



G2M Case Study

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Location: Turkey

Team: Data and Analytics

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Executive Summary

- 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.
- Analysis contains four parts:

Data Understanding

Find and analyze relationships between features

Recommendations for cab investment

Data Exploration

- Timeframe of the data: 2016-01-31 to 2018-12-31
- Total data points :359,393
- Our final data = [Customer ID.csv](#) + [City.csv](#) + [Cab Data.csv](#) + [Transaction ID.csv](#)

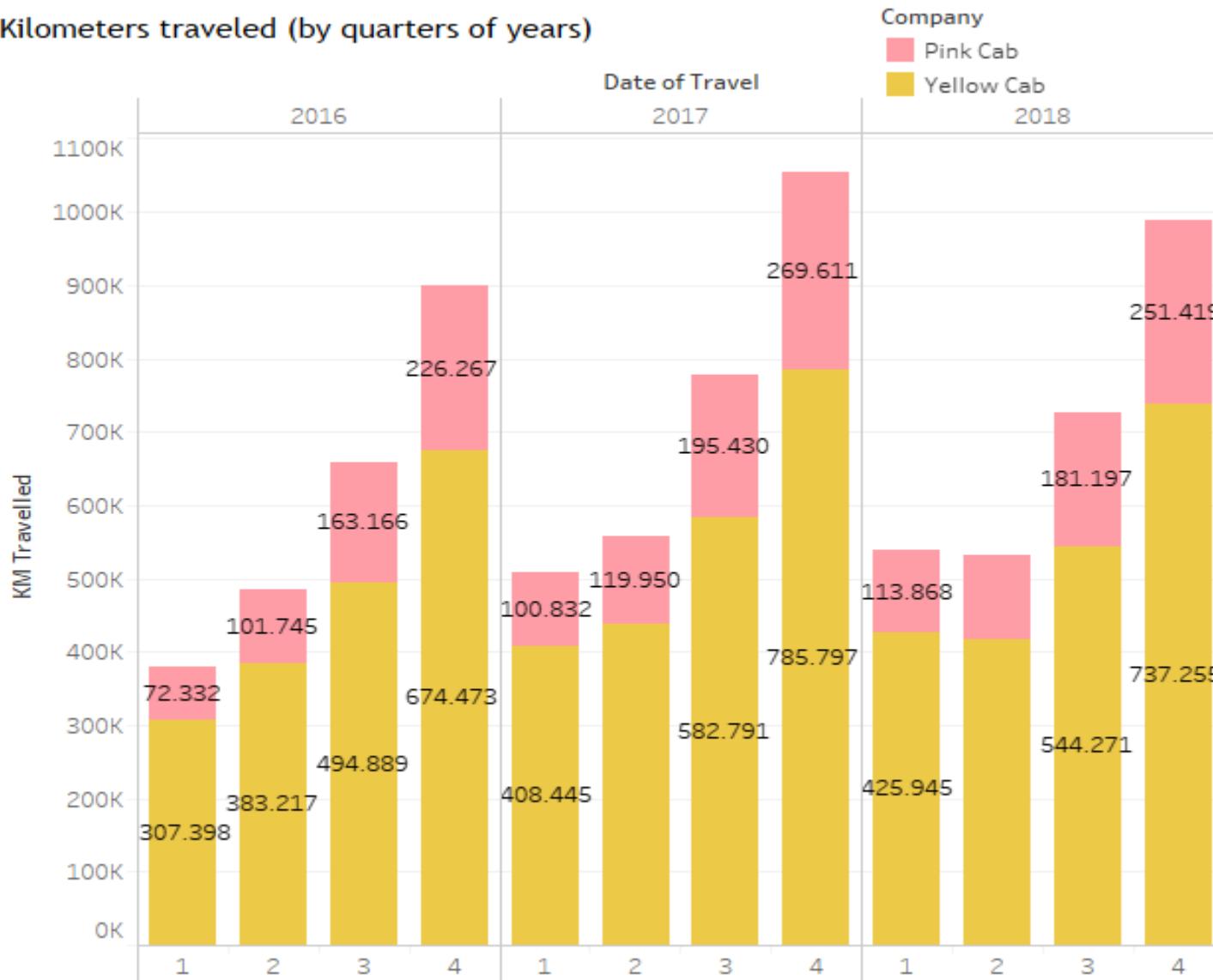
- Assumptions:

Outliers are present in Price_Charged feature but due to unavailability of trip duration details ,we did not treat any value as outlier.

