G2M

Case Study

Aly Medhat

Data Glacier

Your Deep Learning Partner

BACKGROUND

- 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 and as per their Go-to-Market(G2M) strategy they want to understand the market before taking final decision.

OBJECTIVE

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

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Data Understanding

- Cab_Data.csv – this file includes details of transaction 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 list of US cities, their population and number of cab users

- *Another Data file was downloaded from census website (www2.census.gov/) showing the population of each state.*

After exploring the five datasets understanding the names of the columns and identifying the relationships between them, we started by cleaning the data and then the data was merged to a single master dataset in order to perform the analysis.

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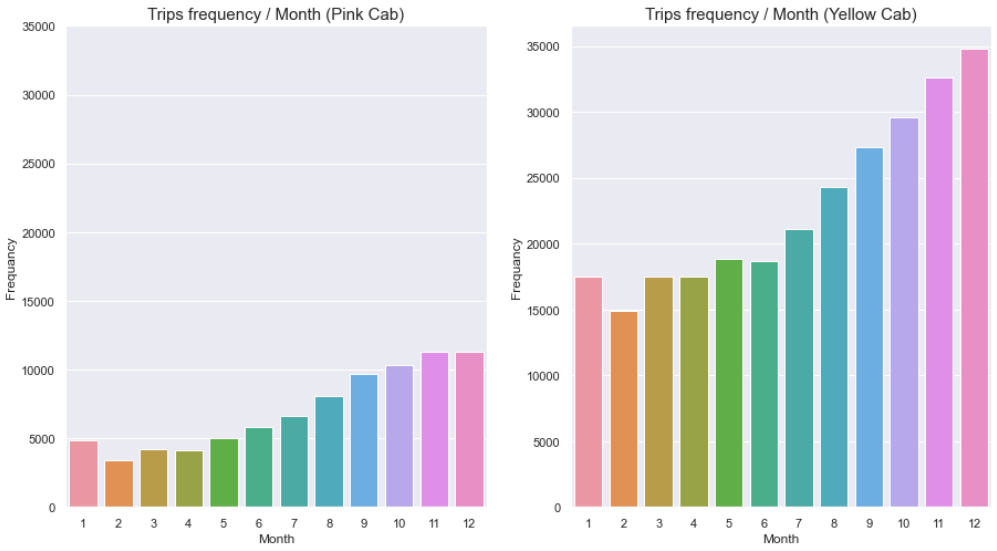
Seasonal Analysis

"Exploratory Data Analysis"

Trips Frequency For Each Month



Observations from the graph:

- It can be noted that Both companies has an increasing in the number of trips starting from January till December.
- The Yellow company performs more than double the trips performed by the Pink company
- The number of trips fluctuations for the yellow company is more high than that of the pink company

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Seasonal Analysis

"Exploratory Data Analysis"

Single Trip Revenue For Each Month

Observations from the graph:

- The Mean Revenue for each trip for the Pink cab Company is much higher than that of the Pink one.
- Both have relatively stable trip revenue through the whole year

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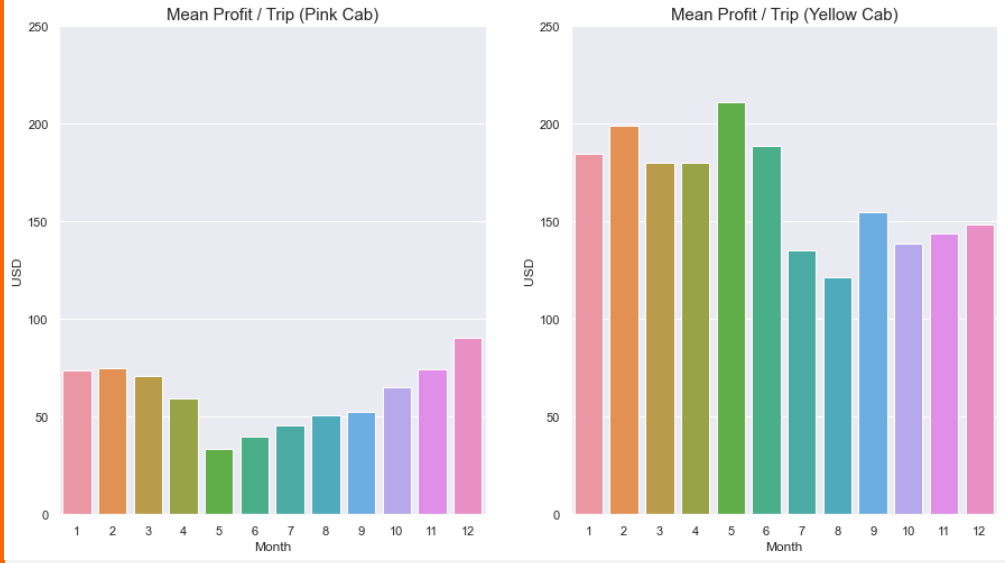
Seasonal Analysis

