



Data Glacier

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Exploratory Data Analysis

G2M Insight for Cab Investment Firm

21-Oct-2023

Problem Statement

- 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.



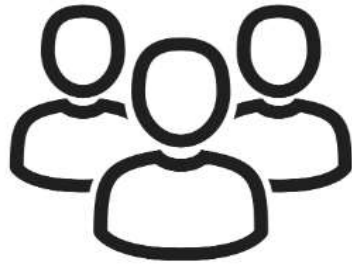
The question is: Pink Cab or Yellow Cab?

Datasets



Cab_Data

- Transaction ID
- Date of Travel
- Company
- City
- KM Travelled
- Price Charged
- Cost of Trip



Customer_ID

- Customer ID
- Gender
- Age
- Income (USD/Month)



Transaction_ID

- Transaction ID
- Customer ID
- Payment_Mode

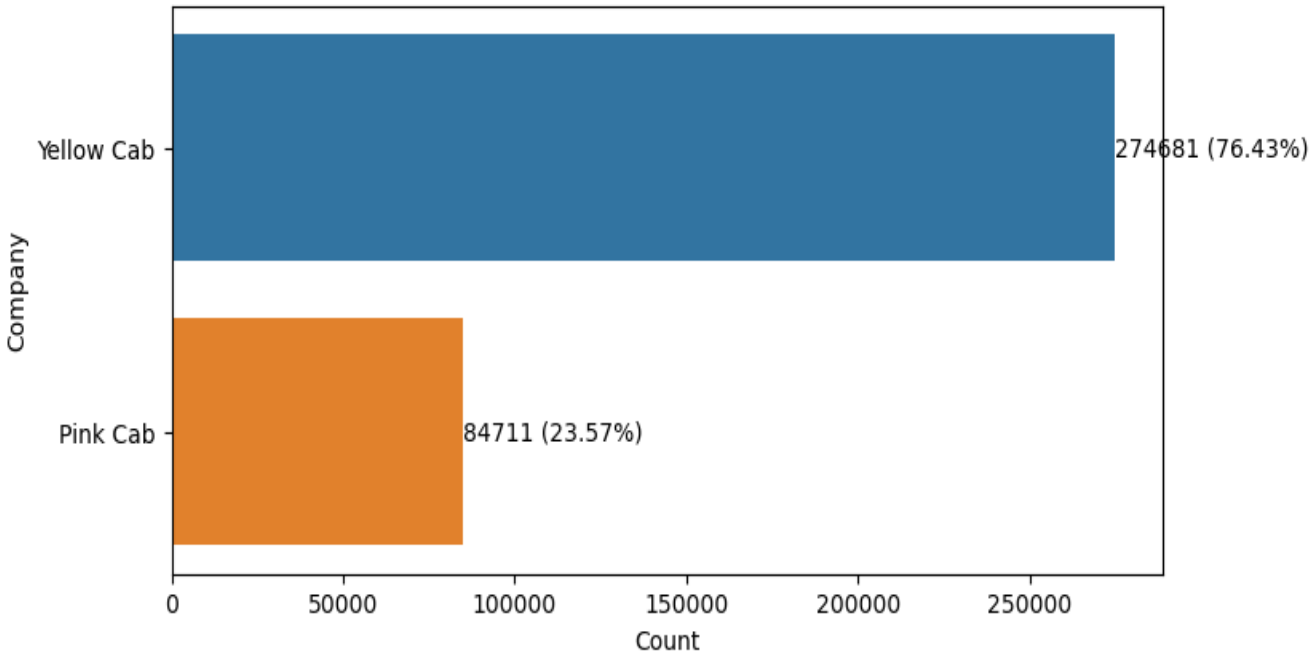


City

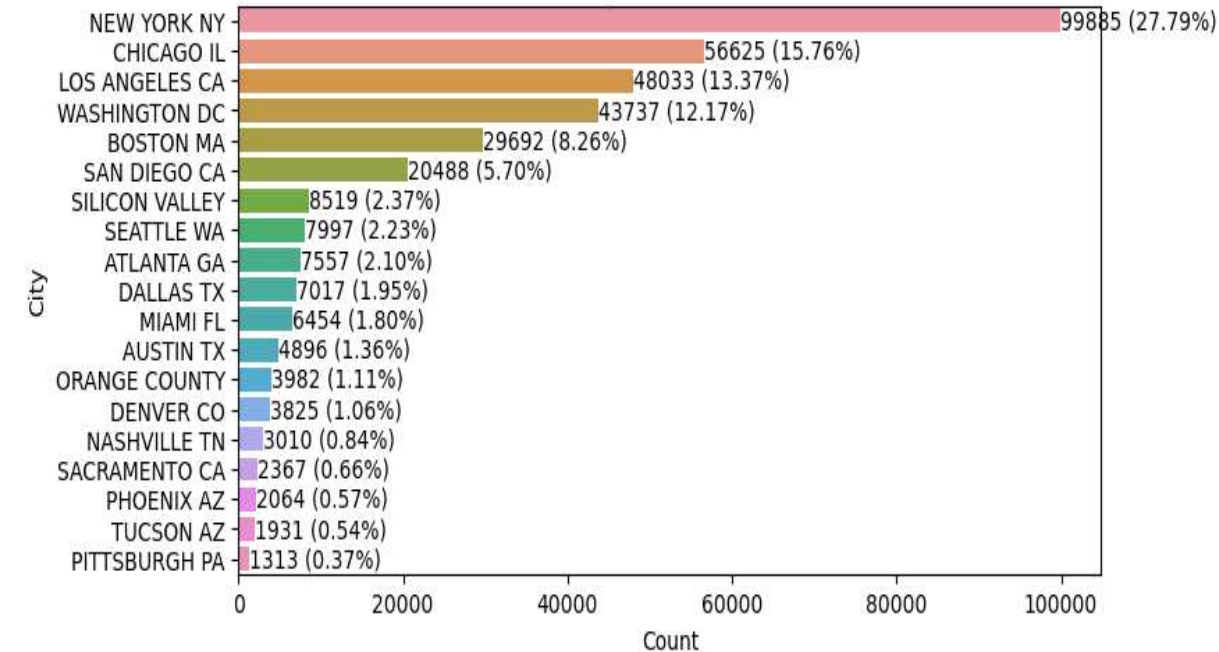
- City
- Population
- Users

Company and City Distribution

Company Distribution

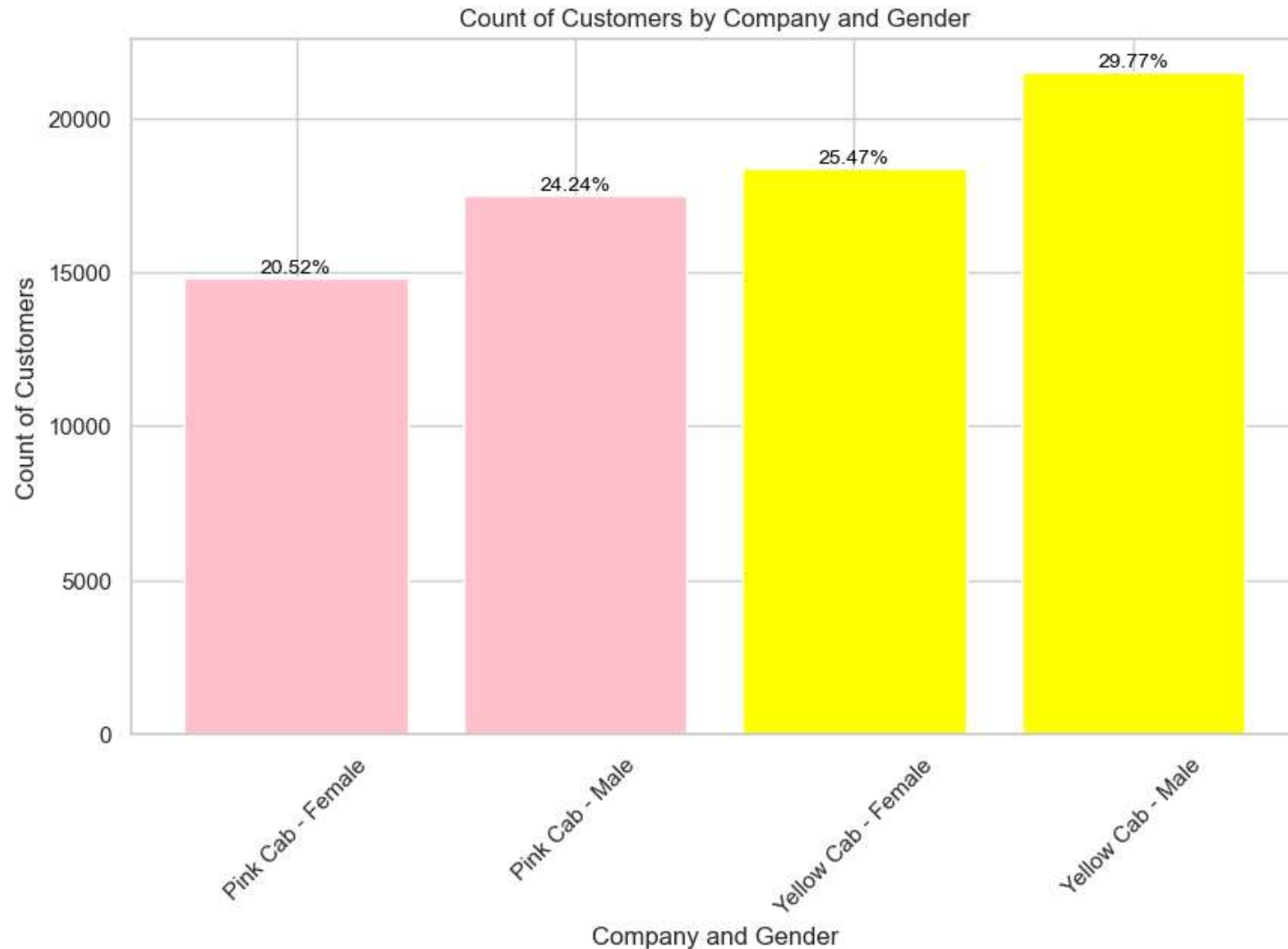


City Distribution



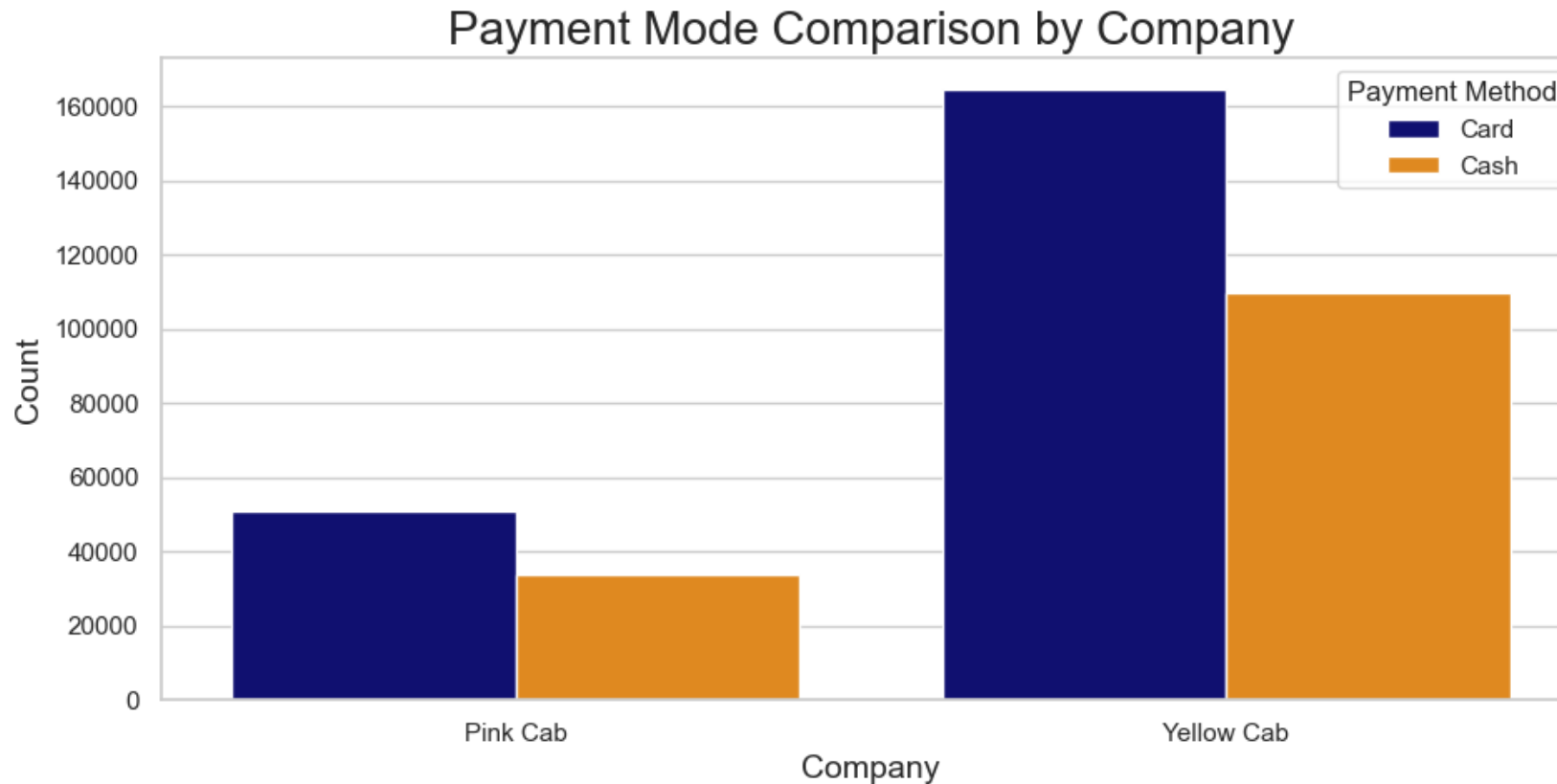
- Yellow Cab company dominates with 76.43% of the operations, while Pink Cab company accounts for 23.57%. It's clear that Yellow Cab has a significant advantage in this regard.
- When we examine the cities, we can see that NEW YORK, CHICAGO, and LOS ANGELES lead in terms of transactions.