To calculate profit, we used Price Charged and Cost of Trip features and evaluate profit for per KM.

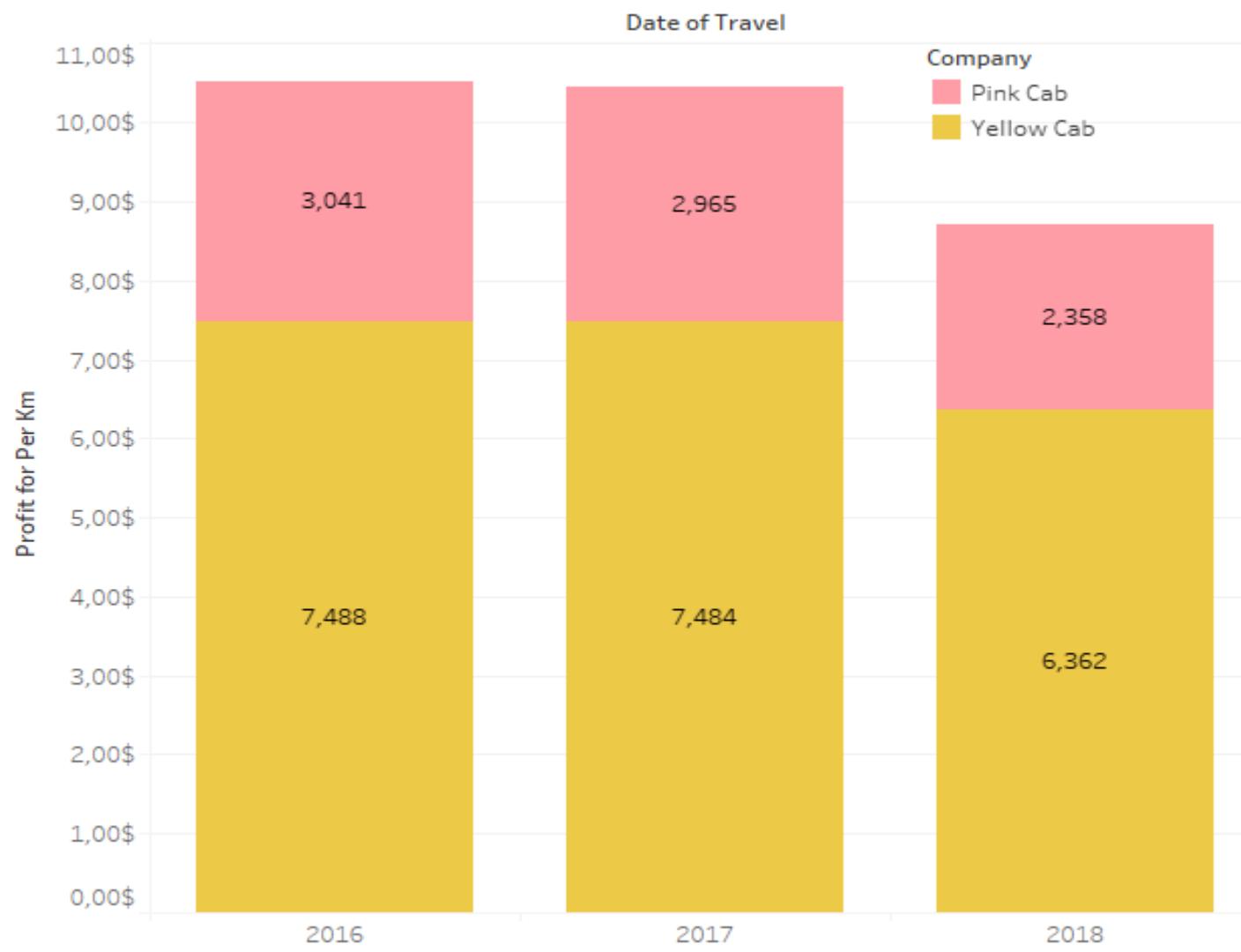
Profit Analysis

Kilometers traveled (by quarters of years)



