G2M Case Study

Virtual Internship

25-10-2021

1. BACKGROUND

Business Problem

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.

Go-to-Market(G2M) strategy

A go-to-market strategy (GTM strategy) is an action plan that specifies how a company will reach target customers and achieve competitive advantage. Go-to-market strategies tend to focus on the short-term, but effective ones will also consider how any immediate success can be sustained over a longer period.

Objective

Provide actionable insights to help XYZ firm in identifying the right company for making investment.

2. HYPOTHESIS

1. How does the profit change over time?
2. How does the percentage of profitable trips change by the city?
3. How does average profit change by holidays?
4. How does the demand of the cab industry change over time?
5. How the demand varies according to age?
6. Loyalty of customers
7. Fluctuations of payment methods

3. DATA ANALYSIS SUMMARY

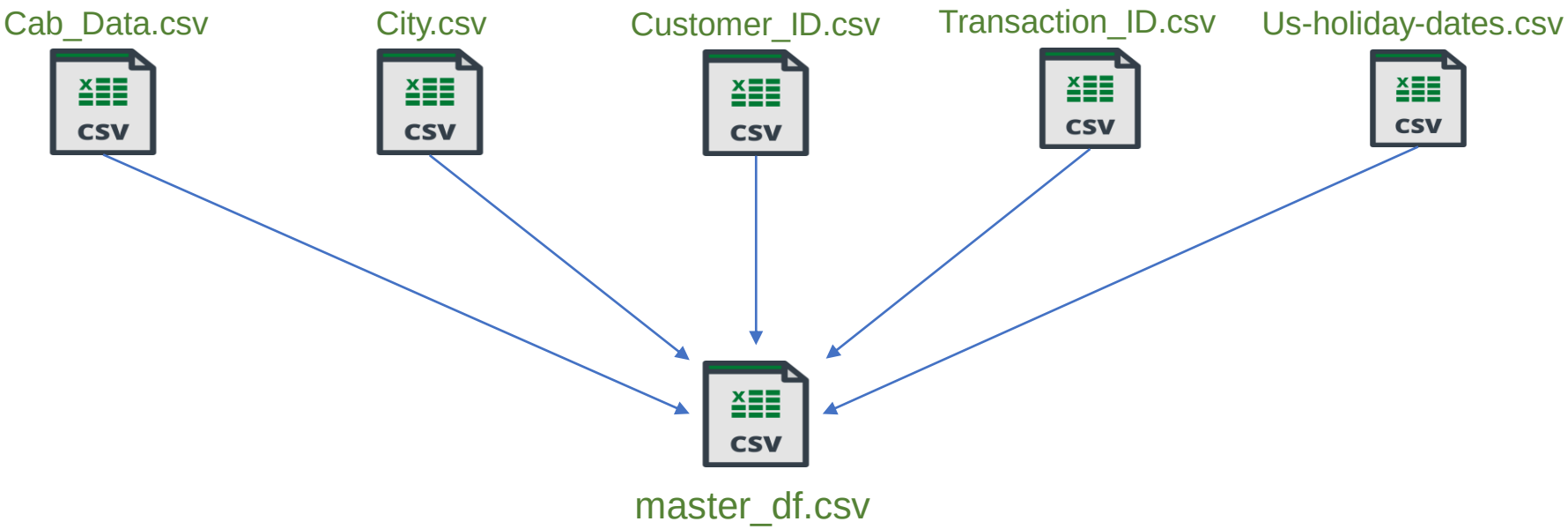
This data analysis has been mainly divided into three parts:

1. Data Understanding and Preparation
2. Exploratory data analysis
    - ✓ Profit Analysis
    - ✓ Demand Analysis
    - ✓ Client Analysis

3. Recommendation for investment

DATA ANALYSIS SUMMARY CONT..

Datasets



No of Features:	15
Total Data Points:	359392
Timeframe:	from 31/01/2016 to 31/12/2018

Figure 2.1

According to the graphs, there are outliers in the Price Charged feature. But since we do not have enough information on the components that made the Price Charged, it is not appropriate to treat it as an outlier.

4. ASSUMPTIONS

1. There are outliers in the ***Price_Charged*** feature. But since we do not have enough information on the components that made the ***Price_Charged***, it is not appropriate to treat it as an outlier.

2. When calculating the Profit per ride, all other factors were considered as constants and only ***Price_Charged*** and ***Cost_of_Trip*** features were used to calculate the profit.

3. ***Users*** feature of *city* dataset is treated as all the cab users in the city. (including Yellow and Pink cab)

5. PROFIT ANALYSIS

Annual Profits

Figure 4.1

PROFIT ANALYSIS CONT..