Company and Gender



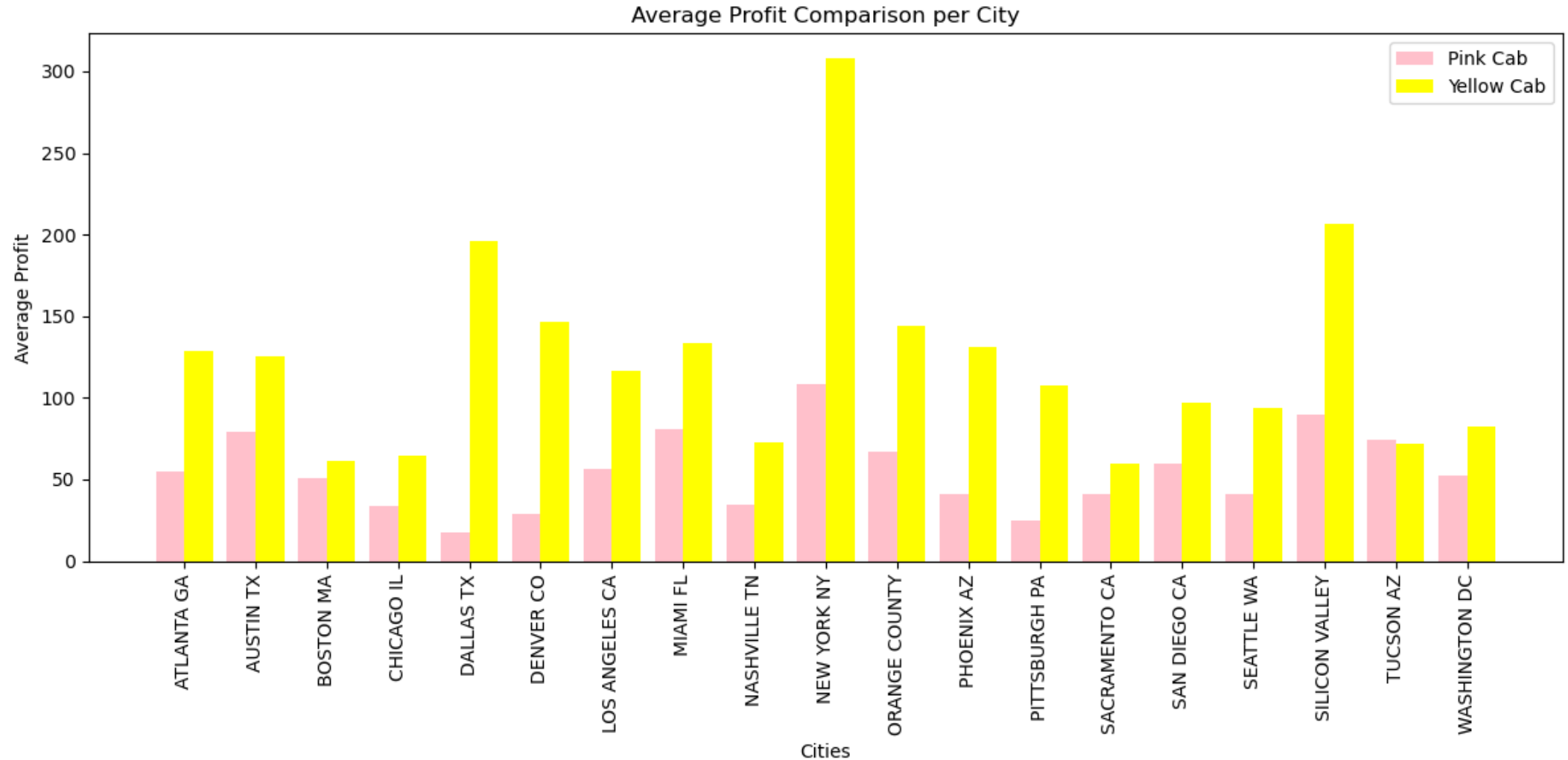
- When comparing the two cab companies, it can be observed that in both of them, there are more Male users.