"Exploratory Data Analysis"

Single Trip Profit For Each Month



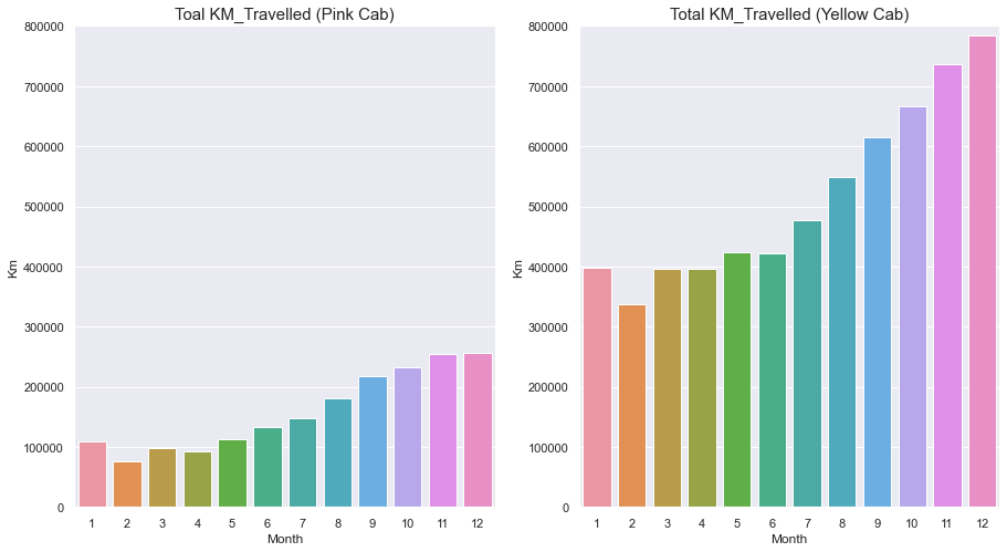
Observations from the graph:

- The Mean Profit for each trip for the Pink cab Company is much higher than that of the Pink one.
- The graph also shows that for both companies the profit decreases the most in August followed by November and December which are the two month with the highest number of trips (from graph 1).

Seasonal Analysis

"Exploratory Data Analysis"

Total Trips Kms For Each Month



Observations from the graph:

- The increase of the number of Kms is directly proportional with the number of trips (from graph 1)

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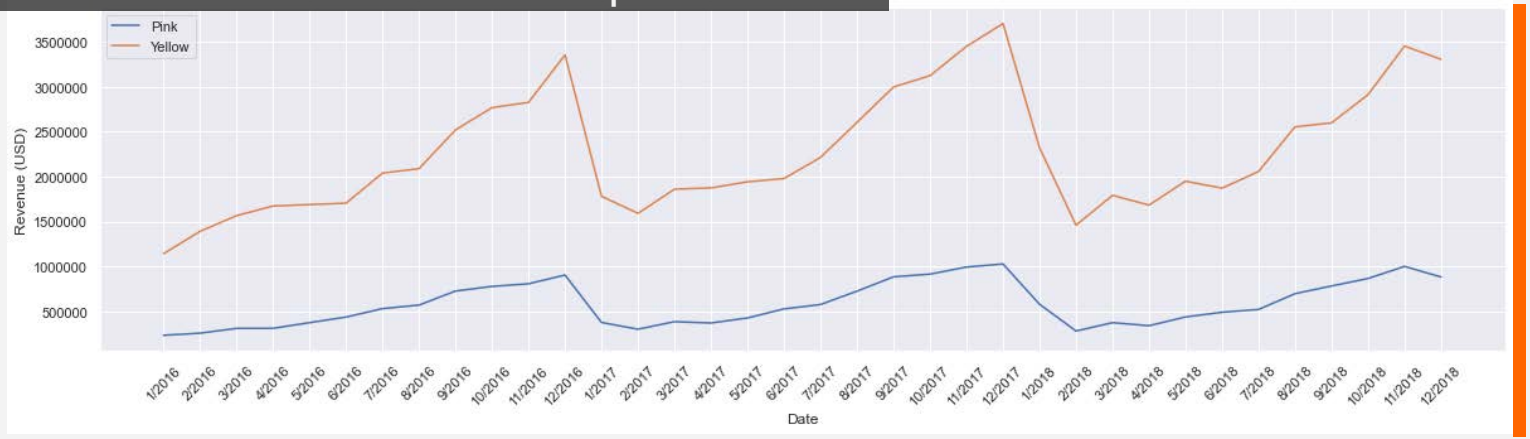
Profit Analysis