Monthly Profits

Figure 4.2

Yellow Cab Company's earnings are more stable with fluctuations of 23.08% while Pink Cab Company's earnings vary with fluctuations of 61.22%.

PROFIT ANALYSIS CONT..

Average profits over Rides (Annual)

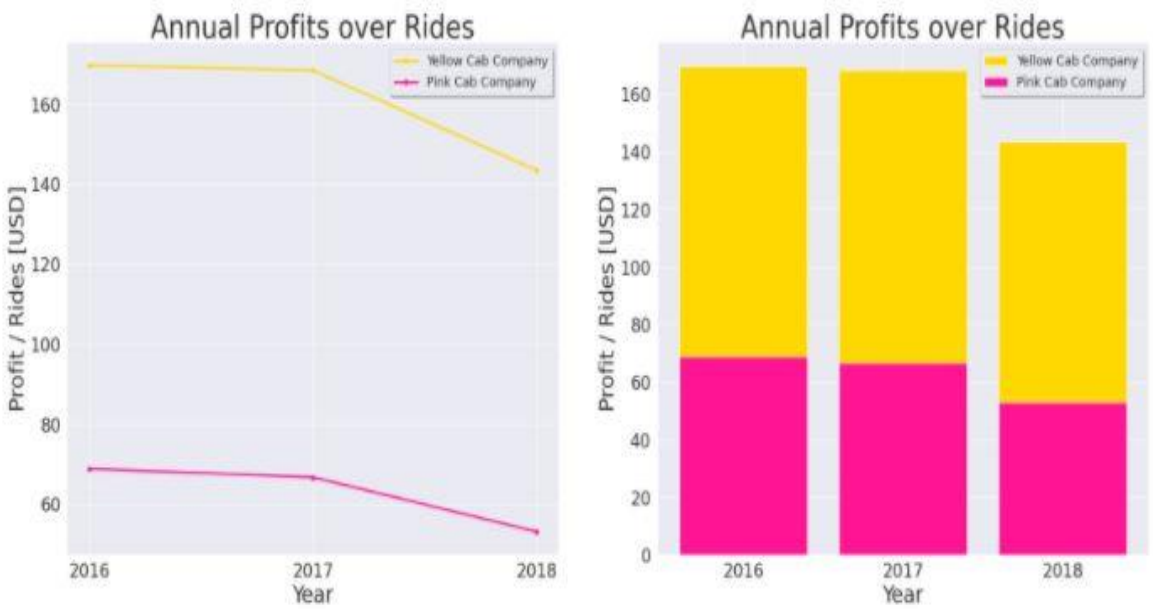


Figure 4.3

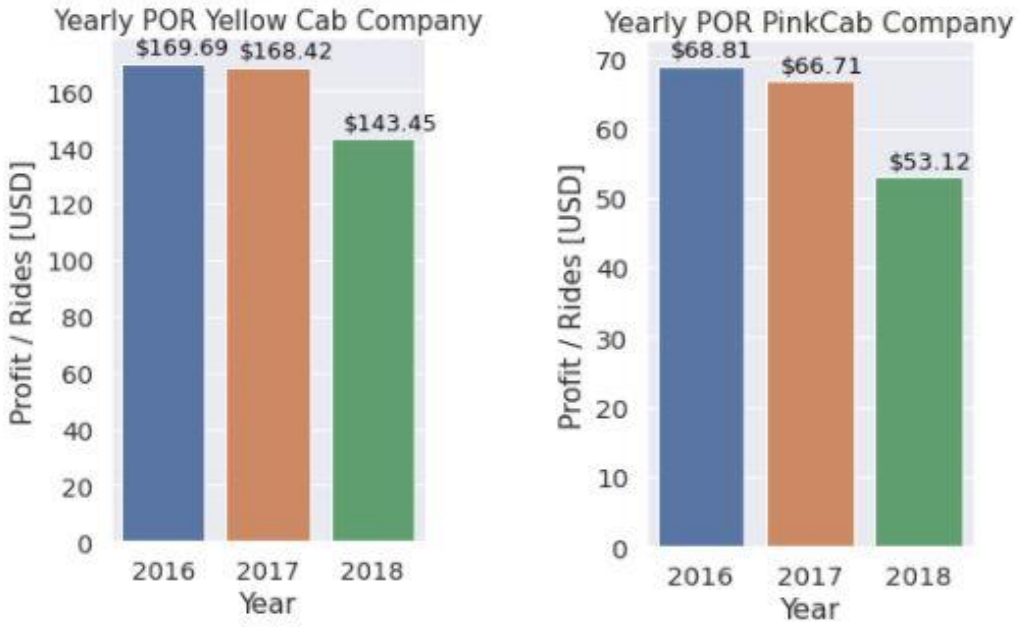


Figure 4.4

Profit per ride decreases over time in both companies.