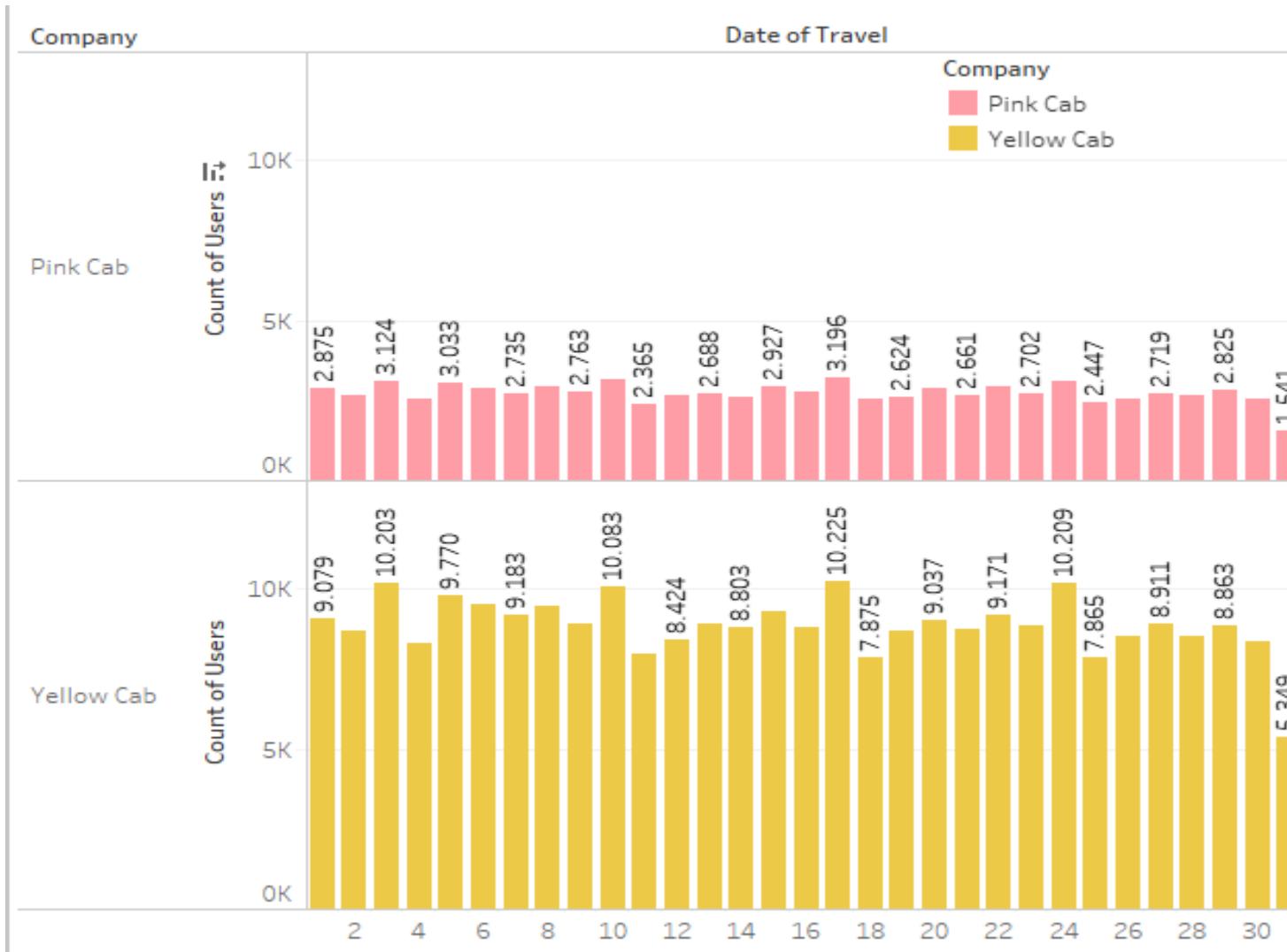
- In the 4th quarter in 3 years, the maximum km in both companies, but Yellow Cab Company about 3 times more km each year than Pink Cab Company.

