

# **Exploratory Data Analysis**

Analysis of Cab Data

20.10.2022

# Agenda

**Executive Summary** 

**Problem Statement** 

Approach

**EDA** 

**EDA Summary** 

Recommendations



# Executive Summary

The project analyzes 'cab data' which contains the data of two cap companies, namely 'Pink' and 'Yellow' in the USA between 2016-2018 to find the potential company for investment. The project concludes that Yellow Cub is the better choice for investment on the grounds that it generates more profit in total and per km. Moreover, on the basis of the size of operation and number of users Yellow Cab is bigger and therefore it is a more reliable company.



## Approach

# <u>Decisions on the investment rely on the comparisons of :</u>

Size

**Profit** 

Stability

Operation



#### The Data Contains

- 355032 entries
- 18 columns

#### Cleaning:

'Date of Travel' Problem?

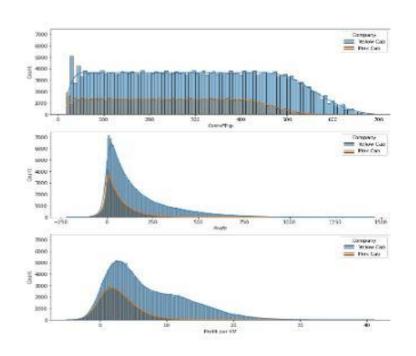
#### Questions

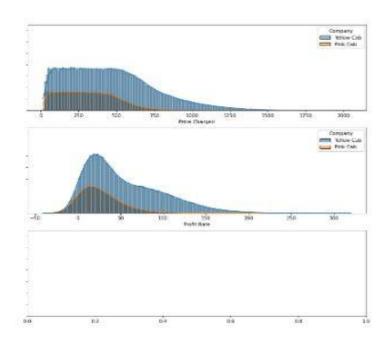
- 1- What is the profit generated by these two companies? (which one generates more?)
- 2- What is the profit generated per km by these two companies?
- 3- Which company has more rides and more profit?
- 4- What is the gender and age distribution of customers?
- 5- What is the market share of the companies in different years (2016-2017)?
- 6- What is the number of users of each company in cities?
- 7- What is the market share of companies in the cities?



#### Questions

- 1- What is the profit generated by these two companies? (which one generates more?)
- 2- What is the profit generated per km by these two companies?







#### Questions

3- Which company have more ride and more profit?

```
Profit Rides profit per ride
Company
Pink Cab 5237540 83825 62.481837
Yellow Cab 43251775 271207 159.478830
```

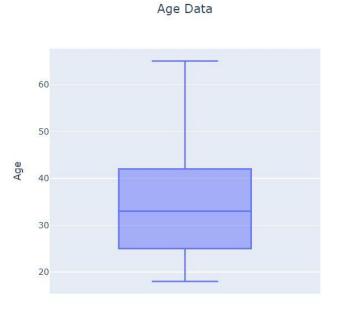
Yellow Cab has advantageous position



#### Questions

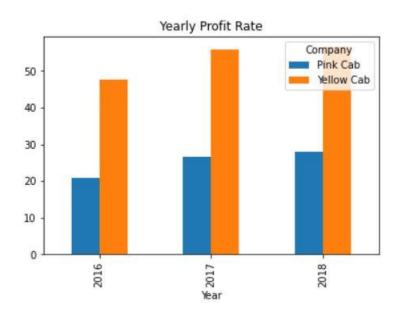
4- What are gender and age distribution of costumers?







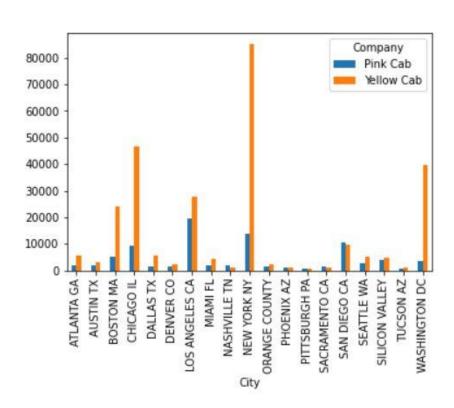
5- What is the market share of the companies in different years?



Yellow generates more profit each year



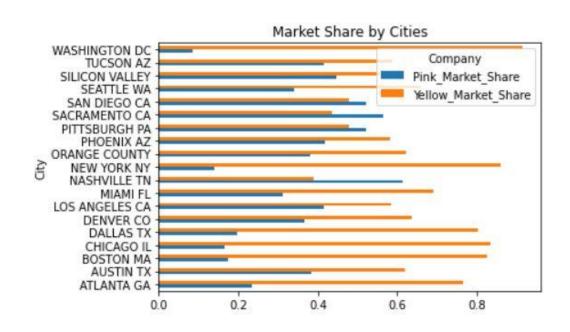
6- What is the number of users of each companies in cities?



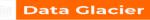
Yellow dominantion in cities



7- what is market share of companies in the cities?



The Yellow still dominantes



## EDA Summary

#### Yellow Cub surpasses The Pink over:

- Profit in total and per km.
- Yearly market share
- Size of operation
- Number of users



### Recommendations

As Yellow would be a better choice for investement.



# Exploratory Data Analysis

Analysis of Cab Data

**Sedat CAN** 

### Thank You

