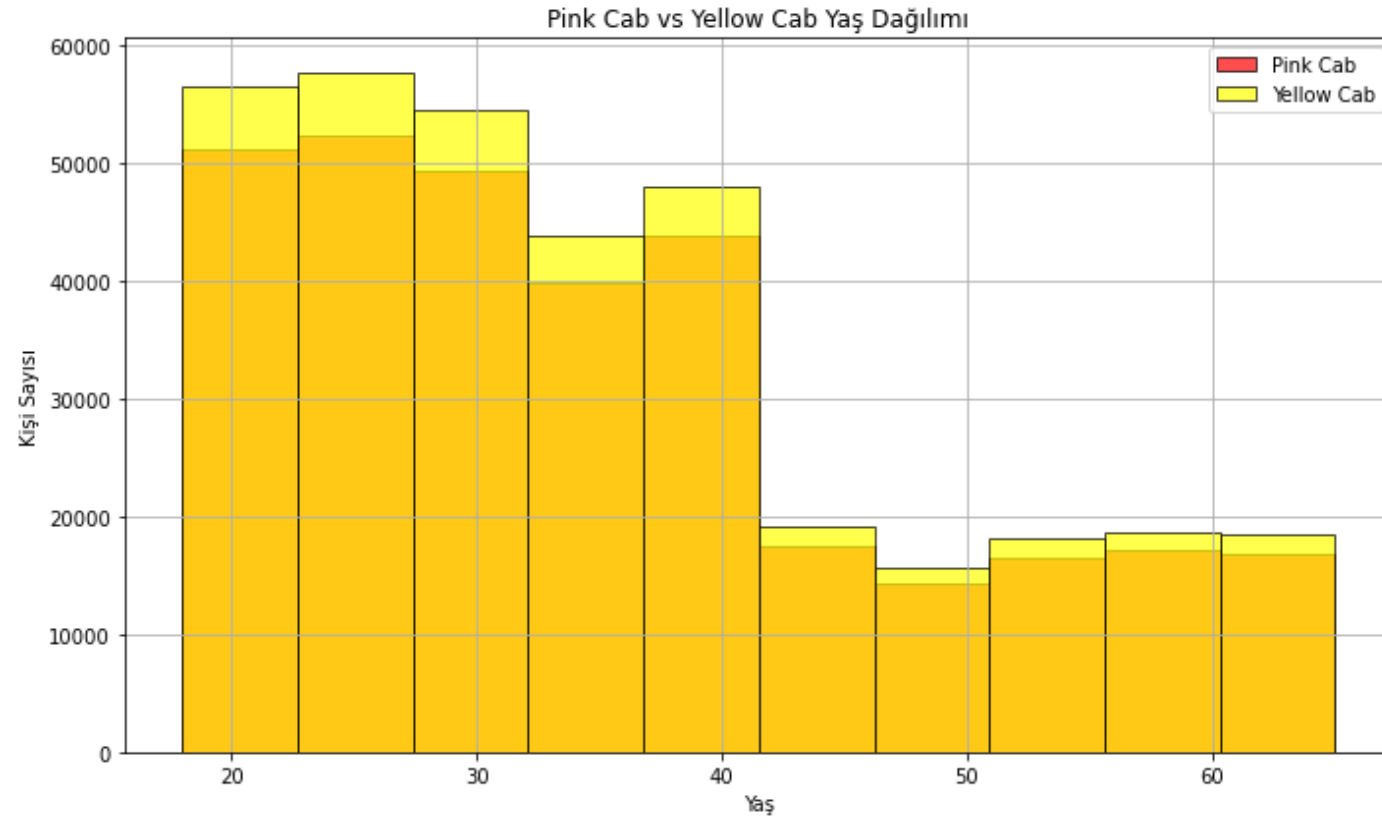
Gender Analysis

Customer Gender Distribution - Pink Cab vs Yellow Cab

When all distributions are analysed in general, although male and female male distributions are close to each other, yellow cap distribution is higher.
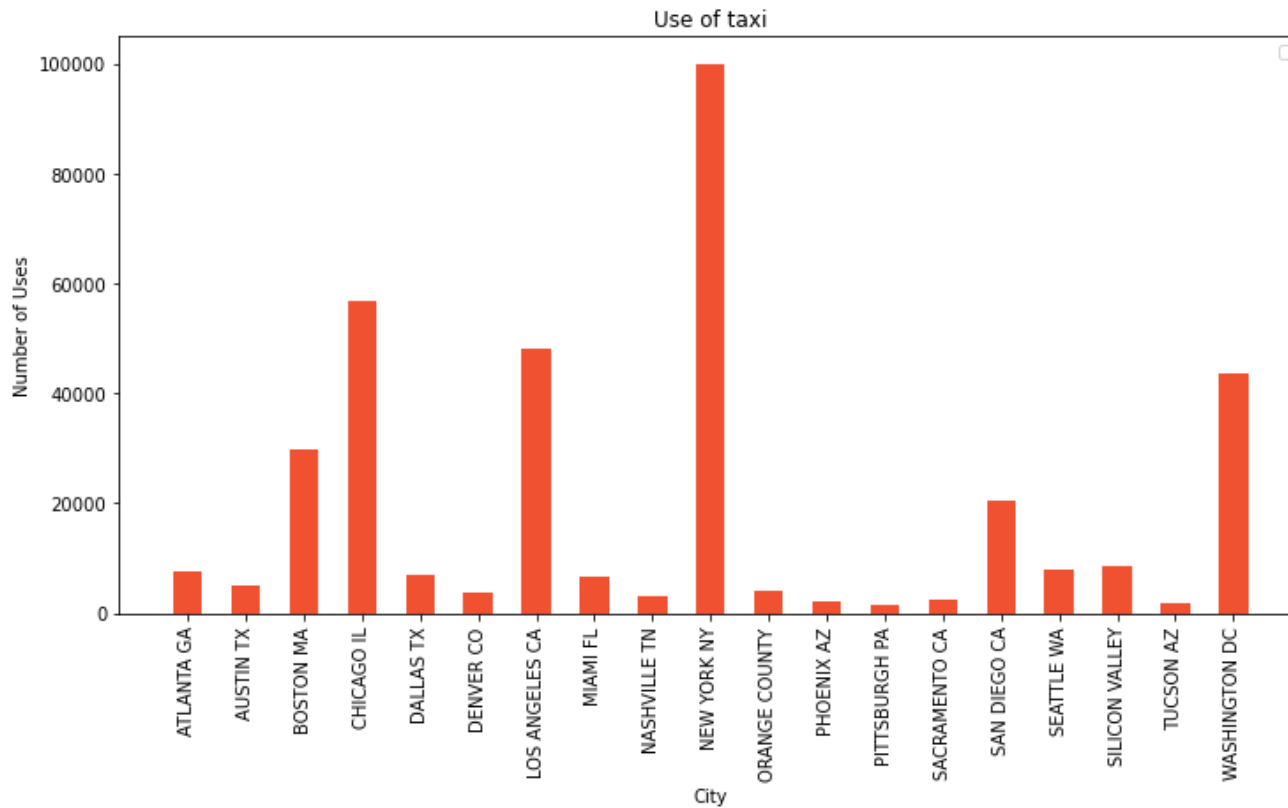
Age Analysis

Pink Cab vs Yellow Cab Yaş Dağılımı

An analysis of age distribution for two companies reveals that Yellow Cap customers are more prevalent across all age groups, indicating a stronger preference for this brand among various age demographics.

Customer Analysis

The analysis of taxi usage across different cities indicates that New York City has a notably high demand for taxis

The number of yellow and pink caps used in New York is as follows.