PROFIT ANALYSIS CONT..

Average profits over Rides (Monthly)

Figure 4.5

PROFIT ANALYSIS CONT..

Average profits over Km (Annual)

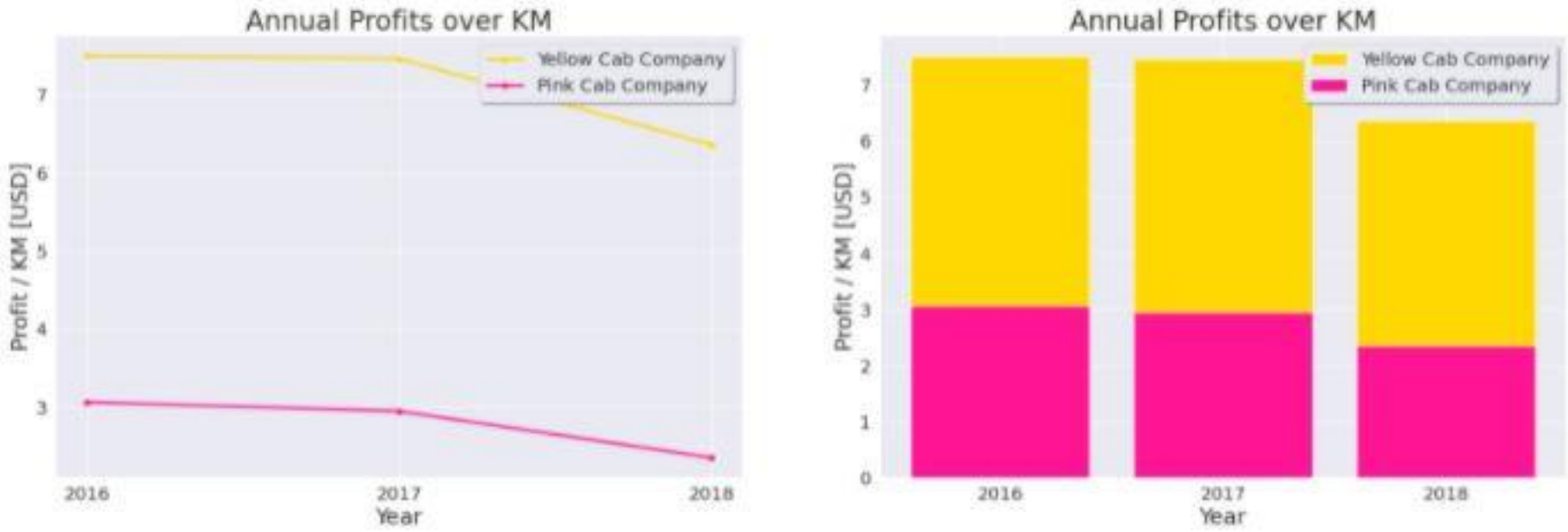


Figure 4.6

Profit per Km decreases over time in both companies.

PROFIT ANALYSIS CONT..

Average profits over Km (Monthly)

Figure 4.7

Profit per Km in Yellow cab company is higher than Pink cab company for each and every month.

PROFIT ANALYSIS CONT..

Profit - City wise

Figure 4.8

In this analysis New York city has been removed from both cab companies to get a better sight of the profits over the other cities.

And we can conclude that Yellow Cab has greater market share in every City.

PROFIT ANALYSIS CONT..

Profit - City wise (Percentage)

