G2M CASE STUDY

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20.05.2021

BACKGROUND OF CASE STUDY



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



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



This presentation composes of four parts:

Data Understanding

Finding the most profitable option for G2M

Recommendations for Investment

Data Undestanding



14 Features

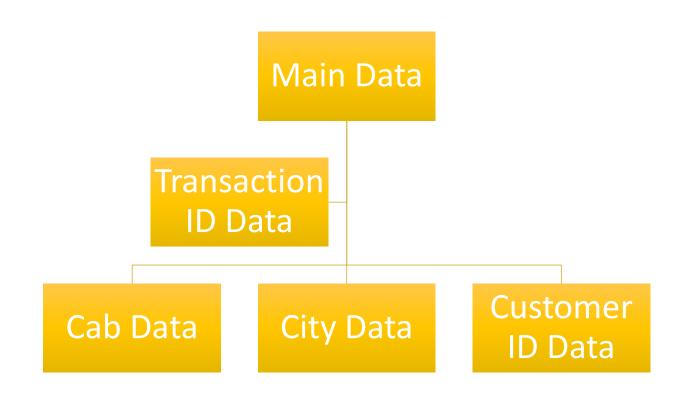


Timeframe of the data: 01.02.2016 – 31.12.2018



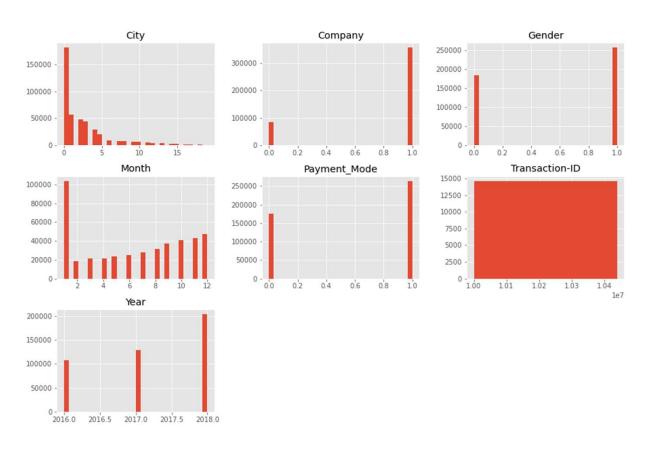
Total data points: 6.161.386 (N. of Features(14) x N. of Values(440.099)

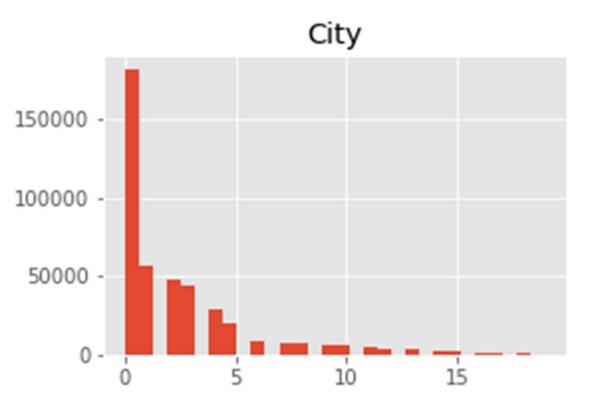
Data Undestanding



Providences

Year ,Month, and City Columns have imbalanced dataset. I am going to deal with them in step 3 by using less imbalanced sensitive M.L. Models such as DecisionTreeClassifier.

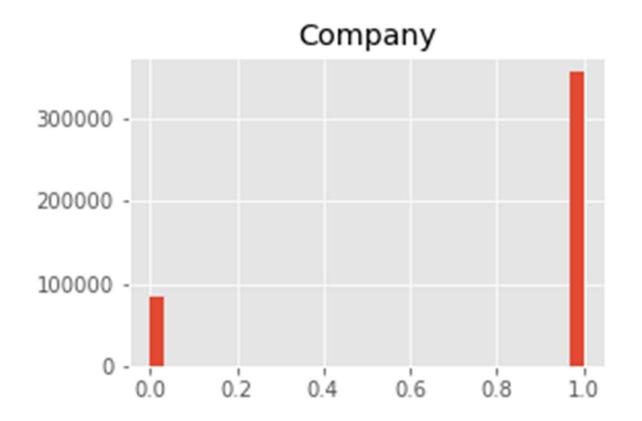




According to the City observation, majority of the cab users are from NYC, while the minority of them are from San Francisco.

Cities and their encoded numbers as follows;

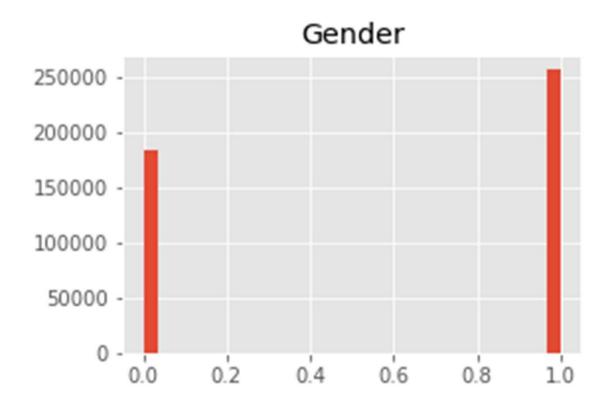
NEW YORK NY as 0, CHICAGO IL as 1, LOS ANGELES CA as 2, WASHINGTON DC as 3, BOSTON MA as 4, SAN DIEGO CA as 5, SILICON VALLEY as 6, SEATTLE WA as 7, ATLANTA GA as 8, DALLAS TX as 9. MIAMI FL as 10, AUSTIN TX as 11, ORANGE COUNTY as 12, DENVER CO as 13, NASHVILLE TN as 14, SACRAMENTO CA as 15, PHOENIX AZ as 16, TUCSON AZ as 17, PITTSBURGH PA as 18. SAN FRANCISCO CA as 19



0: Yellow Cab

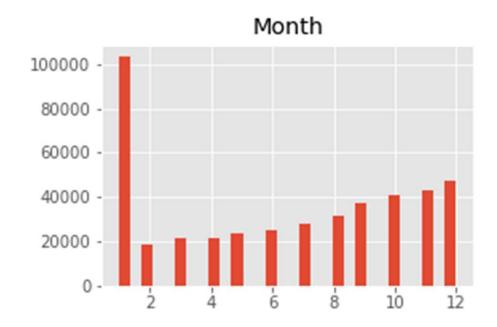
1: Pink Cab

 Pink Cab has more customers than the Yellow Cab.



