G2M Case Study

Virtual Internship

Mustafa Fakhra
03/08/2022

Background –G2M(cab industry) case study

- XYZ is is planning for an investment in Cab industry and as per a developed Go to Market(G 2 M) strategy it is critical to understand the market before making a final decision.

- Approach: Comparing performance criteria for the current market leaders, we determined the most effective investment opportunity based on current forecasted business operations.

The analysis has been divided into four parts:

- Data Understanding
- Data Merging
- Features Engineering
- Data Cleansing
- Outlier Analysis
- Hypothesis Testing

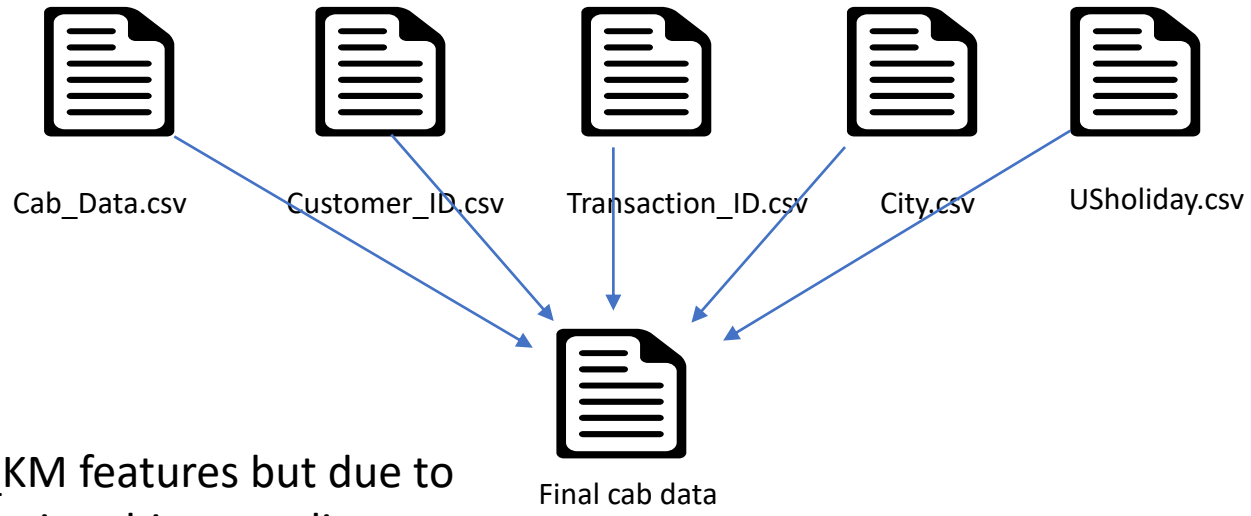
Data Considerations

Data Properties

- Demographics
  - Cab Users,
  - City Population
- Revenue Scales
  - Company Cost per Trip
  - Company Revenue per Trip
- Market Share
  - -Comparative Market sizes for the companies

Data Exploration

- 14 Features(including 2 derived features)
- Timeframe of the data: 31/01/2016 To 31/12/2018.
- Total data points :359,392



Assumptions:

- Outliers are present in Price_Charged & Prices_per_KM features but due to unavailability of trip duration details ,we are not treating this as outlier.

- Users feature of city dataset is treated as number of cab users in the city. we have assumed that this can be other cab users as well(including Yellow and Pink cab)