Payment Mode Comparison

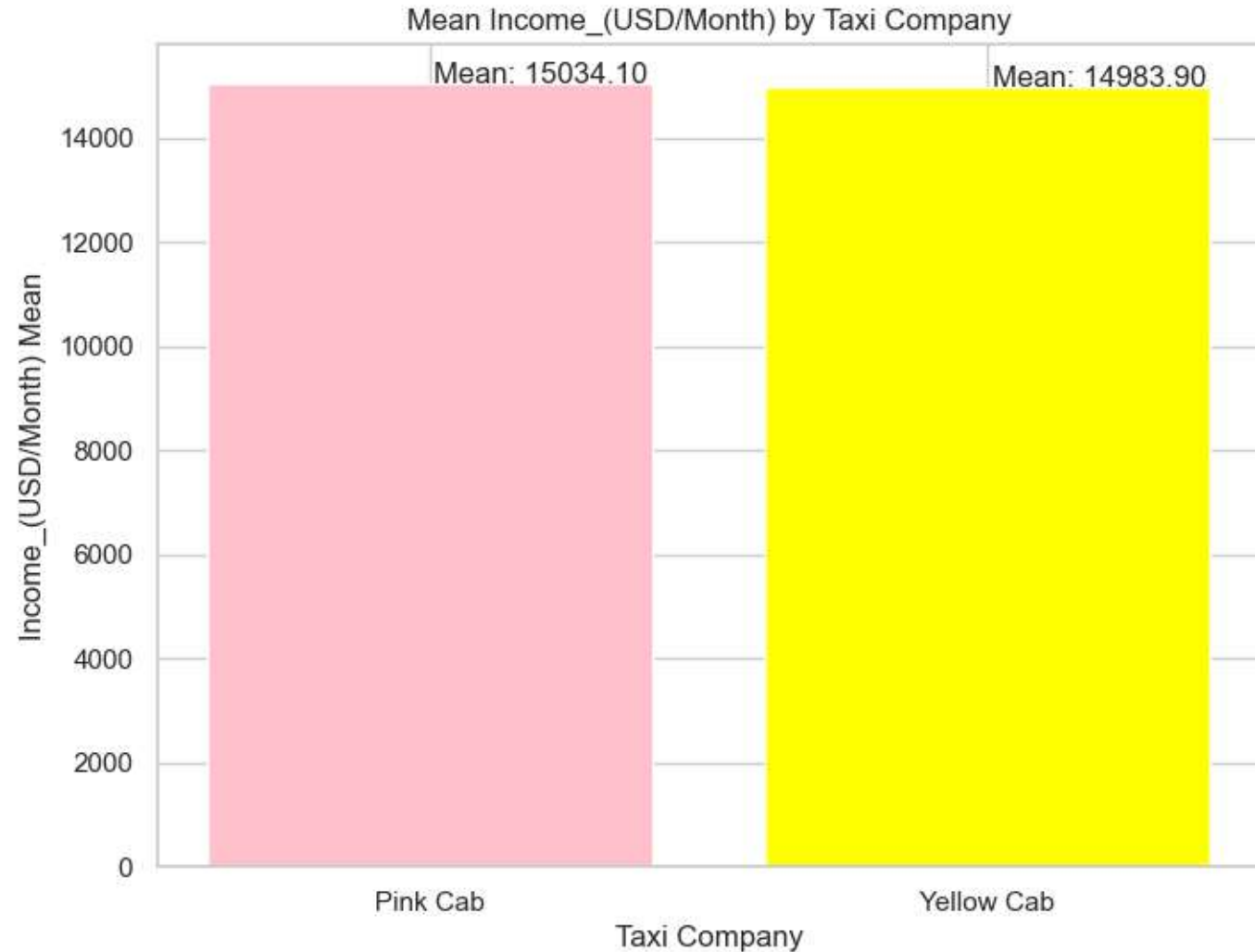


- As we can see that users prefer to pay with a card more as compared to cash.