Male: 1 Female: 2

 Males are tend to use pink & yellow cabs more than females. 1: January4: April7: July10: October2: February5: May8: August11: November3: March6: June9: September12: December

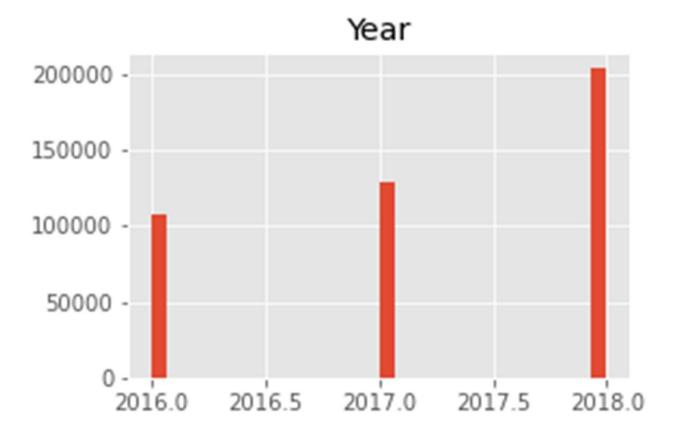


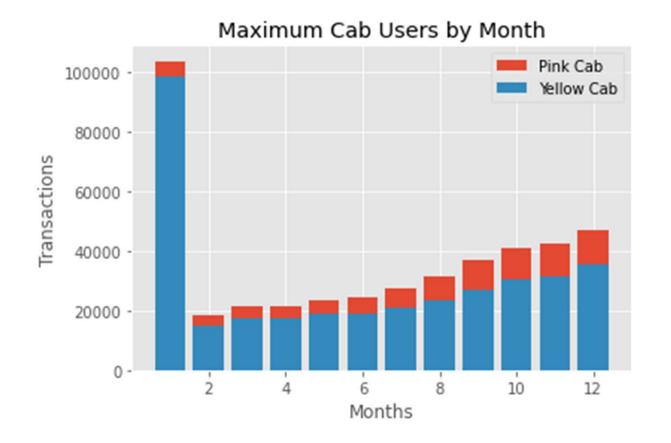
- Due to imbalanced data, excessive amount of users who use Pink & Yellow Cab Companies will be ignored.
- According to the graph, while the number of users in Autumn is in the peak, people tend to use cabs less in the winters.

Payment_Mode 250000 - 200000 - 150000 - 100000 - 0.0 0.2 0.4 0.6 0.8 1.0

1 represents Card2 represents Cash

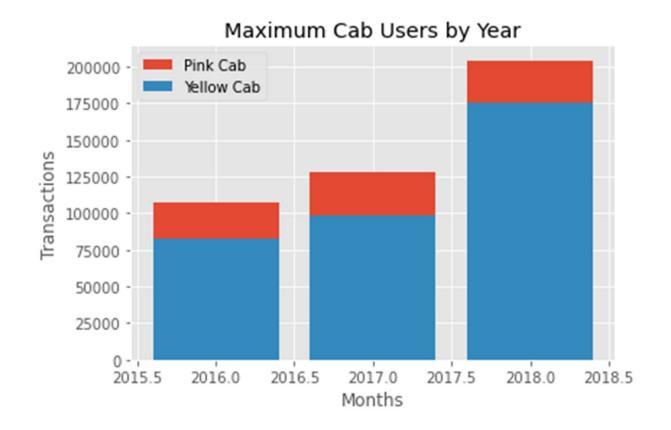
 People are tend to pay with card rather than cash. This tendency can be explained as a result of security procations and swiftness of cards. People are tend to use cabs more recent times than past. This is an interesting insight because mobile applications for transformation is dominating traditional cab industries from past to present.
 (*)





Finding the most profitable option for G2M Monthly

 According to monthly distribution, Pink Cab is preferred more than the Yellow Cab in all months. Thus, Pink Cab is more profitable investment than the Yellow Cab in the sense of monthly evaluation.



Finding the most profitable option for G2M Yearly

 When the yearly distribution of customer for two cab companies, it can be seen that Pink Cab is more dominant than the Yellow Cab in the sense of customer preference. Thus, it would be more wise to invest Pink Cab for G2M.

NYC has more cab users than the other cities that have Pink & Yellow Cab operations. Thus, customers in the other cities should targeted for Marketing Campaigns more to increase reputation.



• Although population of male users are more than female users in the probable customer profile, there is no dominance between the genders. Thus, current strategy of the potential investment company should be protected.

Recommendations for Investment



• As the number of users in Autumn is in the peak, and people tend to use cabs less in the winters, increase of the cab usage in winters should be the investors agenda.



 Usage of credit cards dominates the cash not just for our case, but for all cases. Hence, cooperation of the credit card companies could lead more transaction. As a result of these transactions, company's stock value may increase.



• As Pink Cab dominates Yellow Cab in all areas, G2M should choose Pink Cab for the further investments.