Profit Analysis for per km



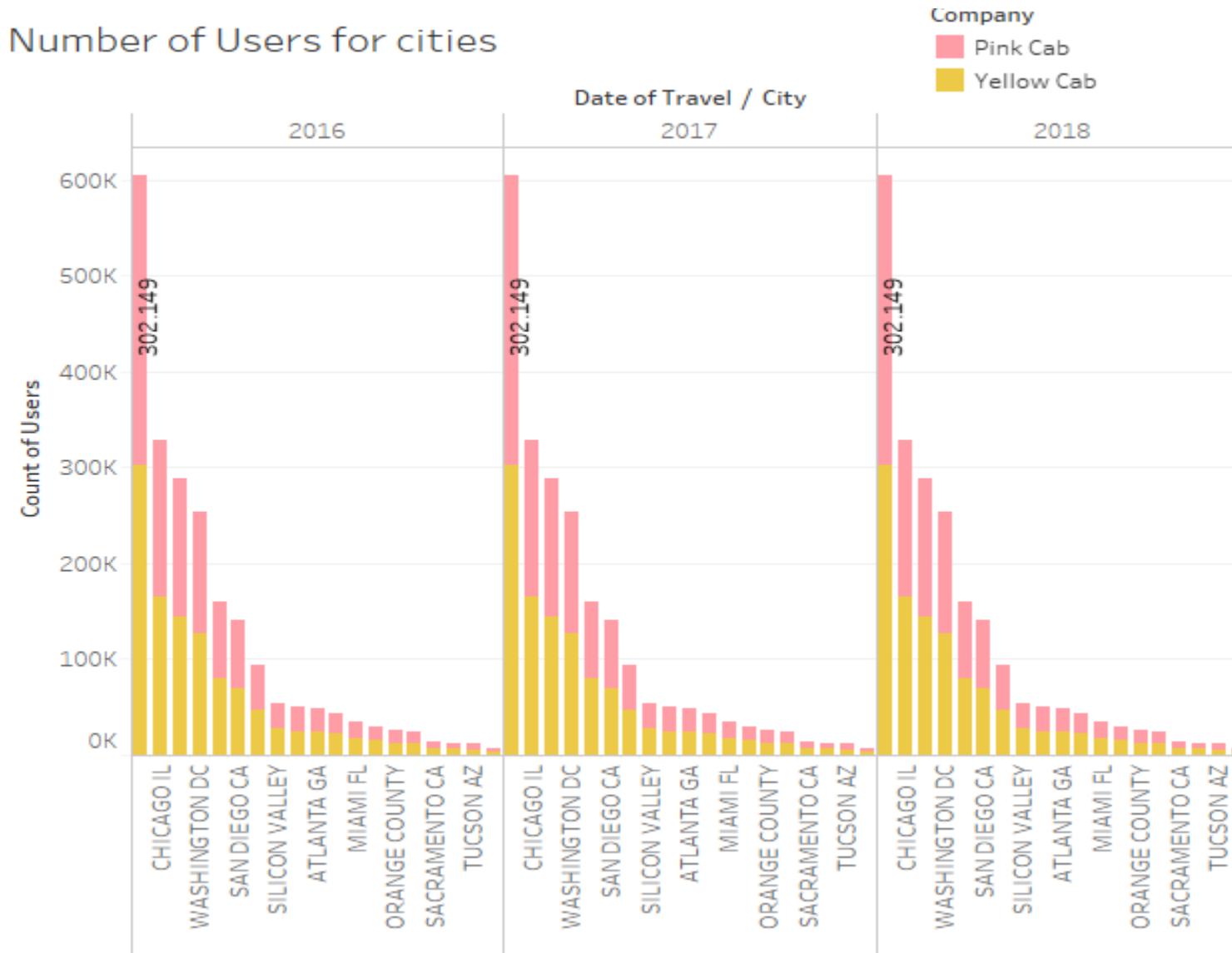
- When we look at the years, the profit per km is more in Yellow Cab Company.