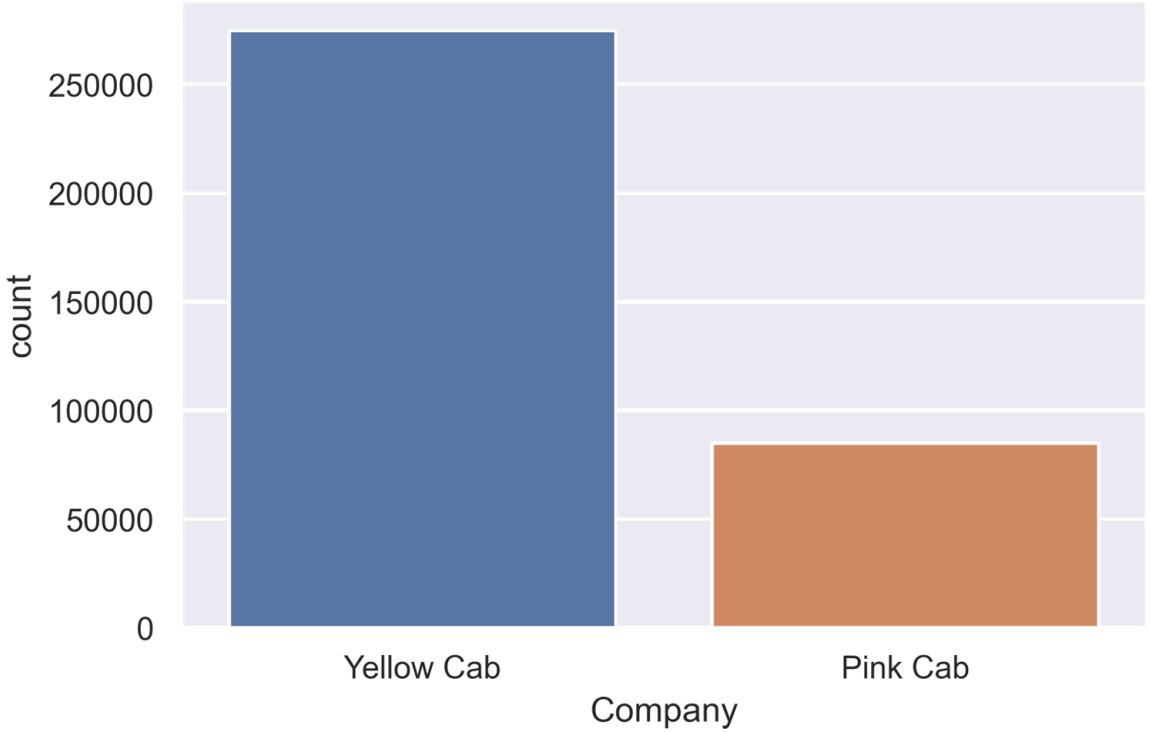
Hypothesis Testing

Hypothesis Testing

1. Yellow Cab has a **larger market share** than Pink Cab

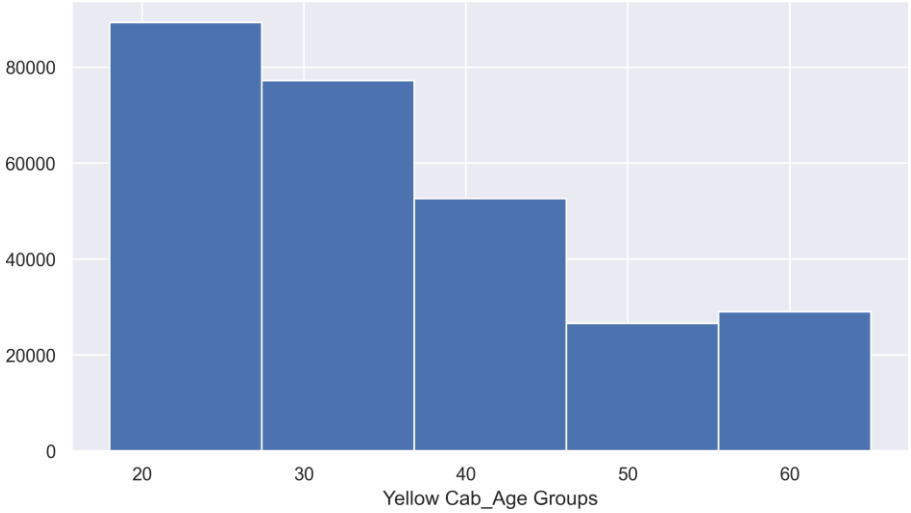
Yellow Cab has a **larger** market share than Pink Cab.