Pink Cap = 13967
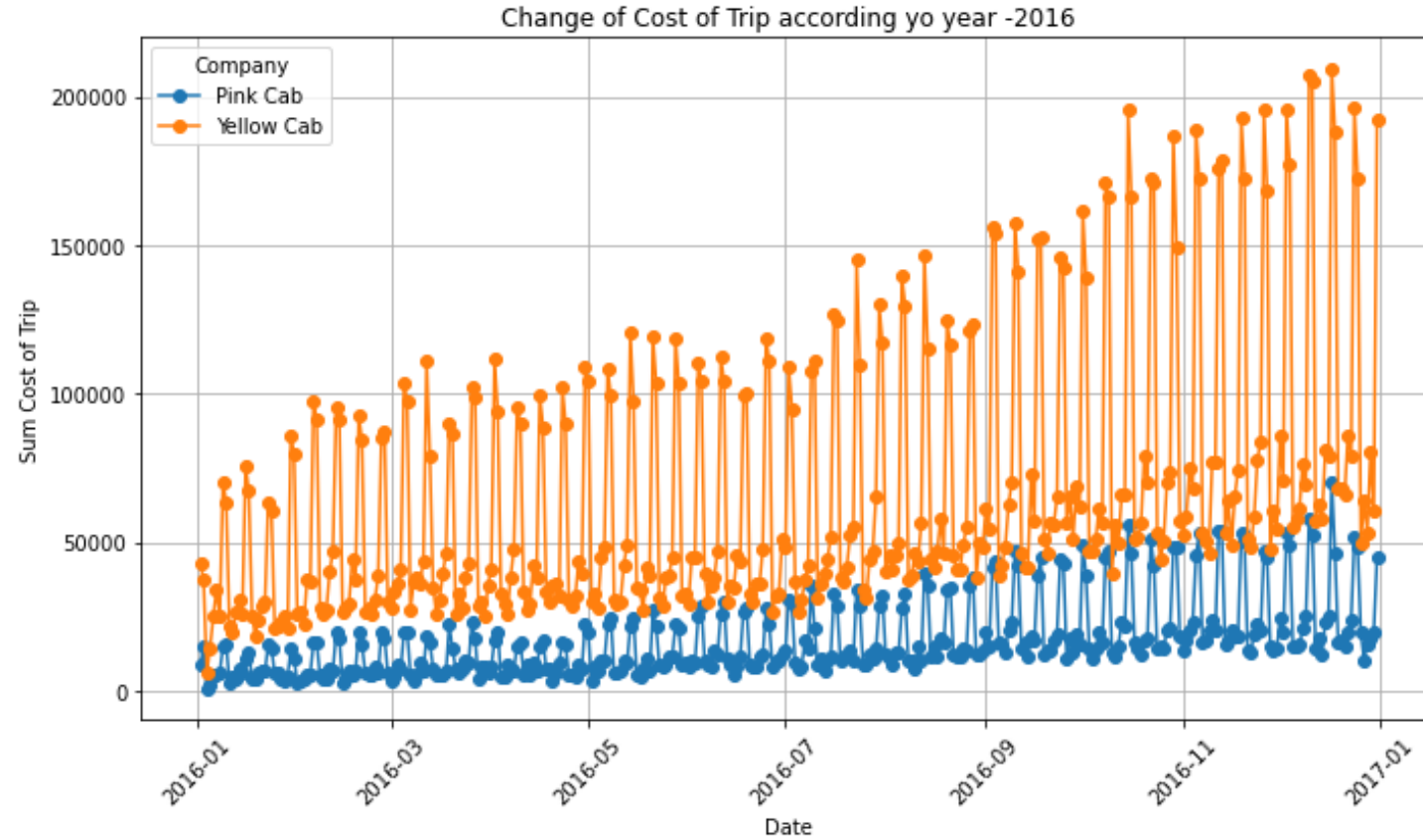Yellow Cap = 85918

# Customer Analysis

Customer Count by City and Company

The analysis of customers using yellow and pink taxis in various cities shows that yellow taxis are generally preferred across the locations included in the dataset.
