

# Exploratory Data Analysis

Cab project

April 22, 2022

## Agenda

**Executive Summary** 

**Problem Statement** 

Approach

**EDA** 

**EDA Summary** 

Recommendations



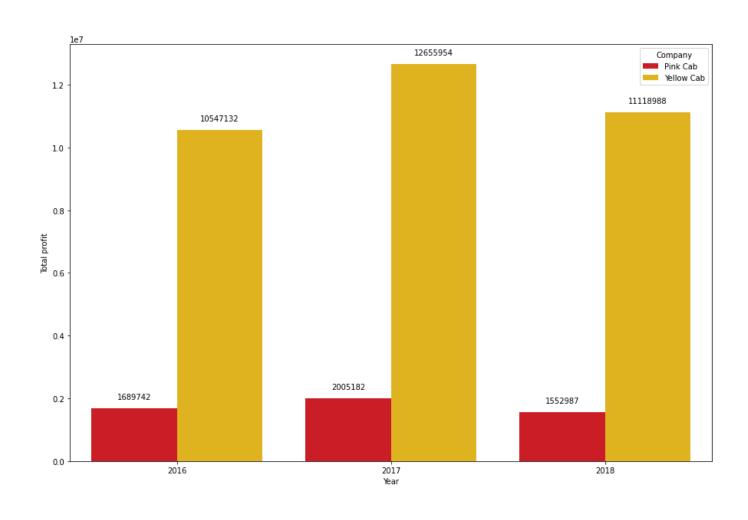
#### **Executive Summary**

- Yellow cab company has maximum cab users for each three years analyzed.
- Profit proportionally increased with the increase in number of customers. Yellow cab company has a significant profit compared to Pink Cab company.
- The yellow company has a greater presence in all cities than the pink company.
- It generates a greater profit since it has a greater number of users.
- The cities with the highest number of users and therefore economic benefit are New York, Washington, Los Angeles and Chicago.

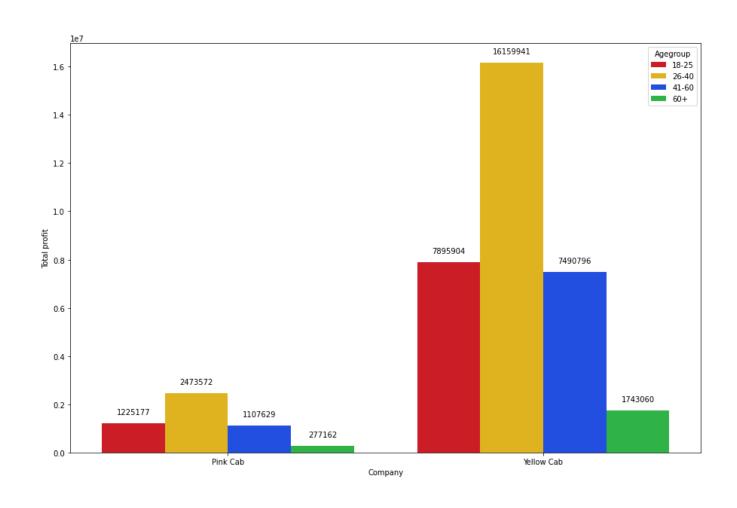
#### Problem Statement and approach

- The business problem that can be proposed is, given an investor interested in the cab industry which cab company would be a good choice.
- Before choosing the problem above described, a little research has been conducted in order to decide the following items:
- Which company has maximum cab users at a particular time period?
- Does margin proportionally increase with increase in number of customers?
- What are the attributes of these customer segments? These questions will be answered in the following section.

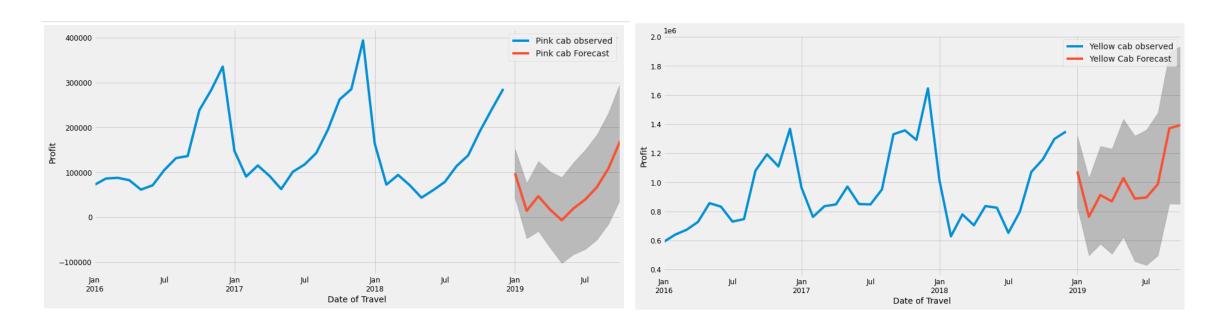
#### Total profit for each year and company



### Total profit for each company and age group



#### EDA and EDA Summary



Based on Time Series analysis performed for both Pink and Yellow Cab companies, the yellow company has a significant profit in the next year.

#### Recommendations

After the analysis carried out, we can affirm that the company in which it should be invested, and therefore the one that will generate the most profit and the one that will have the most users is the Yellow Cab company for the following reasons:

- The yellow company has a greater number of users per year than the pink company.
- The yellow company generates more profit per year than the pink company.
- The yellow company has a greater number of users per city than the pink company.
- The yellow company generates greater profit per city than the pink company.
- Yellow cab have customers in all age groups, and it's been observed that it's even popular in 60 plus age group as equally as its in 18-25 age group.
- The yellow company will generate a future profit greater than the pink company.

Based on above points, we will recommend Yellow cab for investment.

### Thank You