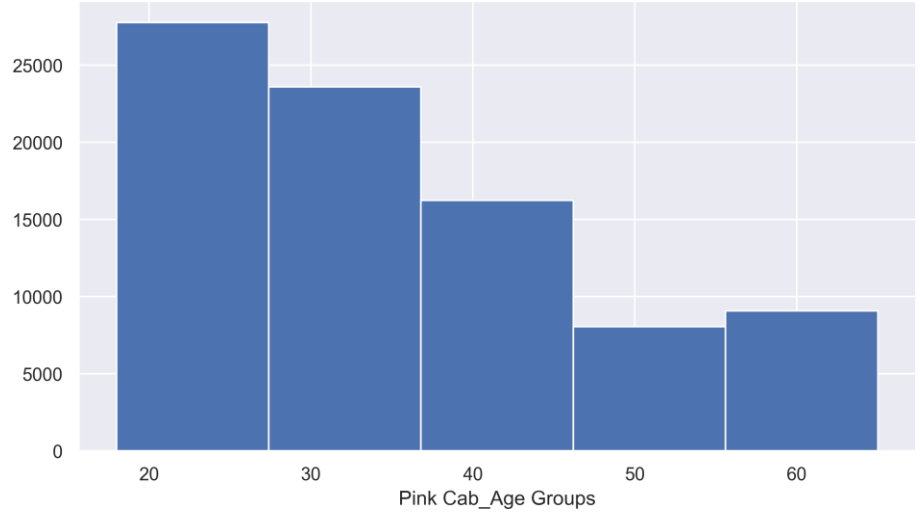
Yellow Cab processed roughly **250%** more cab requests than Pink Cab over the period 2016 - 2018