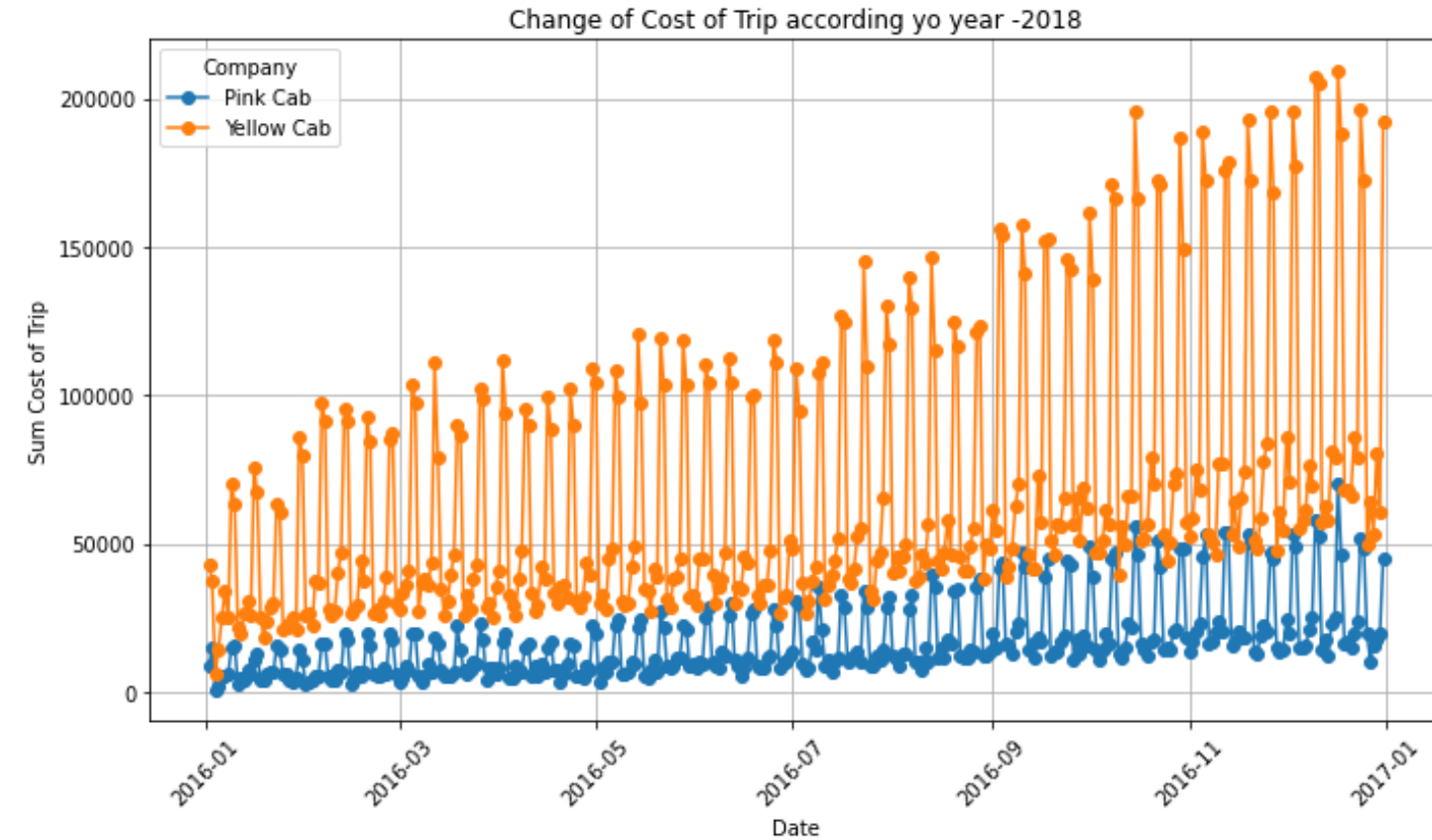
Cost Analysis

Change of Cost of Trip according yo year -2016

The usage of yellow and pink caps was monitored over the years, starting with 2016. It can be observed that yellow caps were more widely used in that year.