"Exploratory Data Analysis"

Total Monthly Revenue From 2016 to 2018
Yellow Cab Vs Pink Cap

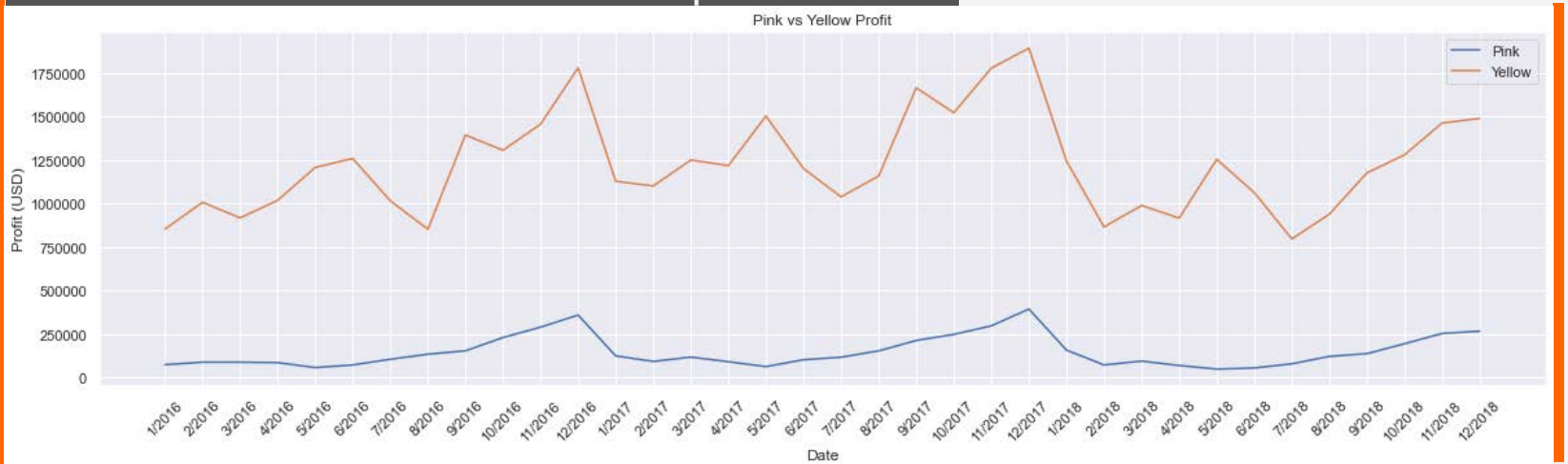


- The revenues of the yellow company through the three years is double (sometimes triple) that of the pink company.
- The graph shows that through the given three years, there isn't any obvious growing in the revenue of both companies. Indicating that both kept their market value without any increase or decrease.

Profit Analysis

"Exploratory Data Analysis"