Hypothesis Testing

2. Both Cabs have **similar distributed** client base, based on:
a). **Age**



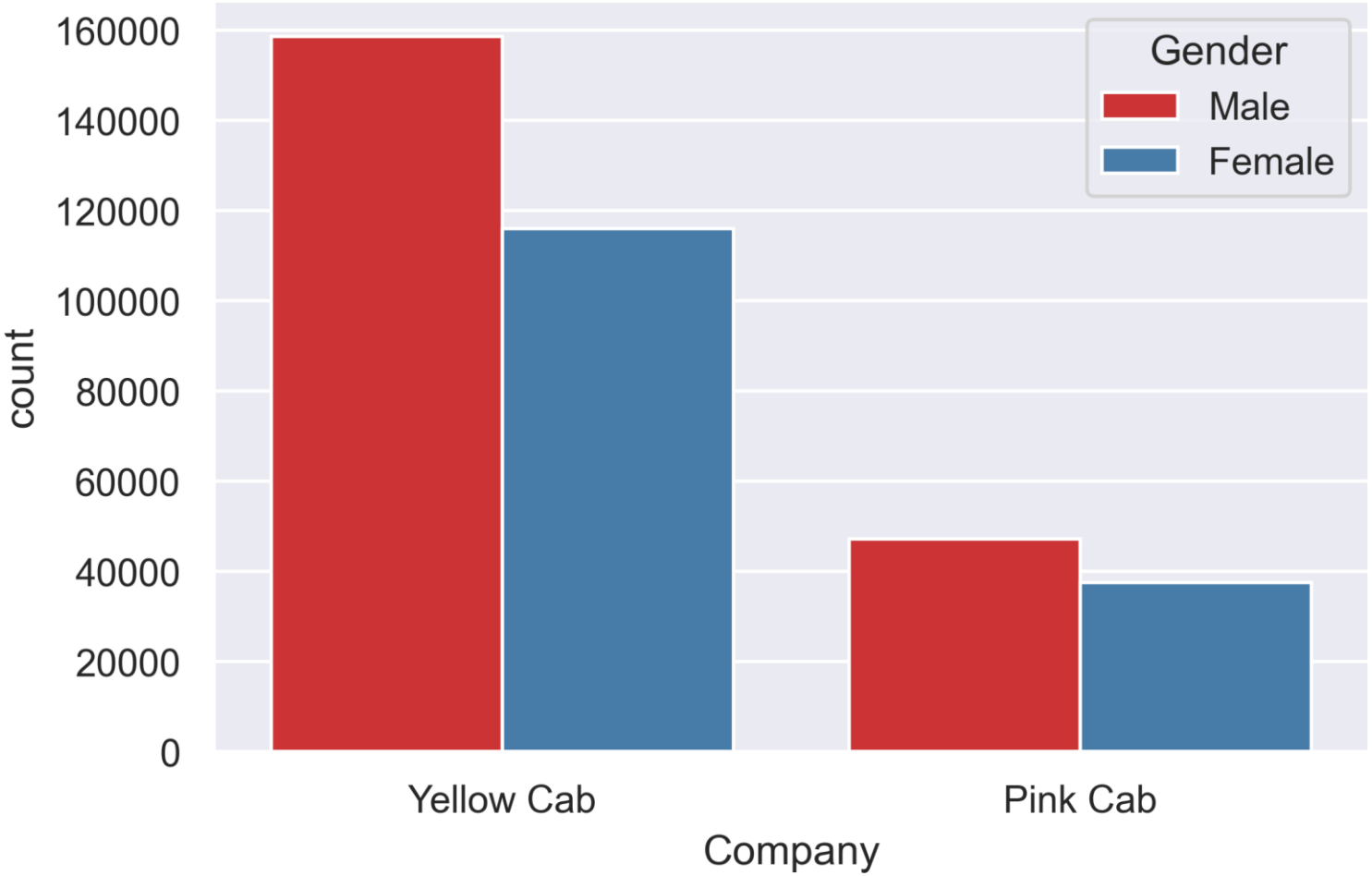


Both Cabs have **similar** distributed client base, based on **age**.

Both cabs have similar Age grouped clientele, with higher market capacities in the 20 – 40 groups.