Cost Analysis

Change of Cost of Trip according yo year -2017
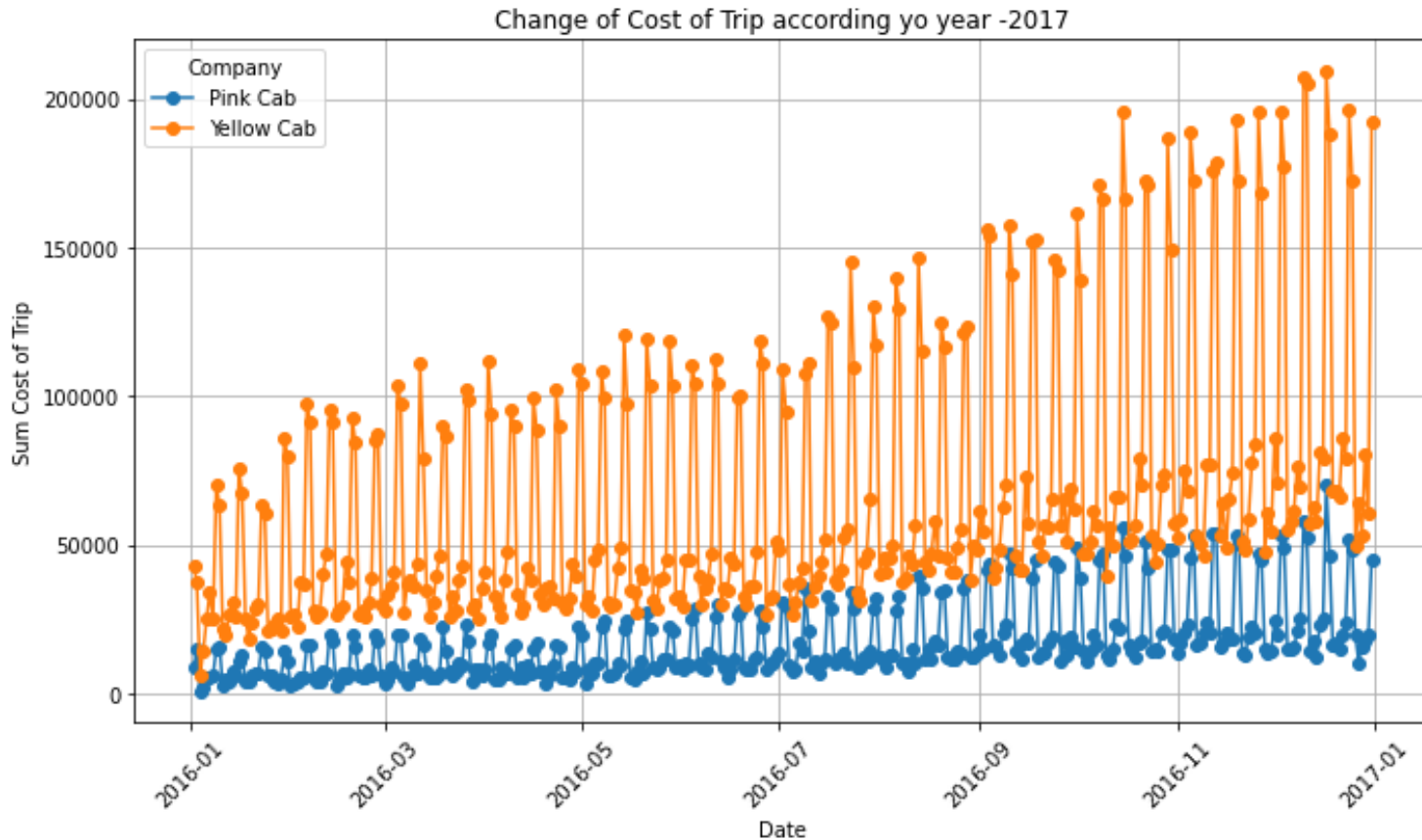
The usage of yellow and pink caps was monitored over the years, starting with 2017. It can be observed that yellow caps were more widely used in that year.