Number of users for companies

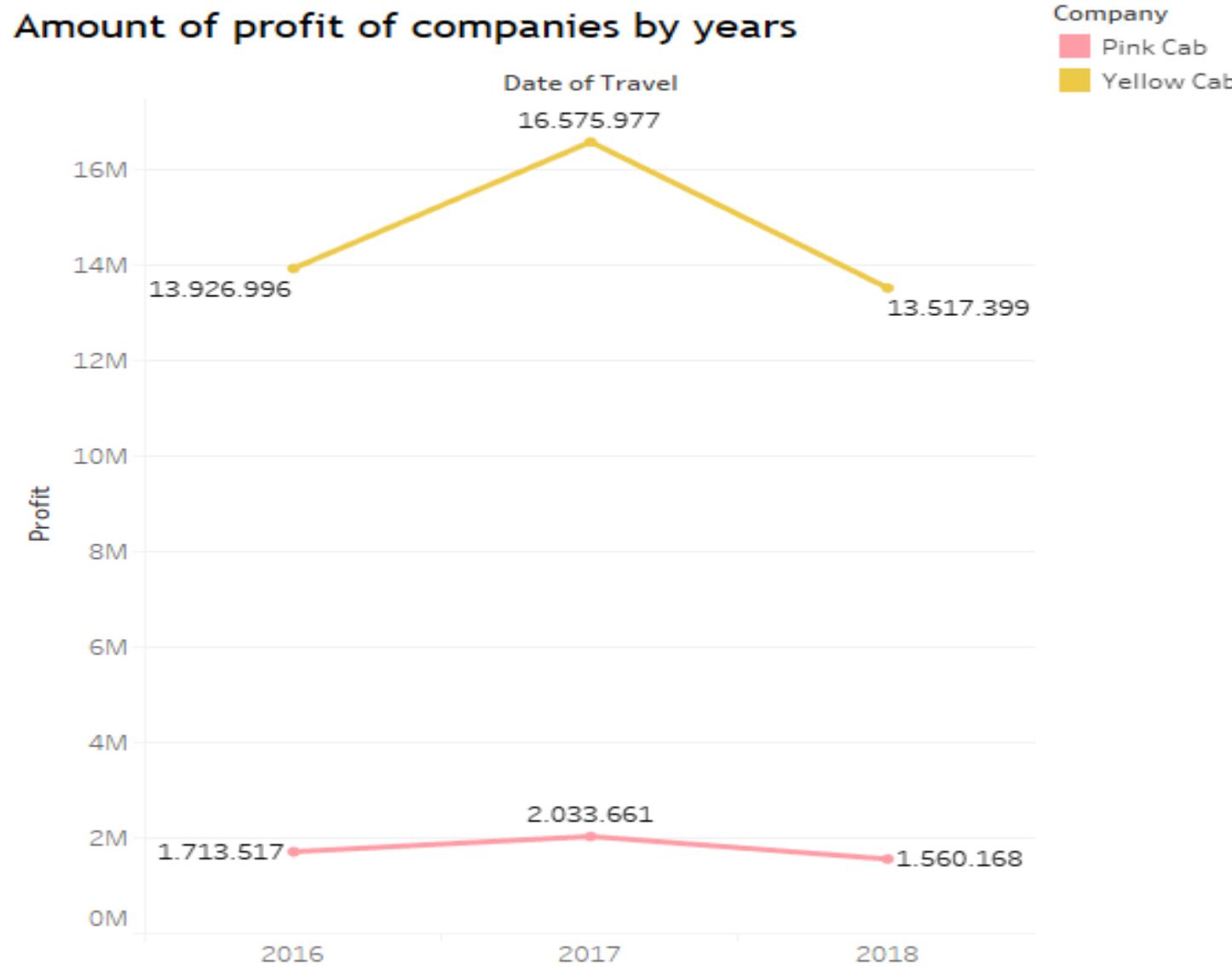


Number of users in cities

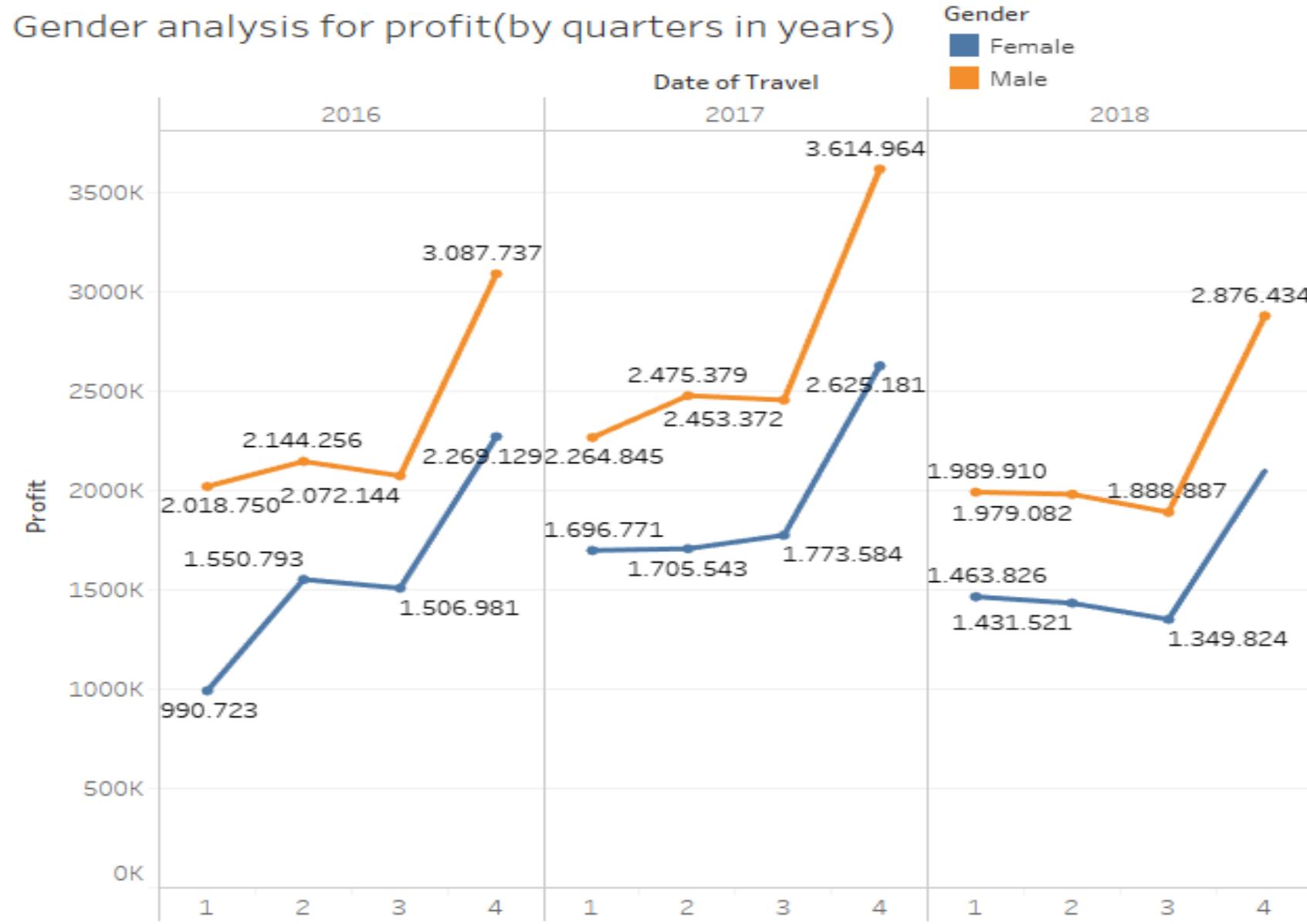
Number of Users for cities



Profit Analysis

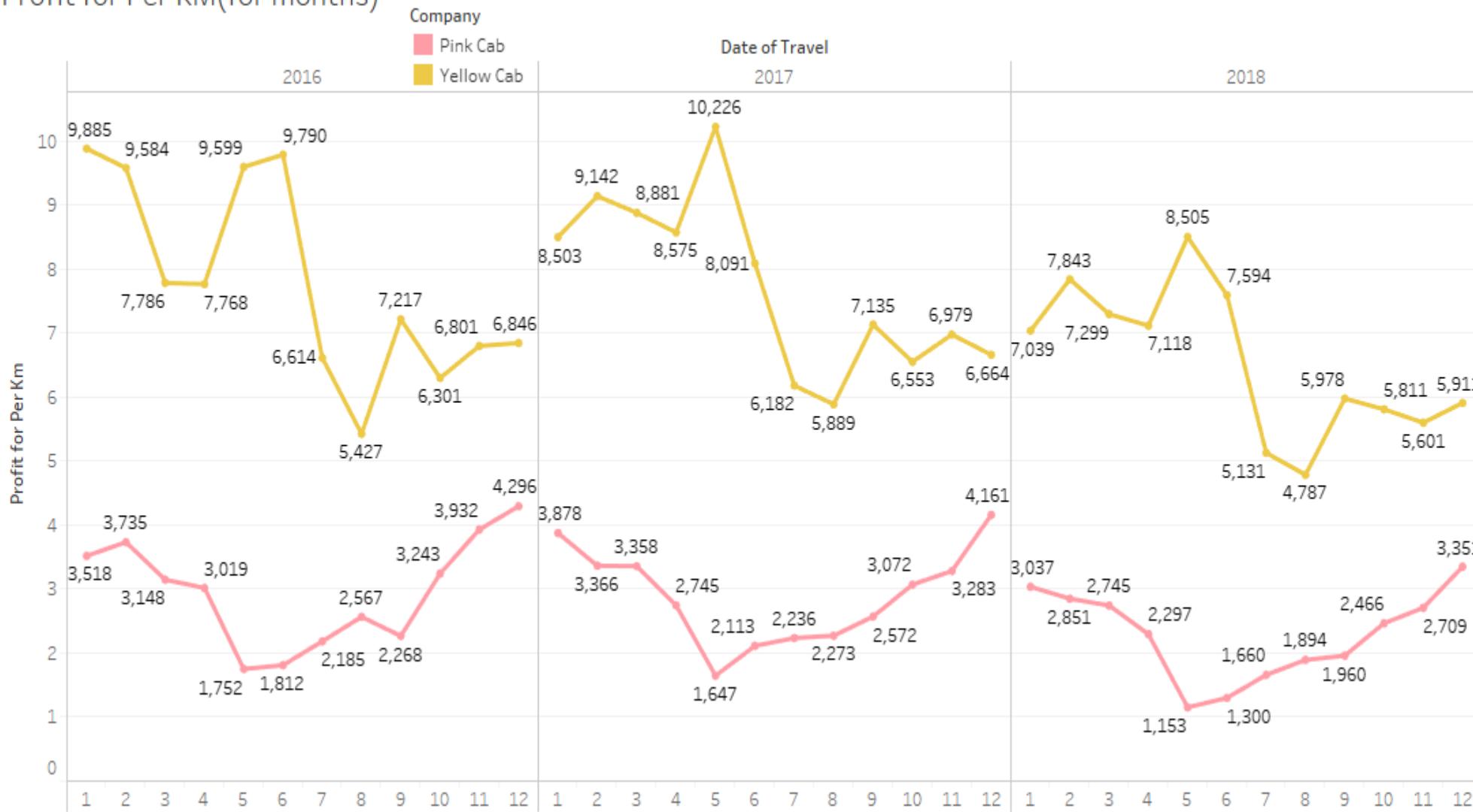


Gender Analysis



Profit Analysis

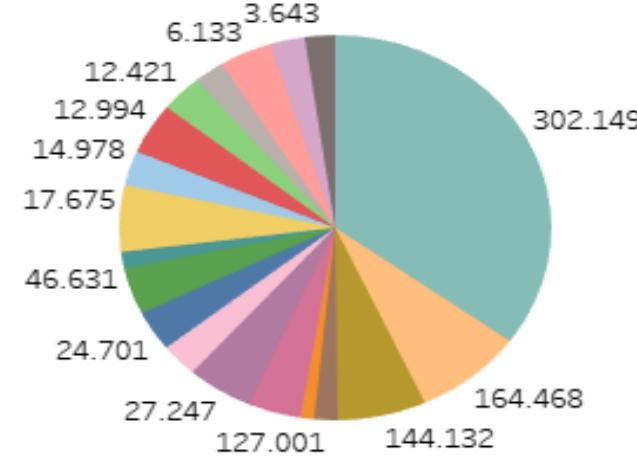
Profit for Per KM(for months)



- When we consider the Profit as the month, we see that Yellow Cab Company is more in the months when the profit of Pink Cab Company decreases.
- We can observe an increase in the last months for both.

Number of Users

Number of Users in cities



Sum of Users

1.114.165

Percentage of Users

City	= Percentage(%)
BOSTON MA	32,14
WASHINGTON DC	30,32
NASHVILLE TN	14,25
LOS ANGELES CA	9,04
CHICAGO IL	8,41
SAN DIEGO CA	7,30
SEATTLE WA	3,73
NEW YORK NY	3,59
ATLANTA GA	3,03
DALLAS TX	2,35
SILICON VALLEY	2,31
AUSTIN TX	2,14
DENVER CO	1,65
MIAMI FL	1,32
SACRAMENTO CA	1,29
ORANGE COUNTY	1,26
TUCSON AZ	0,90
PITTSBURGH PA	0,67
PHOENIX AZ	0,65

Cities with the most cab users (Top 5)