Hypothesis Testing

2. Both Cabs have **similar distributed** client base, based on b). **Gender**

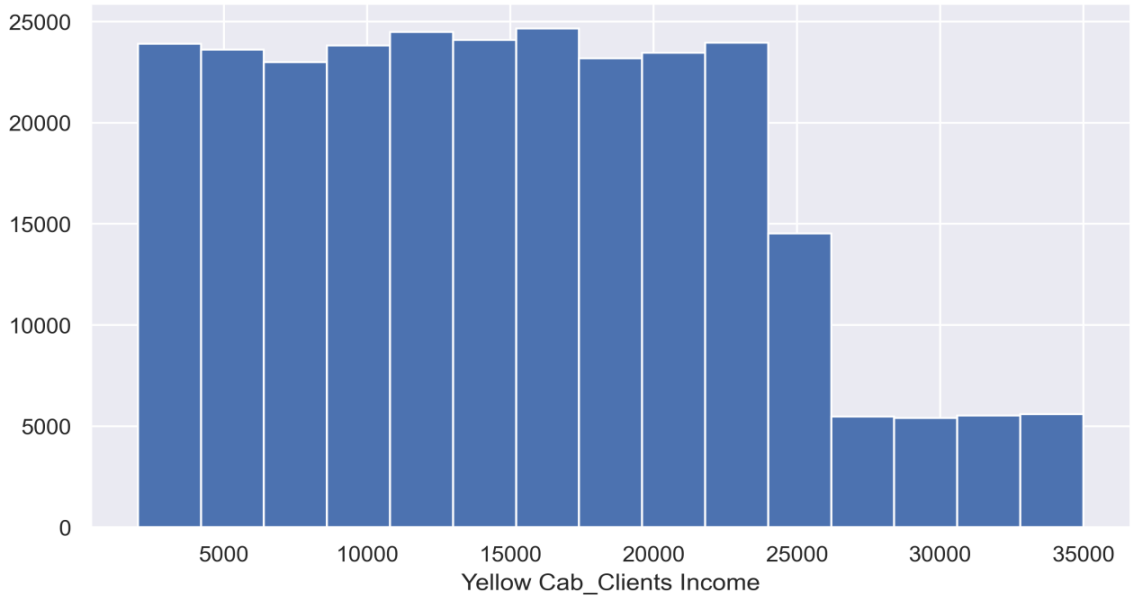


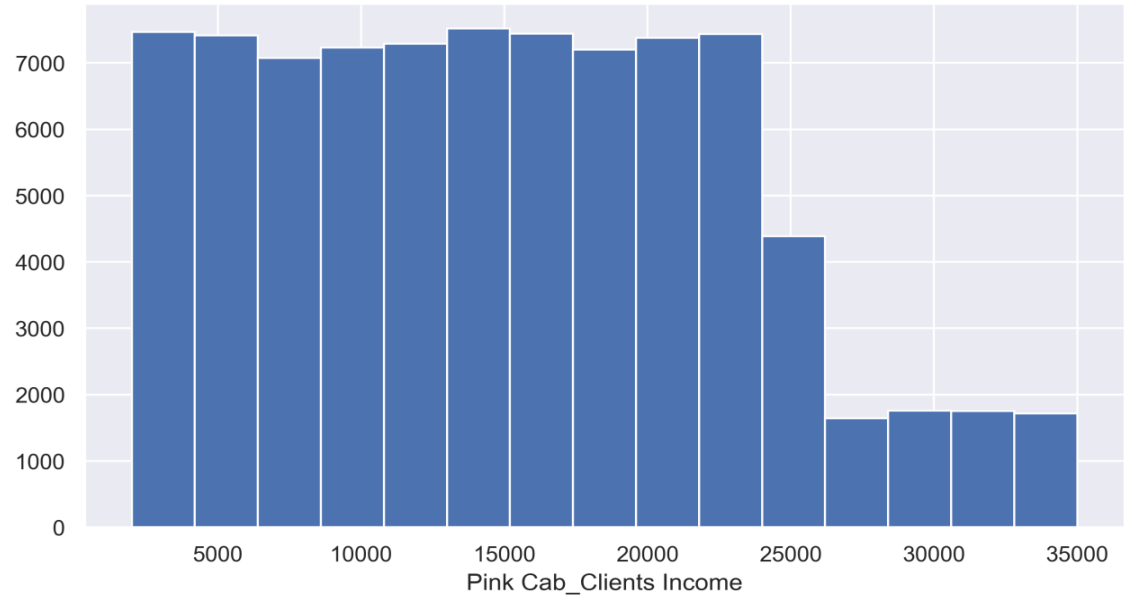
Both Cabs have **similar** distributed client base, based on **gender**.

Both companies have similar distribution structure based on **Gender**.