Cost Analysis

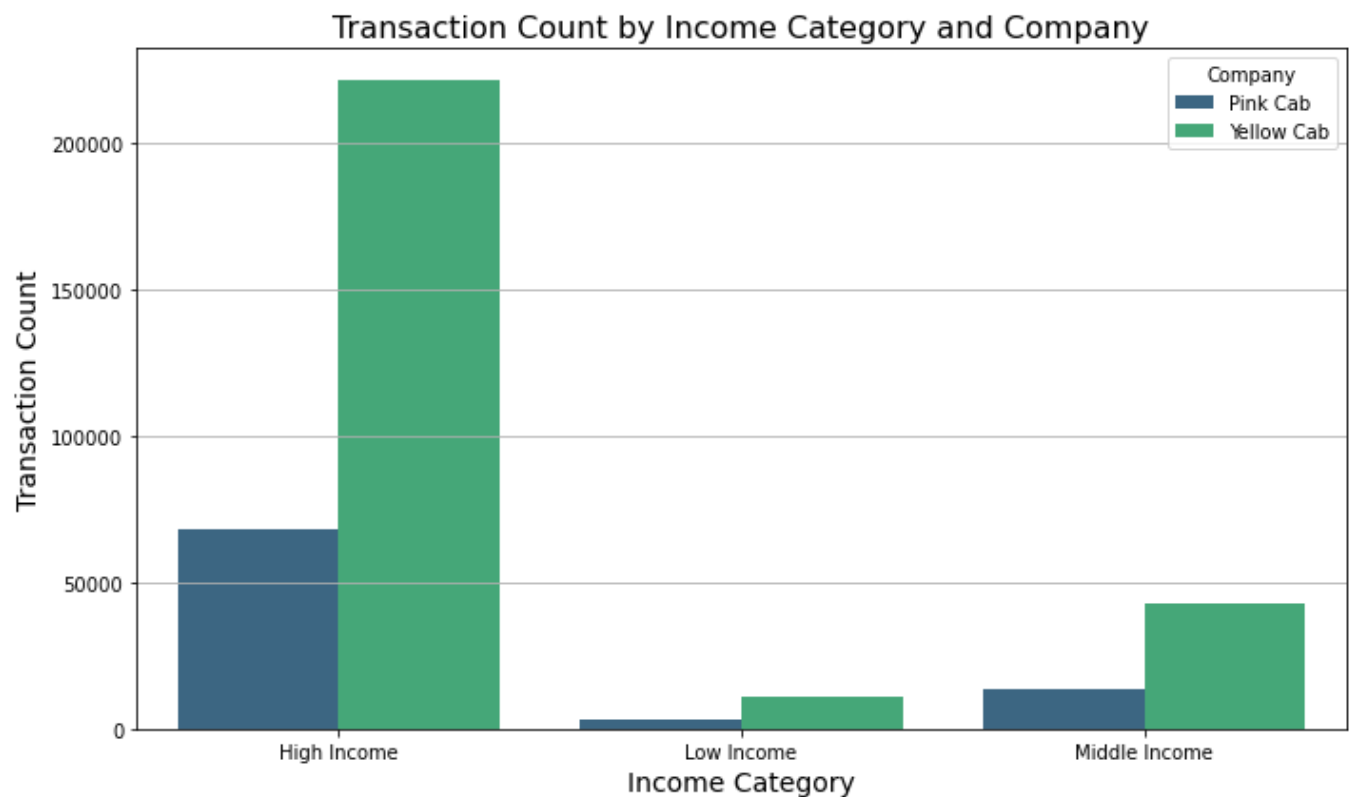Change of Cost of Trip according yo year -2018

The usage of yellow and pink caps was monitored over the years, starting with 2018. It can be observed that yellow caps were more widely used in that year.

Income Analysis

Transaction Count by Income Category and Company

Income Category	Company	Transaction ID
High Income	Pink	68056
High Income	Yellow	221390
Low Income	Pink	3321
Low Income	Yellow	10682
Middle Income	Pink	13334
Middle Income	Yellow	42609

It is seen here that green cap is preferred at all income levels.