Total Monthly Profit From 2016 to 2018
Yellow Cab Vs Pink Cap

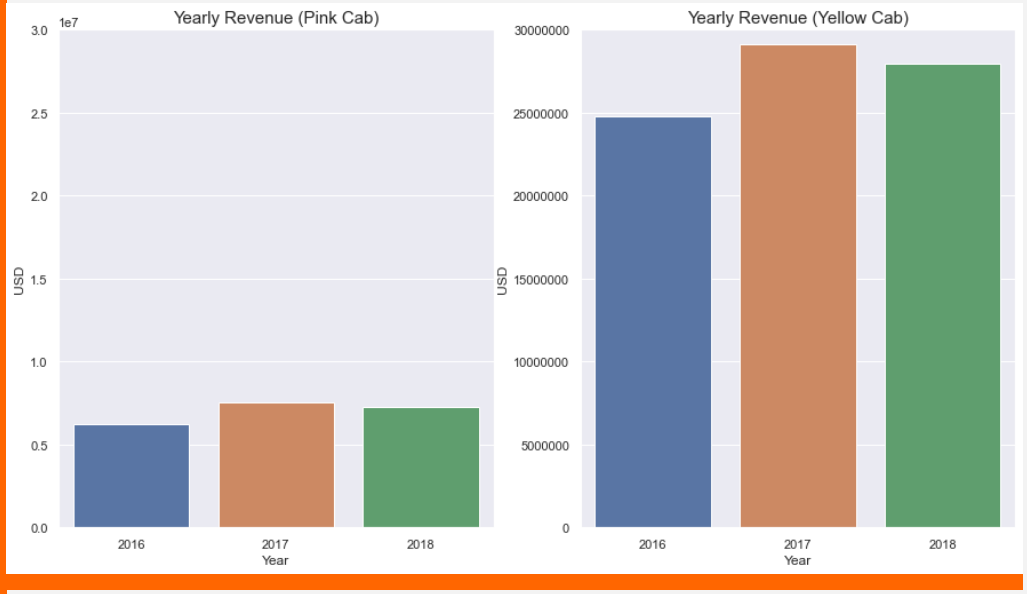


- The profit of the yellow company is much higher than that of the pink company.
- In contrast to the revenue graph. The profit of the yellow company showed very large fluctuations through the given three years (nearly 900,000 USD) while the pink company showed nearly stable profit through the three years.

Profit Analysis

"Exploratory Data Analysis"

Annual Growth



- For both companies, the highest achieved revenue was during 2017 followed by 2018 then 2016.

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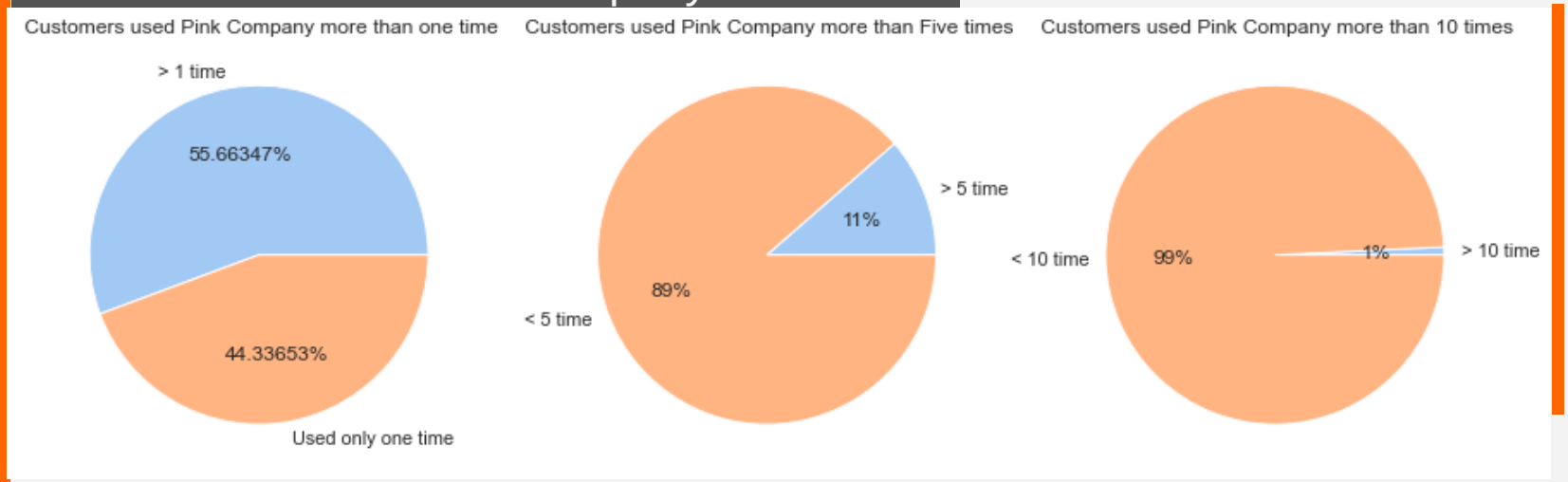
Customer Retention

"Exploratory Data Analysis"