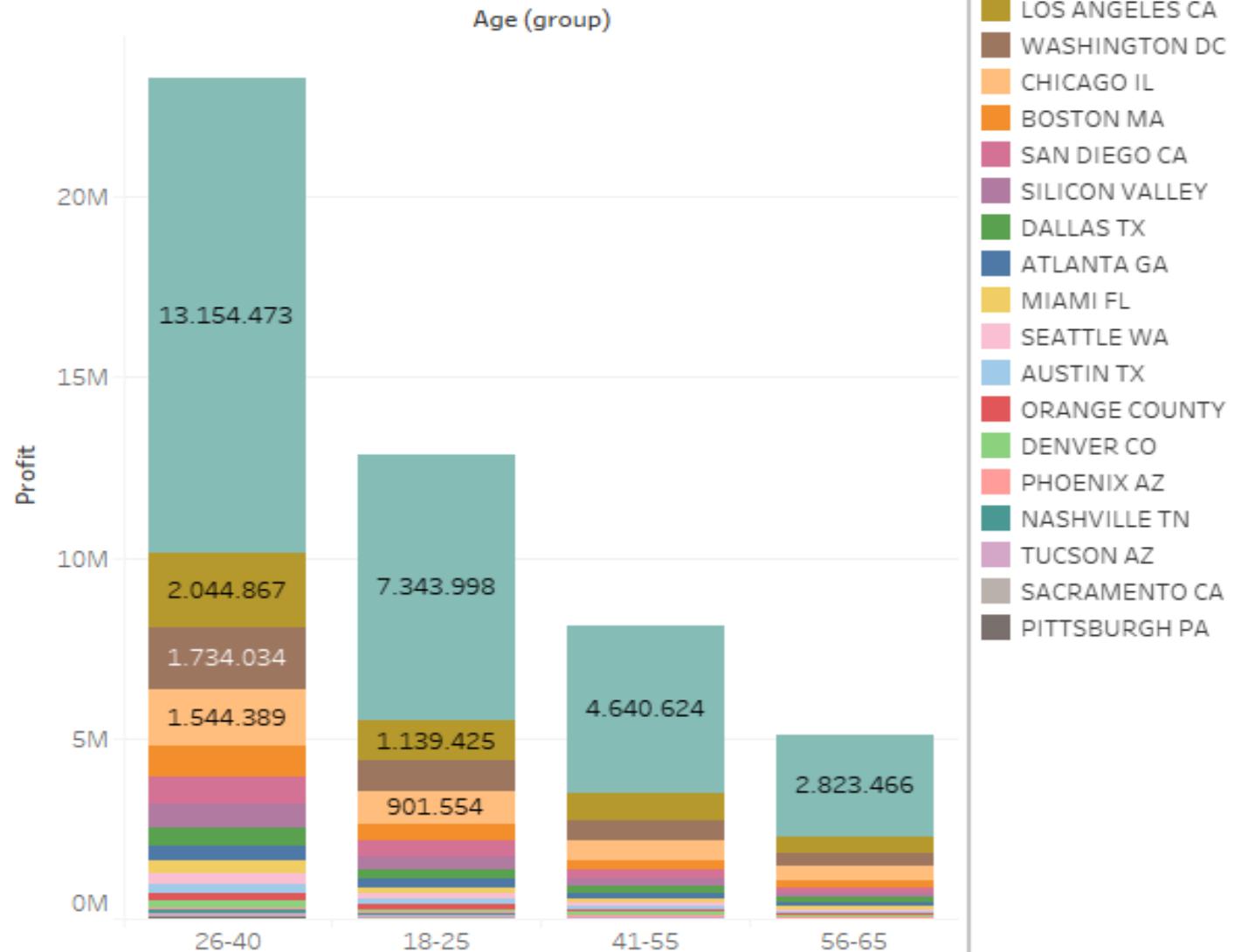
- New York
- Chicago
- Los Angeles
- Washington
- Boston

City

NEW YORK NY	ATLANTA GA	PHOENIX AZ
CHICAGO IL	DALLAS TX	TUCSON AZ
LOS ANGELES CA	NASHVILLE TN	PITTSBURGH PA
WASHINGTON ..	MIAMI FL	
BOSTON MA	AUSTIN TX	
SAN DIEGO CA	ORANGE COUN..	
SILICON VALLEY	DENVER CO	
SEATTLE WA	SACRAMENTO ..	

Number of Users

Profit by Age groups (in Cities)



26-40 age group provides profit the most.

Top Profit cities:

- New York
- Los Angeles
- Washington

Recommendations

From the observations, we can say that Yellow Cab is better than Pink Cab for investment.

- **Customer Reach :**In every city, users prefer Yellow Cab more.
- **Average Profit per KM:** Yellow cab's average profit for per KM is almost three times the average profit per KM of the Pink cab.
- **Profit:** In terms of profit per KM, Yellow Cab periodically provides more profit than Pink Cab.
- **Preferences according to months:** In all periods of the year, Yellow Cab is preferred more than Pink Cab.

We will recommend Yellow cab for investment.

Thank You