Hypothesis Testing

2. Both Cabs have similar distributed client base, based on c). **Income**



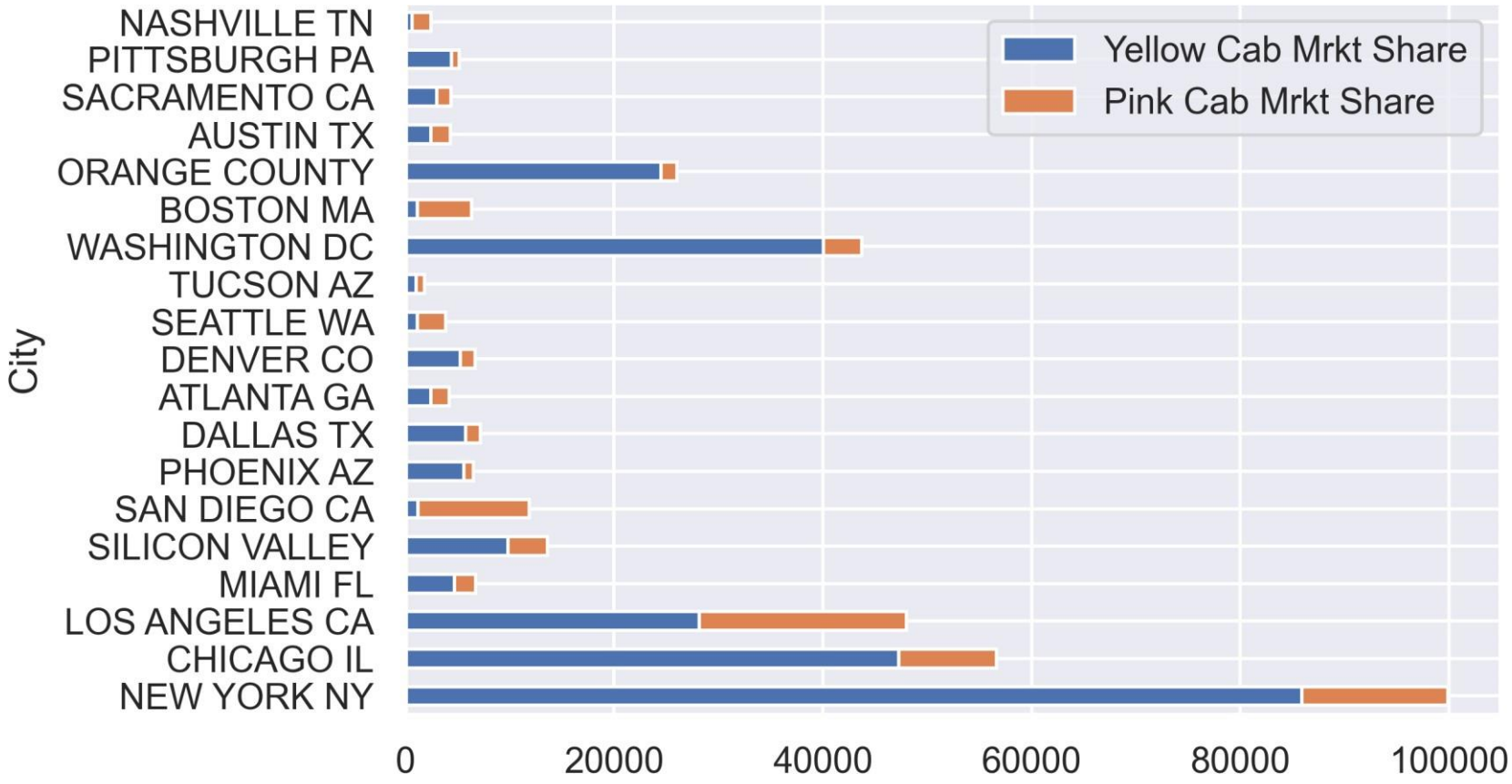


Both Cabs have **similar** distributed client base, based on **income**.

Both companies have similar distribution structure based on **income,** appealing greatly to the range **<25,000**.

Hypothesis Testing

2. Both Cabs have **similar distributed** client base, based on d). **Location**



Both Cabs **do not** have **similar** distributed client base, based on **income**.

Yellow Cab holds fort in a **few locations** expected to have high demand for Cab services. Locations where Pink has a **higher market** share have a **low demand** over the data period. However, Yellow cab still has presence in these locations.

Hypothesis Testing

3. Pink Cab **charges higher per KM** than Yellow Cab
4. Pink Cab has a **higher Turnover per KM** than Yellow Cab

	Cost per KM Pink	Price per KM Pink	Cost per KM Yellow	Price per KM Yellow
count	84711.000000	84711.000000	274681.000000	274681.000000
mean	10.998602	13.768510	13.200565	20.306073
std	0.606598	2.631528	0.726940	5.745021
min	10.000000	6.338621	12.000000	9.161765
25%	10.500000	11.937046	12.600000	15.805288
50%	11.000000	13.396096	13.200000	18.753655
75%	11.500000	15.232716	13.800000	24.100763
max	12.000000	39.046939	14.400000	53.955556

3. Pink Cab **charges lower** per KM than Yellow Cab.

Pink charges an average of **13.7** per KM with its range between **(6.3 – 39.04)**, while Yellow charges **20.3**, with its range between **(9.16 – 53.96)**

4. Pink Cab has a **lower Turnover** per KM than Yellow Cab.

Pink's has a cost per KM signify's a high operational cost for its services, & is unable to deliver a profit turnover that is comparable to Yellow's.

Conclusion

Pink cab is still in transition of joining the market, evident by its **smaller market share** in comparison to **Yellow** Cab. This is also evident by its **lower price per KM**, to serve as an incentive for **market disruption**.

Regardless, based on the analysis, we recommend the **best investment** to be in **Yellow** Cab, which demonstrates **longer experience** in the market sector, with a **loyal clientele**, & **greater margins** per prospective transaction.

Thank You