Number of the customers that regularly uses the Pink company

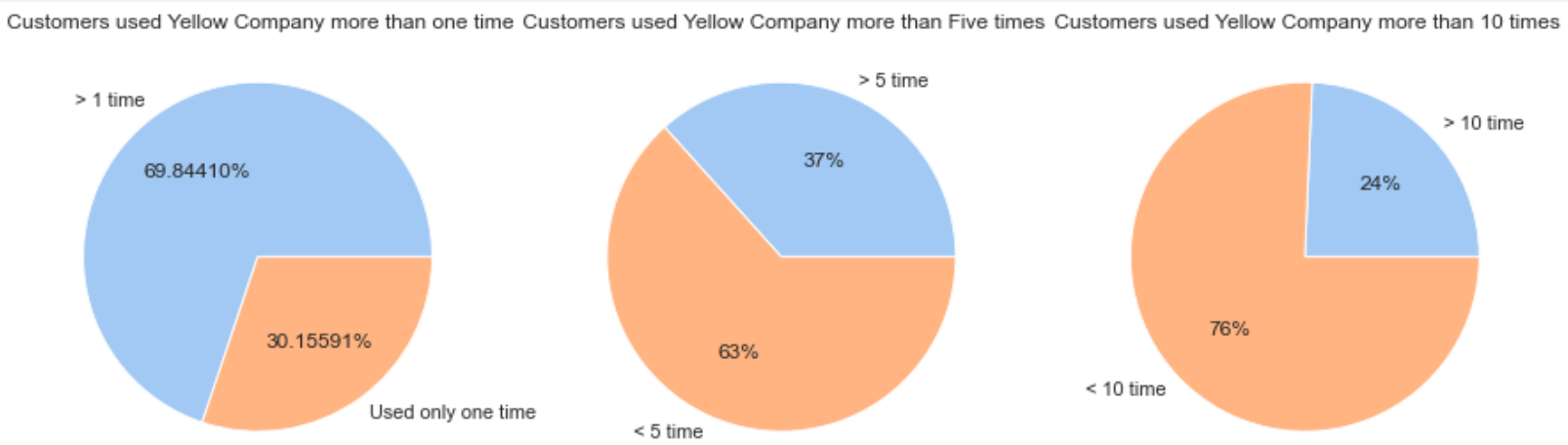


- The Graph shows that :
- 44.33% of the whole customers of the yellow company used it only one time.
- 11% of the whole customers of the yellow company used it more than five times.
- 1% of the whole customers of the yellow company used it more than ten times.

Customer Retention

"Exploratory Data Analysis"