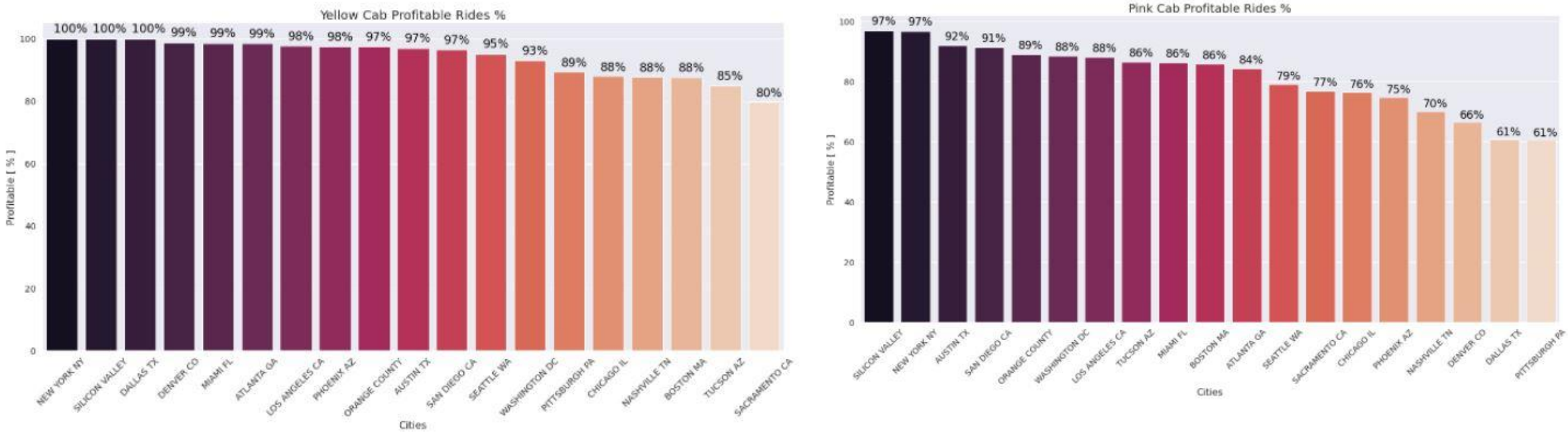


Figure 4.9

Now, we can answer the second hypothesis. For that, let's assume that if the profitability percentage of rides per city is higher than 80%, it will perform well. Then we can say that:
profitability percentage of rides change by cities and Yellow Cab has a high performance according to the analysis by maintaining a high level of profitable rides in every City.

PROFIT ANALYSIS CONT..

Profit per day

Figure 4.10

In Yellow cabs, the average profit per holiday is less than the average profit per normal day.

But when considering the average profit per day in pink cab company, they have gained a bit of higher profit on a holiday than a normal day.

6. DEMAND ANALYSIS

Annual Demand

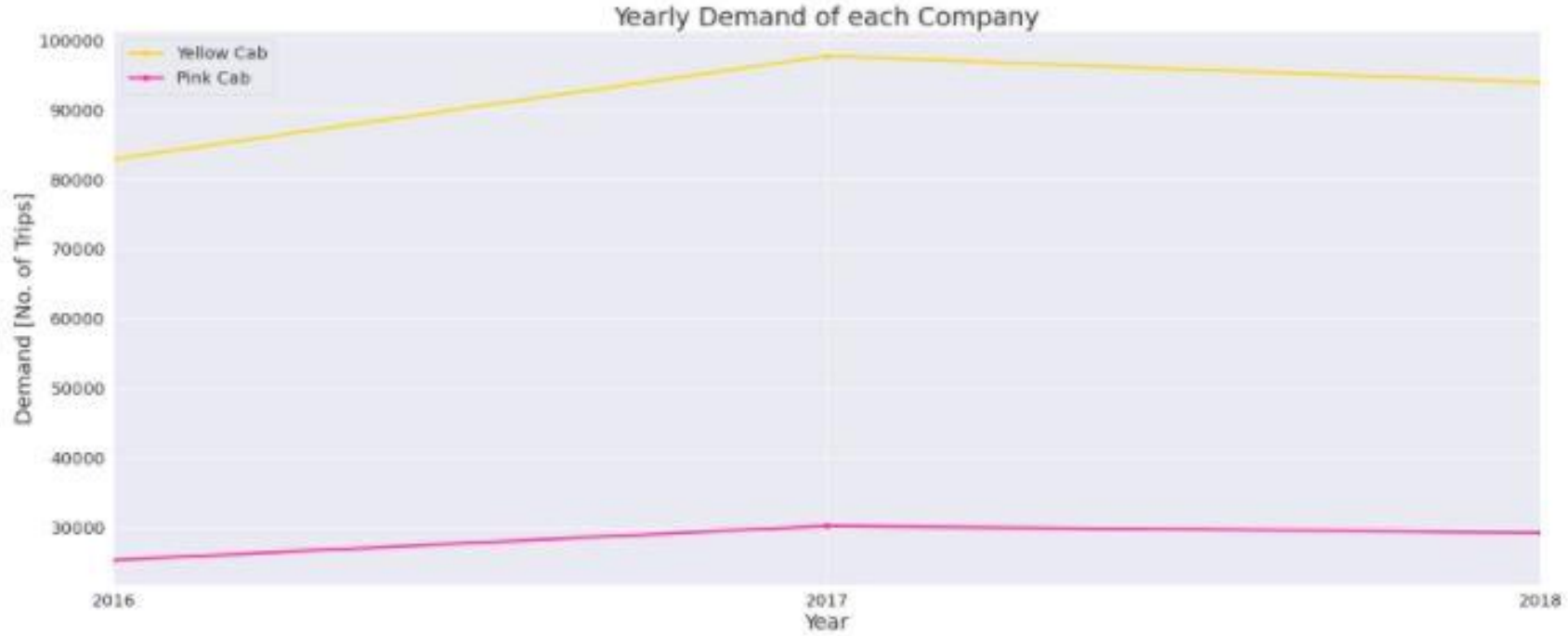


Figure 5.1

Yearly demand of Yellow cab company is maintained nearly 4 times greater than the demand of Pink cab company.

