



**Data Glacier**

Your Deep Learning Partner

# G2M Case Study

## Cab Industry

08/29/21

# Background

- The company XYZ has experience a large amount of growth in the cab industry. Now they are looking to expand their business.
- **Objective:** Provide insight in to which company XYZ should invest in.
- The analysis hopes to answer the following questions:
  - Which company has a **higher profit**?
  - Which company has a **higher profit margin**?
  - Which company provides more **rides each year**?
  - Which company has more **unique customers**?
  - Which **month** do most **rides** occur per company?
  - Which **month** creates the most **profit** per company?

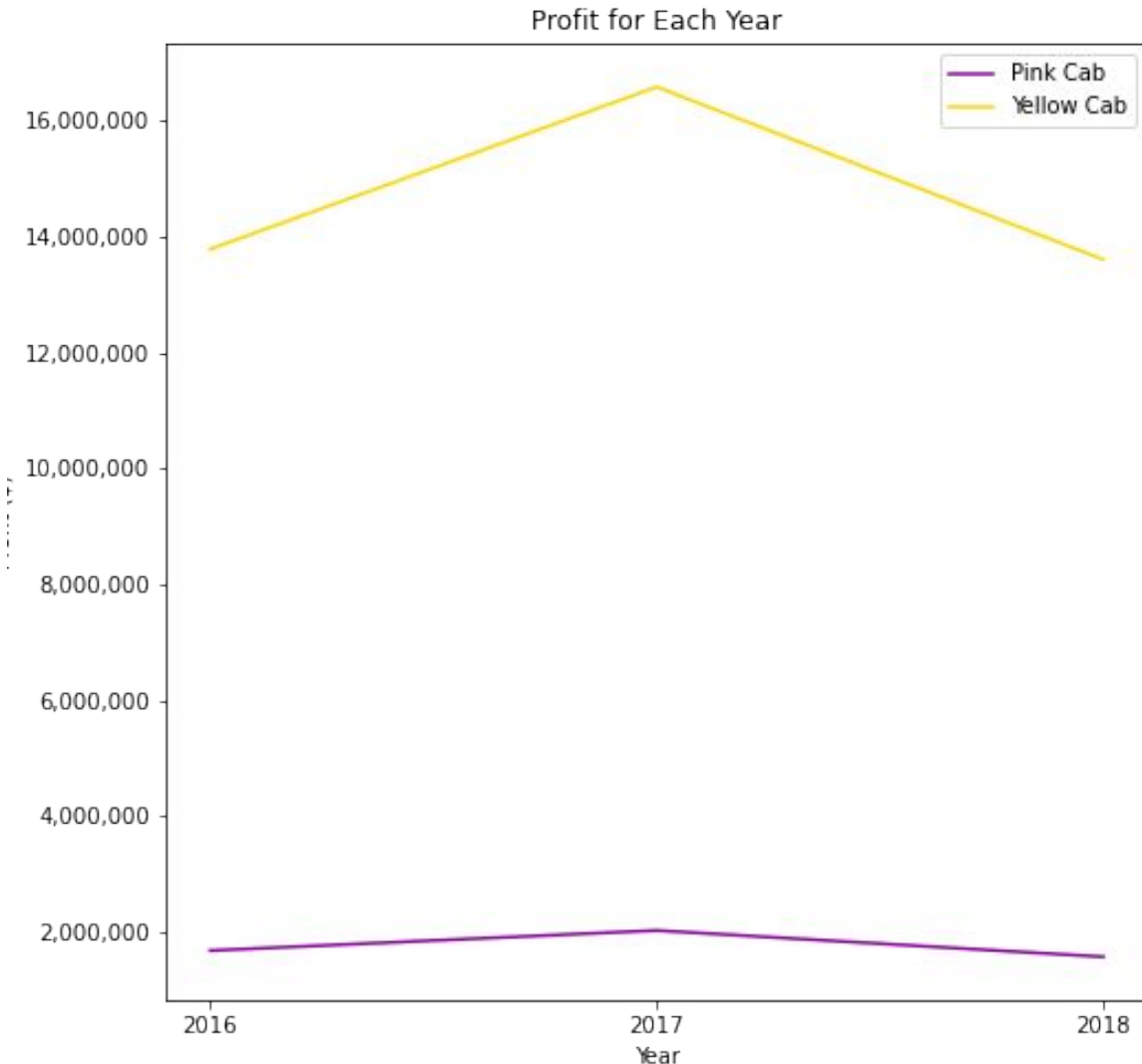
# Data Exploration

- 4 datasets used
- Time frame from data used: 2016-01-01 to 2018-31-1
- Total data points: 359,392

## Assumptions:

- No null values were found in any datasets.
- cab\_merged dataset was created by merging Cab\_Data, Customer\_ID, and Transaction\_ID.
- Profit was found by subtracting the Cost of Trip from the Price Charged.