Number of the Customers That regularly Uses the Pink Company

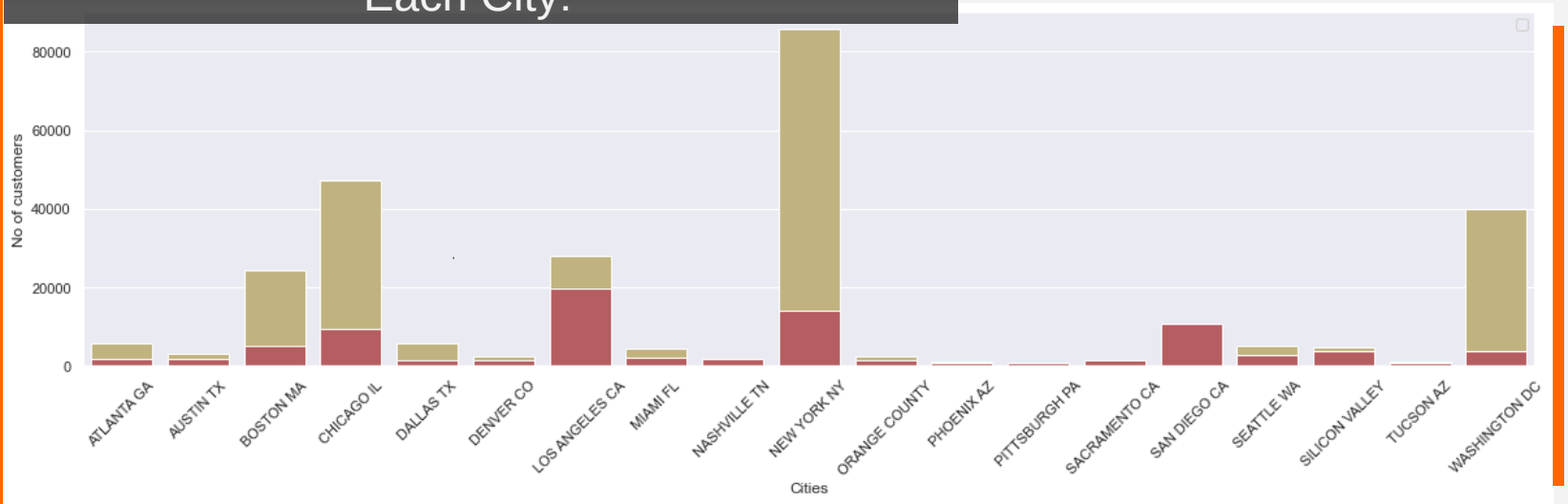


- The Graph shows that :
- 69.84% of the whole customers of the yellow company used it only one time.
- 37% of the whole customers of the yellow company used it more than five times.
- 24% of the whole customers of the yellow company used it more than ten times.

States Exposure

"Exploratory Data Analysis"

Number of Customers For Each Cab at Each City:

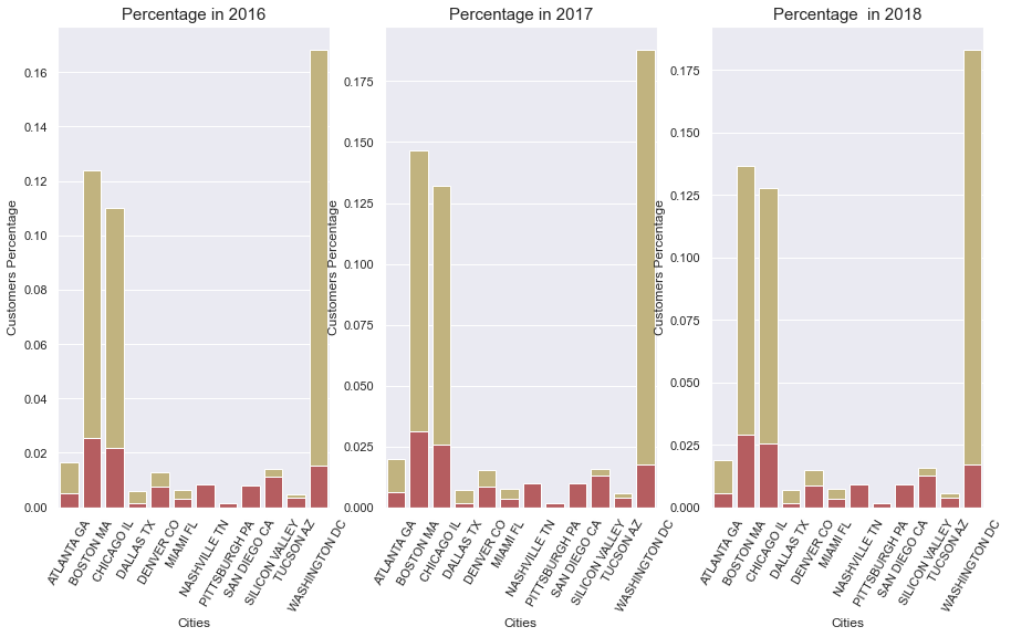


- Yellow company has highest clients base at New York City followed by Washington DC while the Pink company has the highest client base at Los Angeles followed by NYC.

States Exposure

"Exploratory Data Analysis"

Number of Customers For Each Cab at Each City:



Observations from the graph:

- To compare the percentage of the customers at each city to the whole state population, the population data had to be downloaded from the census website (www2.census.gov/).
- The data showed that both companies has a very small target segment for each state. Less than 0.02 in most of the states. It also showed that there isn't also any obvious growth for the number of customers from a year to another.

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Investment Recommendations

- After Performing an executive analysis, the final decisions are as follow:
- 1- Yellow company has higher profit than the pink company
- 2- Both companies has seasonal changes in Revenues.
- 3- More customers who used the yellow Company preferred to use it again than customers who used the Pink company.
- 4- Both companies didn't show any obvious revenue increase neither decrease in the past few years.
- 5- The yellow companies has shown higher profit, yet it showed higher fluctuations in the revenues. While the pink company had shown smaller profit, yet it was stable through the three year.

-The final decision is to invest in the Yellow company-

THANK YOU

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