DEMAND ANALYSIS CONT..

Monthly Demand

Figure 5.2

There is a seasonality of demand changing throughout every year. The highest demand is in December.

DEMAND ANALYSIS CONT..

Demand Age wise

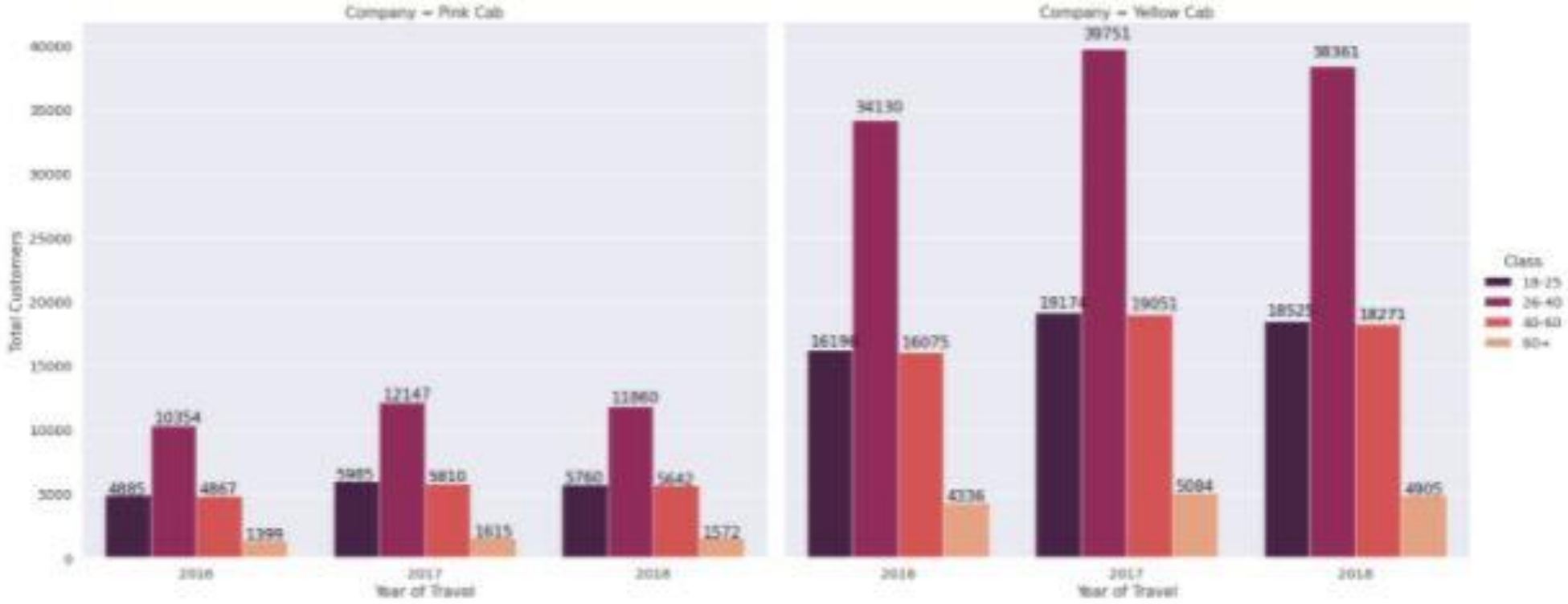


Figure 5.3

Each year both companies have more customers in the age class of 20-40 years.

7. CLIENT ANALYSIS

Loyalty of customers

To analyze the Loyalty rates, Let's define 2 classes:

1. Medium loyalty Customers - Customers who took more than 10 rides yearly.

2. High loyalty Customers - Customers who took more than 10 rides monthly

Figure 5.4

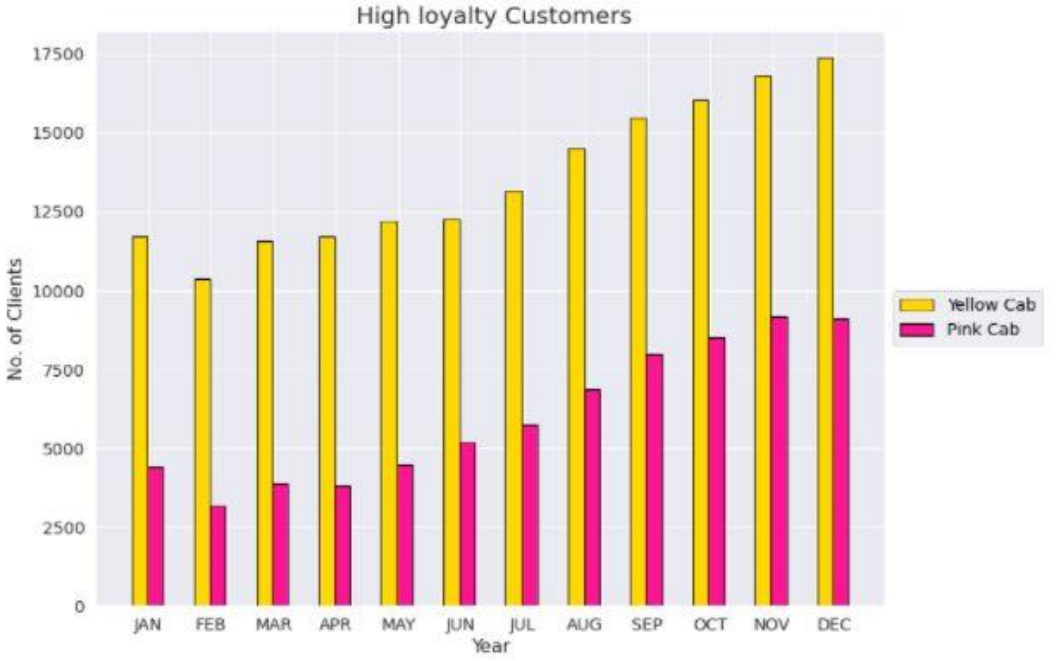


Figure 5.5

CLIENT ANALYSIS CONT..

Loyalty of customers (High loyalty Clients)

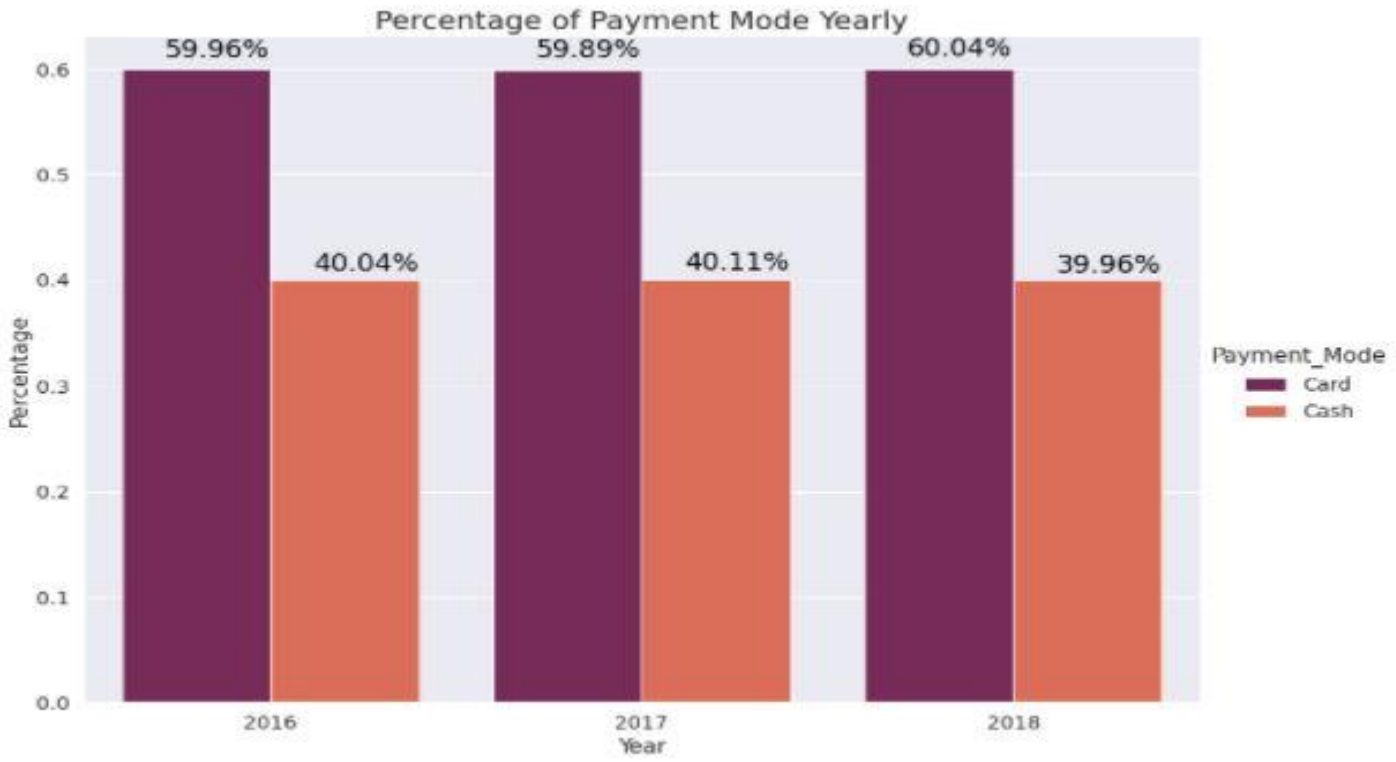
Figure 5.6

Figure 5.7

Yellow Cab Company is doing better in both classes of Loyalty Rates.