# Profit Analysis



## Yellow Cab:

- Profit increased from \$13,786,935.95 in 2016 to \$16,586,614.06 in 2017 (18% increase)
- Profit decreased to \$13,609,461.48 in 2018 (20% decrease)

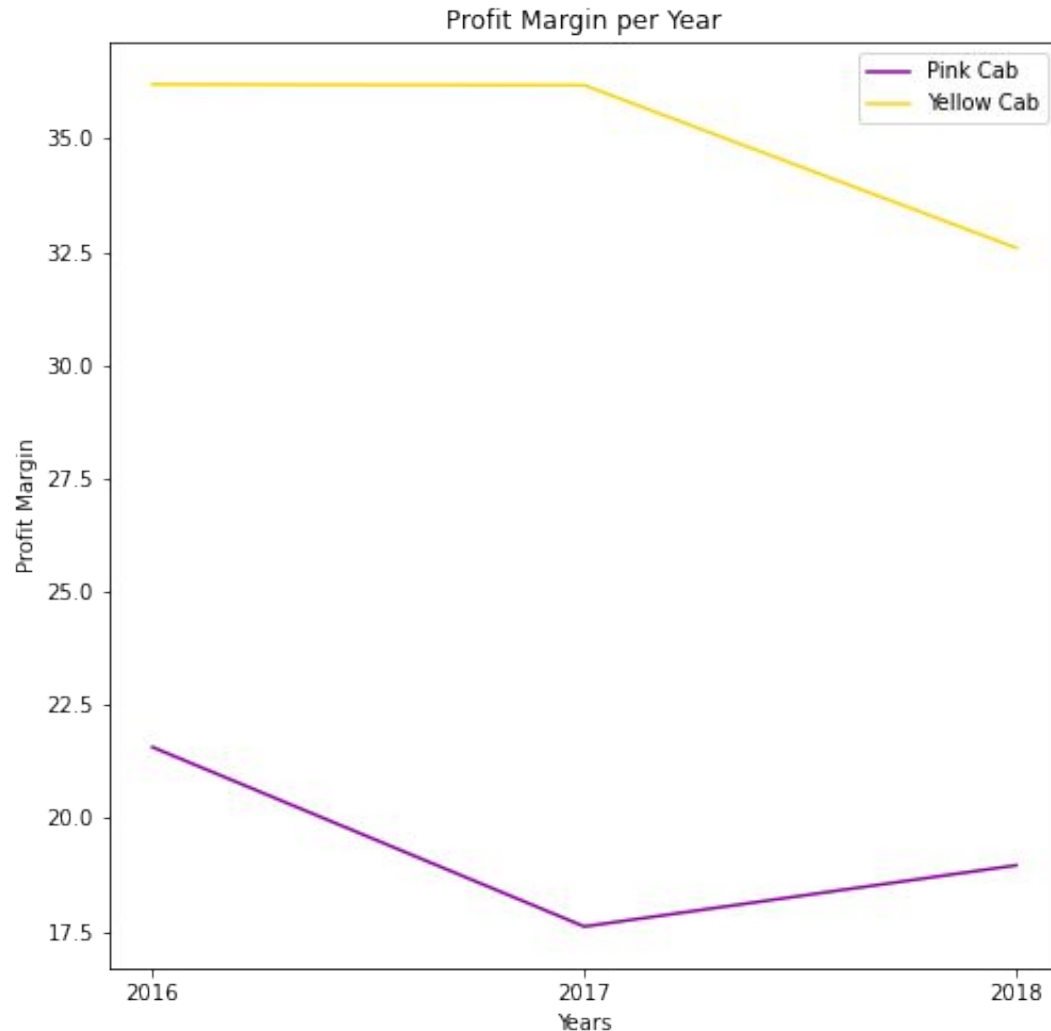
## Pink Cab:

- Profit increased from \$1,686,457.51 in 2016 to \$2,033,435.13 in 2017 (19% increase)
- Profit decreased to \$1,578,972.46 in 2018 (25% decrease)

## Conclusion:

- Yellow cab has a higher profit amount
- Yellow cab has a smaller decrease percentage from 2017 - 2018

# Profit Margin Analysis



## Yellow Cab:

- Margin decreased from 36.2% in 2016 to 36.18% in 2017 (0.05% decrease)
- Margin decreased to 32.59% in 2018 (10% decrease)
- Overall decrease of 3.61% (10.5% decrease)

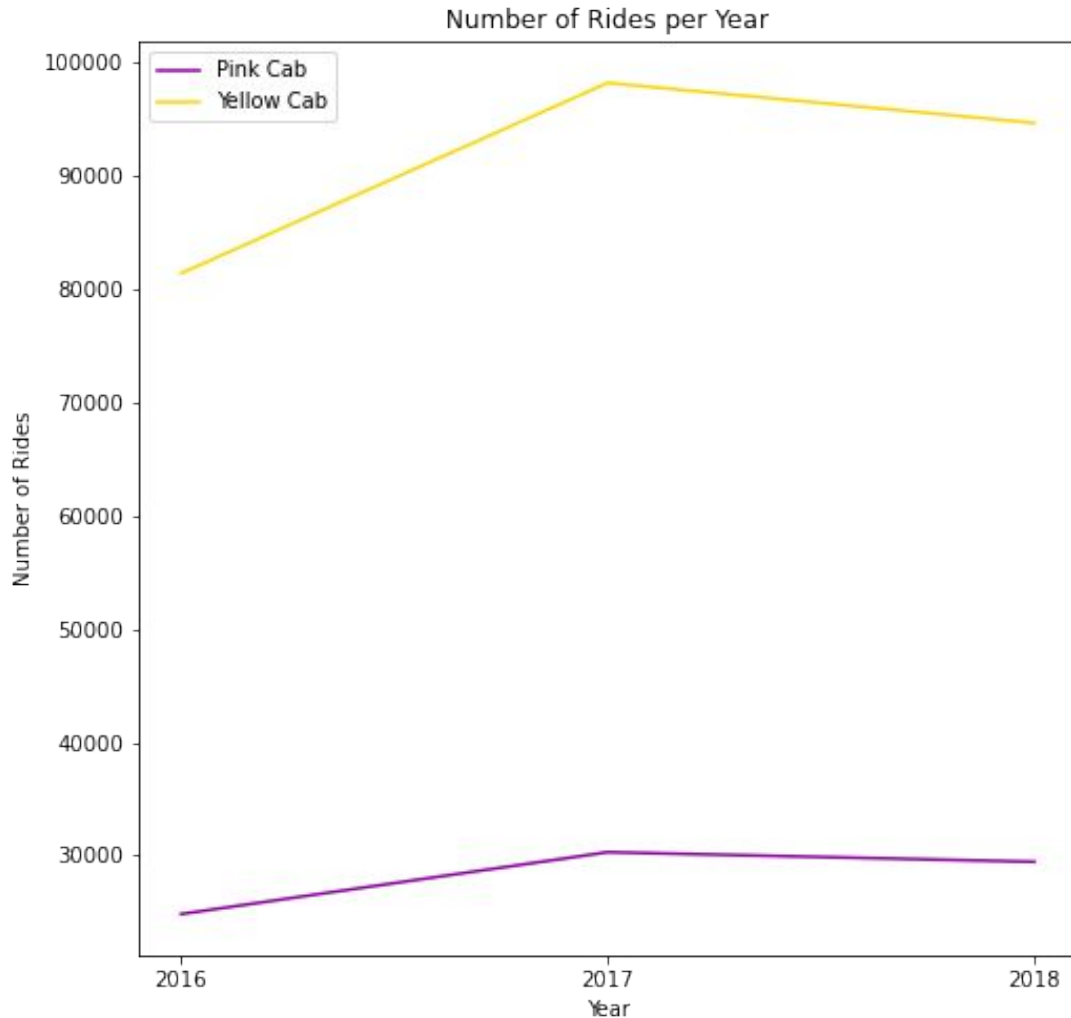
## Pink Cab:

- Margin decreased from 21.57% in 2016 to 17.61% in 2018 (20% decrease)
- Margin increased to 18.96% in 2018 (7% increase)
- Overall decrease of 2.61% (13% decrease)

## Conclusion:

- Yellow cab has a higher profit margin
- Yellow cab has a smaller decrease percentage from 2016 - 2018

# Number of Rides



## Yellow Cab:

- Rides increased from 81,399 in 2016 to 98,212 in 2017 (19% increase)
- Rides decreased to 94,671 in 2018 (7% decrease)
- Overall increase of 13,272 (15% increase)

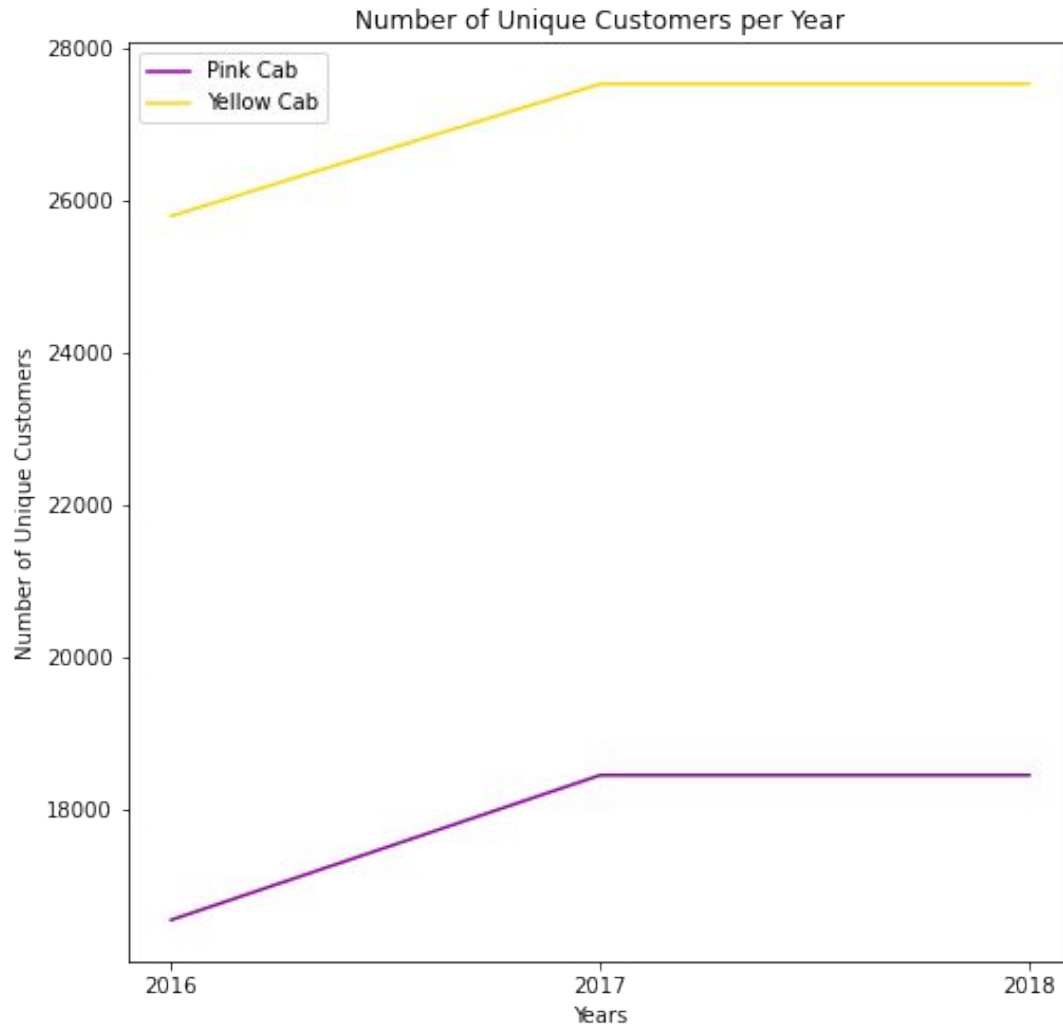
## Pink Cab:

- Rides increased from 24,840 in 2016 to 30,301 in 2017 (20% increase)
- Rides decreased to 29,456 in 2018 (3% decrease)
- Overall increase of 4,616 (17% increase)

## Conclusion:

- Yellow cab has a higher increase and number of rides
- Pink cab has a higher percentage increase from 2016 - 2018

# Unique Customers



## Yellow Cab:

- Unique customers increased from 25,801 in 2016 to 27,535 in 2017 (7% increase)
- Unique customers stayed at 27,535 in 2018 (0% change)
- Overall increase of 1,734 (7% increase)

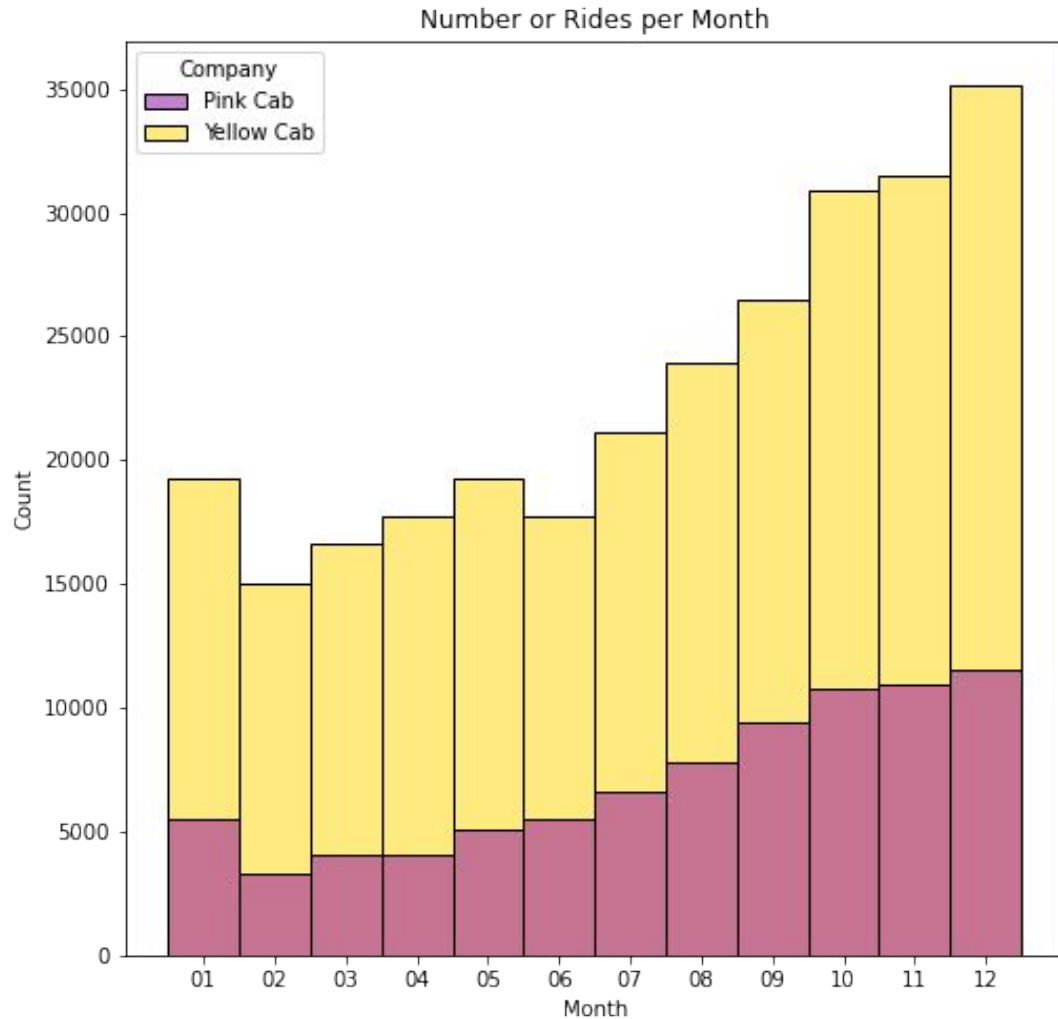
## Pink Cab:

- Unique customers increased from 16,558 in 2016 to 18,459 in 2017 (11% increase)
- Uniques customers stayed at 18,459 in 2018 (0% change)
- Overall increase of 1,901 (11% increase)

## Conclusion:

- Yellow cab has a higher number of rides
- Pink cab has a higher percentage and total increase from 2016 - 2018

# Rides per Month



This graph shows the following for both companies:

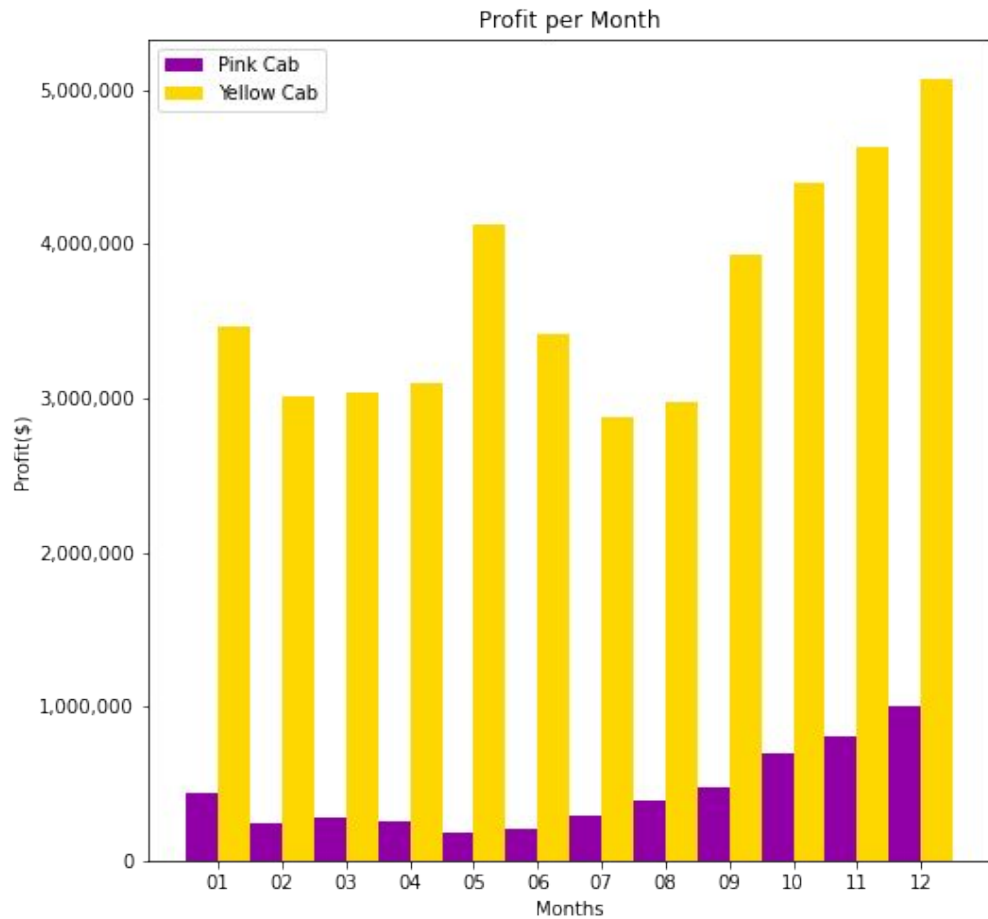
- There are a lower number of rides in the first 7 months of the year
- The number of rides rises with each month after July

Conclusion:

- The highest number of rides is in December



# Profit per Month



## Yellow Cab

- Lower profits in Feb-Apr and July-Aug
- Highest profit in December

## Pink Cab

- Lower profits from Feb - July
- Highest profits in December

## Conclusion:

- The highest profit is in December

# Conclusion

- Which company has a higher profit?
  - **Yellow Cab**
- Which company has a higher profit margin?
  - **Yellow Cab**
- Which company provides more rides each year?
  - **Yellow Cab**
- Which company has more unique customers?
  - **Yellow Cab**
- Which month do most rides occur per company?
  - December
- Which month creates the most profit per company?
  - December

Conclusion:

- After analysing the data, **Yellow Cab** is my recommendation for which company to invest in.

# Thank You