Forecasting

Aylık Müşteri Sayıları ve Tahminler
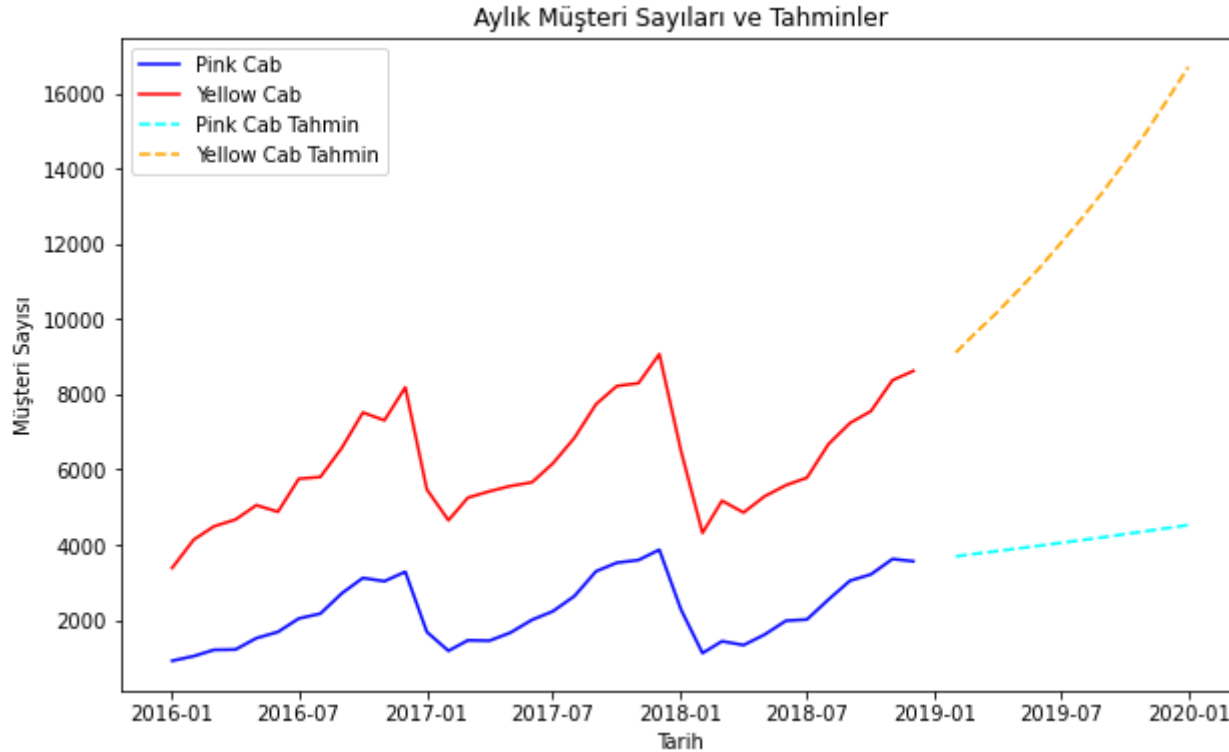
Yellow Cab's increased demand may be due to service quality, customer satisfaction or effective marketing strategies. Competitive advantage, favourable pricing and a wide service network may have increased the number of customers. In addition, seasonal effects and economic conditions may also influence this; Yellow Cab's higher demand during certain periods may increase the number of customers. Finally, data analysis and customer feedback can help to understand the causes.

Recommendations

Analysis Summary:

1.Customer Preference: The Yellow Cap taxi service demonstrates a significantly higher customer preference, being favored in 25 cities compared to the Pink taxi service, which is preferred in only 4 cities.

2.Preference by Age Group: An examination of preferences across different age groups reveals that the Yellow Cap is consistently favored in all demographics, indicating its widespread appeal.

3.Income Analysis: A review of the financial performance shows that Yellow Cap generates higher total earnings than Pink Cap, highlighting its stronger market position.

4.Income Level Preference: In terms of income levels, the Green taxi option emerges as the preferred choice across all income brackets, suggesting a diverse appeal irrespective of financial status.

Thank You