CLIENT ANALYSIS CONT..

Variation of payment mode with time



Minimal deviations in the payment method are observed over time.

Figure 5.8

CLIENT ANALYSIS CONT..

Payment mode (City wise)

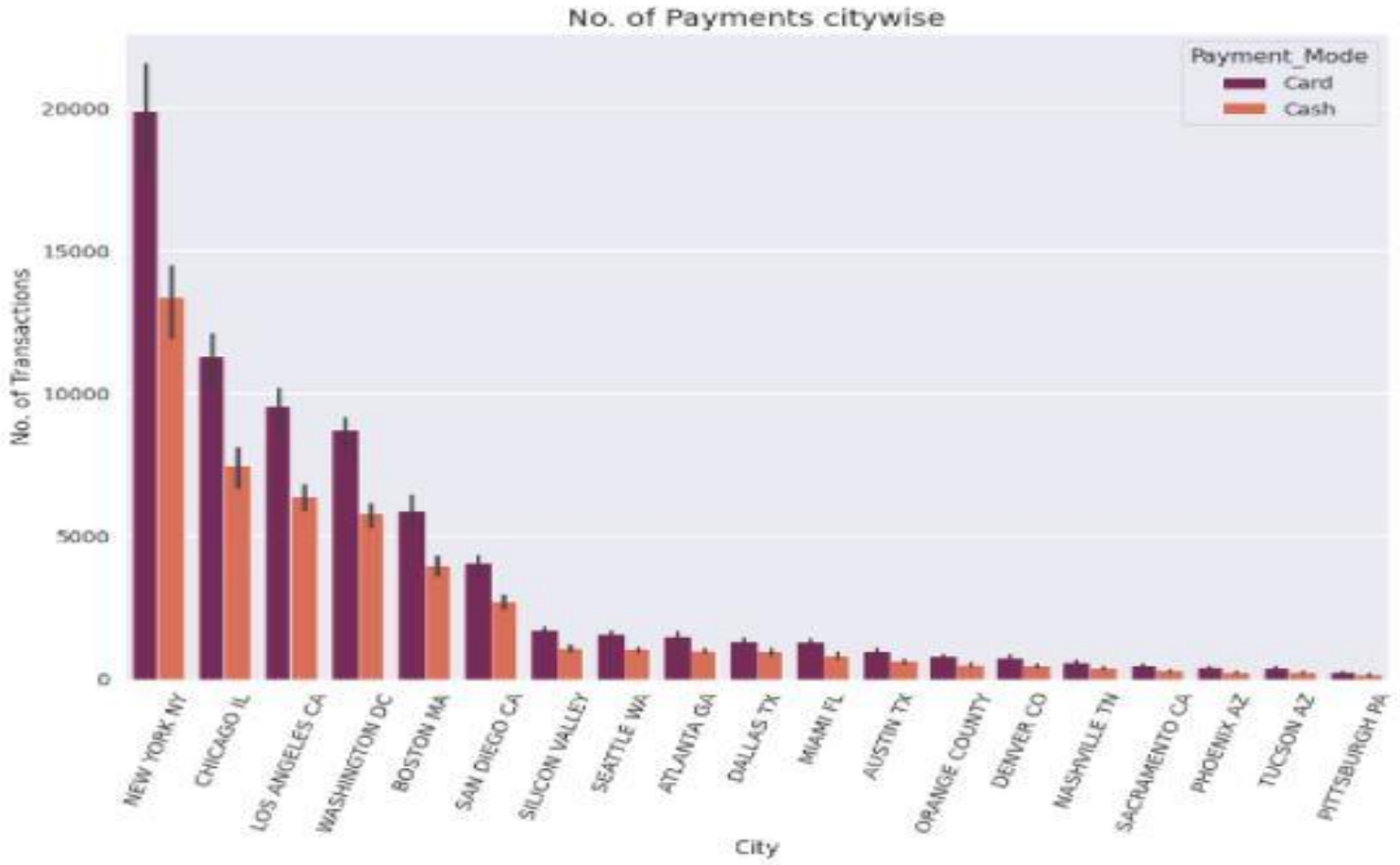


Figure 5.9

Minimal deviations of the payment method are observed in each city.

CLIENT ANALYSIS CONT..