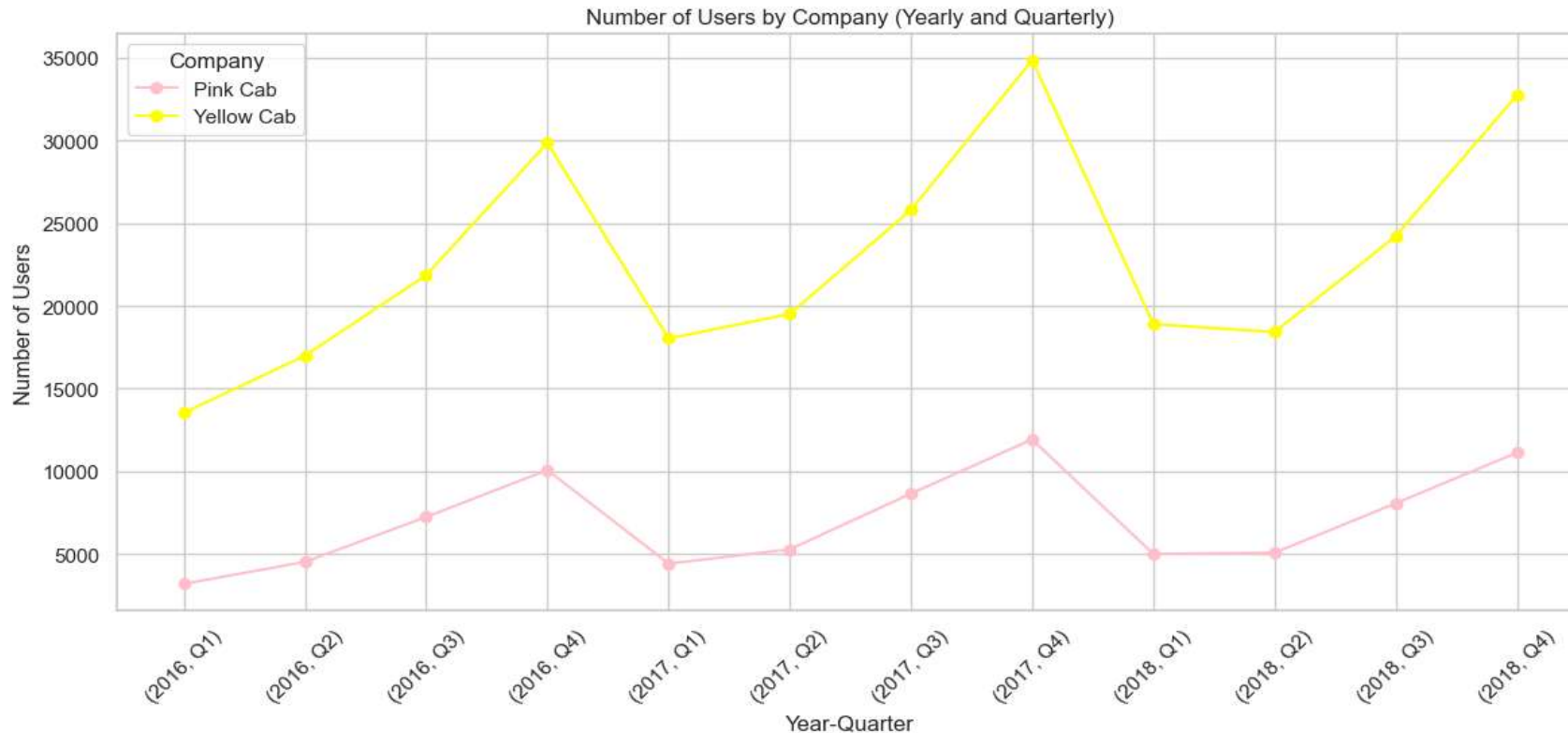
Average Profit Comparison per City



Average Income of Cab Customers



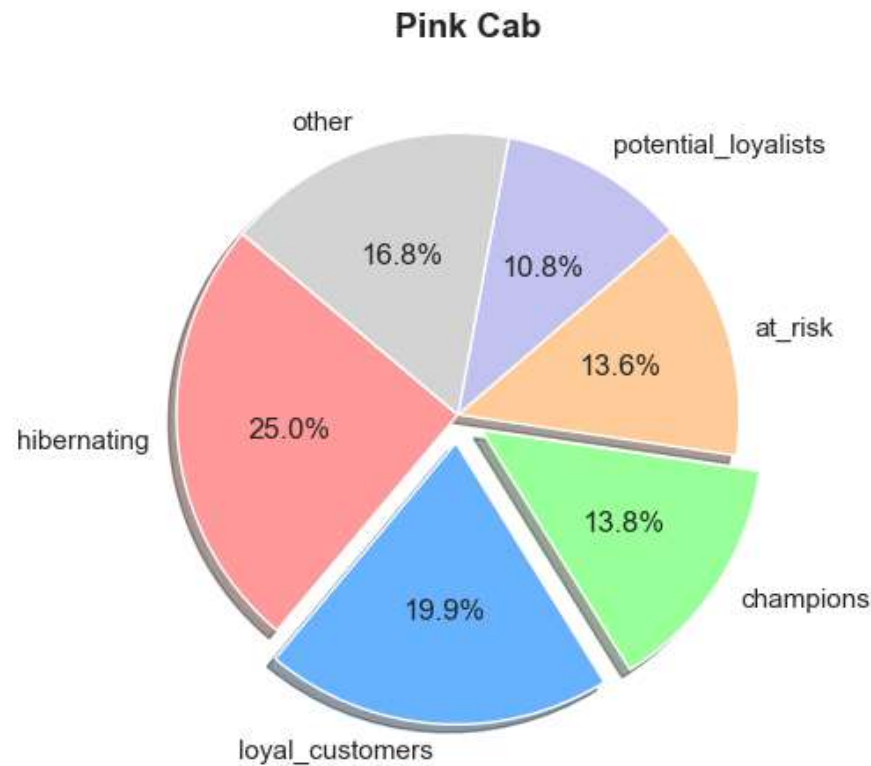
Number of Users per Season



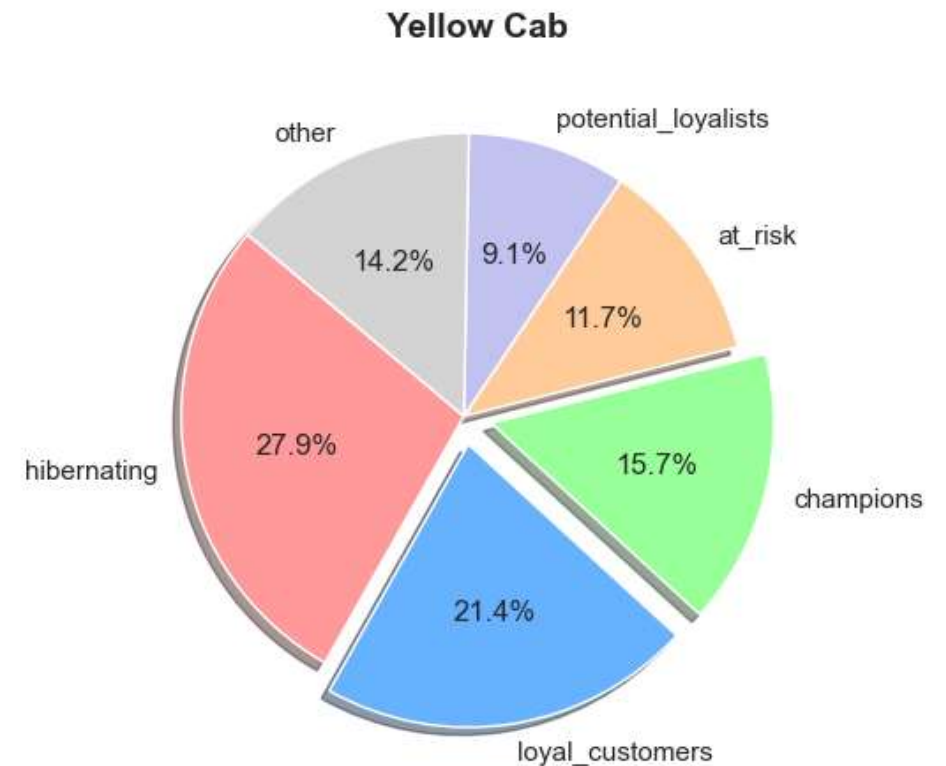
- When the graph is examined, it can be seen that there is an increasing trend in customer cab usage demand from the first quarter to the fourth quarter in each of the years 2016, 2017, and 2018.

- The increasing trend in customer demand for cab usage from the first quarter to the fourth quarter in each of the years 2016, 2017, and 2018 may be attributed to various factors, including seasonal patterns, economic variables, special occasions, holidays, urban population growth, and the preference for cabs during adverse weather conditions.

Number of Loyal Customers



Number of 'Champions' and 'Loyal Customers' (Pink Cab) = 10923



Number of 'Champions' and 'Loyal Customers' (Yellow Cab) = 14812

- As a result of the hypothesis tests conducted, it was found that Yellow Cab's loyal customers and champions generate more profit than those of Pink Cab.

Recommendations

- **Number of Users:** It is evident that the Yellow Cab company has a larger user base.
- **Average Profit per City:** In all cities except Tucson, AZ, the average profit of Yellow Cab is higher than that of Pink Cab.
- **Loyal Customers:** Yellow Cab's greater quantity of loyal customers points to the potential for more consistent future revenue.
- **Gender Preference:** Yellow Cab's popularity among male demographics could be a significant factor in influencing marketing strategies.

To sum it up, the data supports choosing Yellow Cab.

Thank You



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