Payment mode (Age wise)

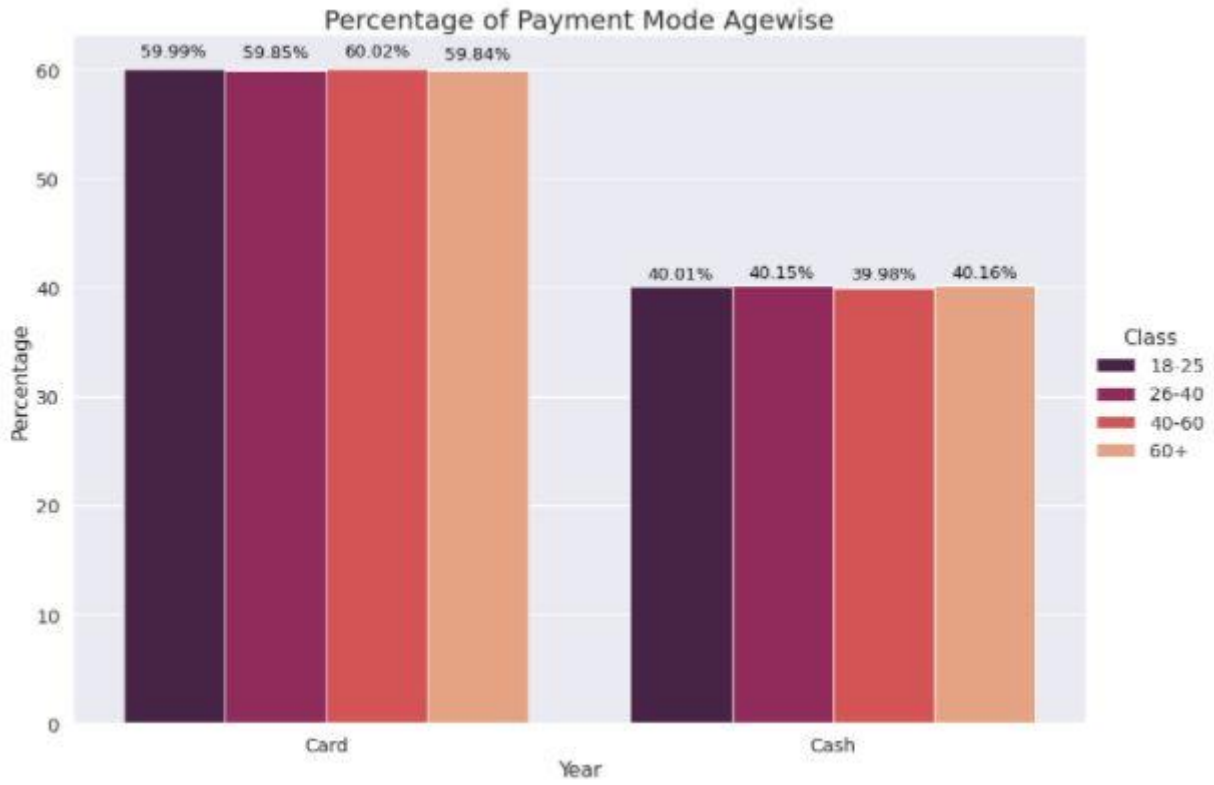


Figure 5.10

Minimal deviations of the payment method are observed with respect to the age of the clients.

8. RECOMMENDATION

1. How does the profit change over time?

- According to the analysis, Yellow Cab Company's earnings are more stable than Pink Cab Company's earnings.
- Profit per ride of Yellow cab company is higher than Pink cab company over three years.
- Profit per Km decreases over time in both companies.
- Profit per Km in Yellow cab company is higher than Pink cab company for each and every month.

2. How does the percentage of profitable trips change by the city?

- Profitability percentage of rides change by cities.
- Yellow Cab has greater market share in every City.

3. How does average profit change by holidays?

- In Yellow cabs, the average profit per holiday is less than the average profit per normal day.
- Pink cab company have gained a bit of higher profit on holidays than normal days.

RECOMMENDATION CONT..

4. How does the demand of the cab industry change over time?
Yearly demand of Yellow cab company is about 4 times greater than yearly demand of Pink cab company.
There is a seasonality of demand changing throughout the year in both cab companies.

5. How the demand varies according to age?
Each year both companies have more customers in the age class of 20-40 years.

6.Loyalty of customers
Yellow Cab Company is doing better in both classes of Loyalty Rates.

7. Fluctuations of payment methods
Minimal deviations in the payment method are observed over time.
Minimal deviations of the payment method are observed in each city.
Minimal deviations of the payment method are observed with respect to the age of the clients.
According to the overall analysis Yellow cab company is better than the Pink cab company for investing.

According to the overall analysis, Yellow cab company is better than the Pink cab company for investing.

Thank You!