

G2M Case Study: Virtual Intern

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The problem

Company

XYZ is a private equity 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.

Context

XYZ plan to make an investment in either yellow or pink cab company; however needs us to provide valuable insights to pinpoint what the better investment would be

Data Exploration

The analysis has been divided into four parts:

Data Understanding

Forecasting profit and number of rides for each cab type

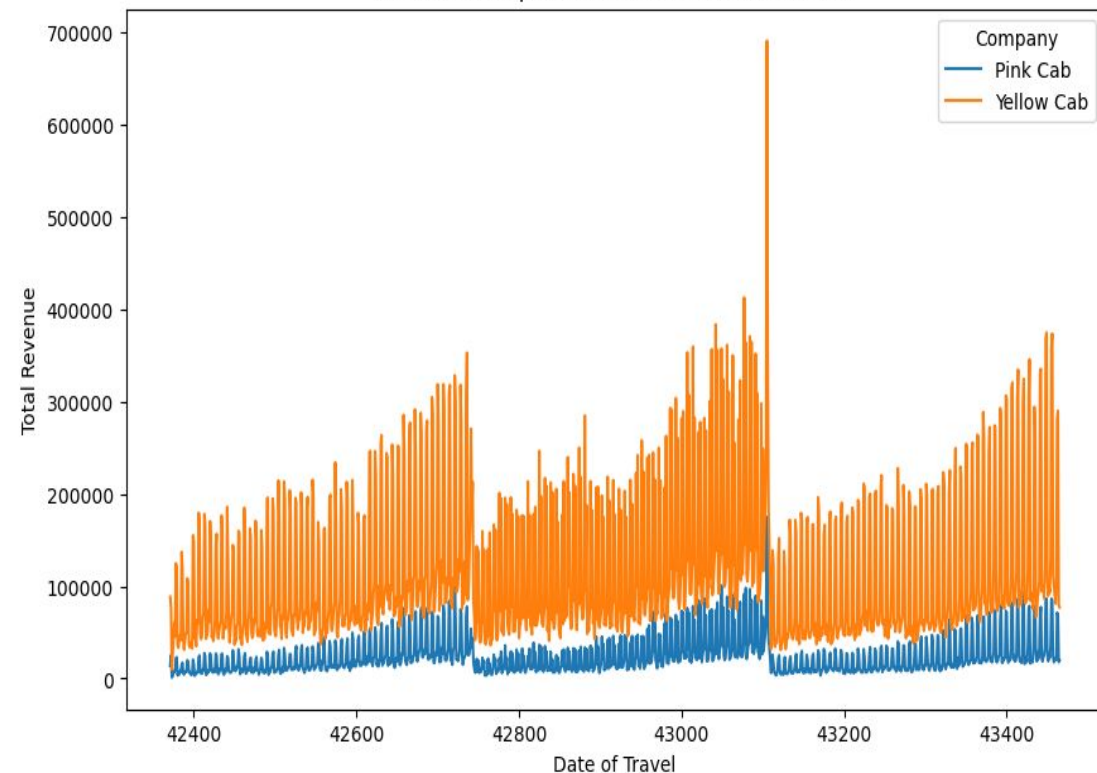
Finding the most profitable Cab company

Recommendations for investment



Analysis Made for Pink & Yellow
Company...

Revenue Comparison: Pink Cab vs. Yellow Cab

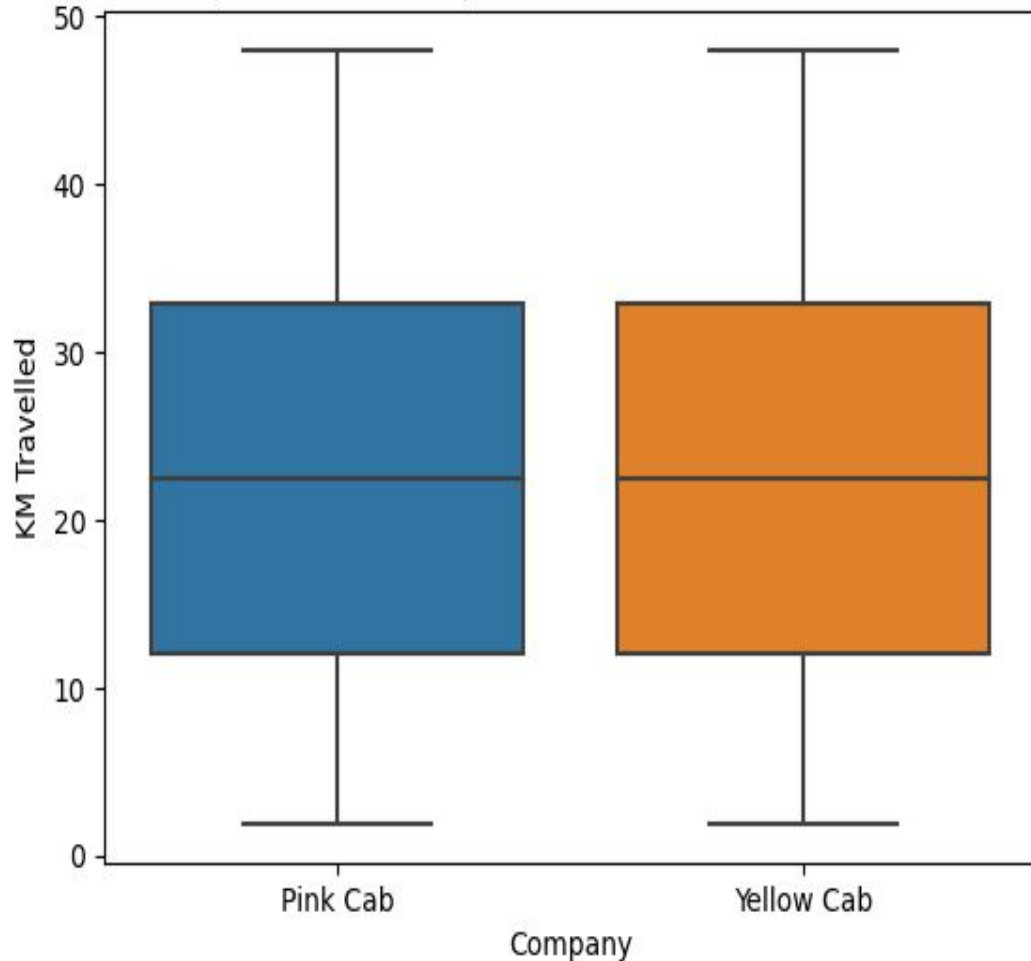


#Yellow Cab generally seems to generate higher revenue compared to Pink Cab.

#We can observe fluctuations in revenue for both companies over time, indicating potential patterns or trends in customer demand or other factors influencing revenue generation.

#Analyzing the trends in revenue over time can help in understanding the performance and growth of each company and making informed business decisions.

Trip Distance Comparison: Pink Cab vs. Yellow Cab



#Pink Cab has recorded 84,711 trips, while Yellow Cab has recorded 274,681 trips.

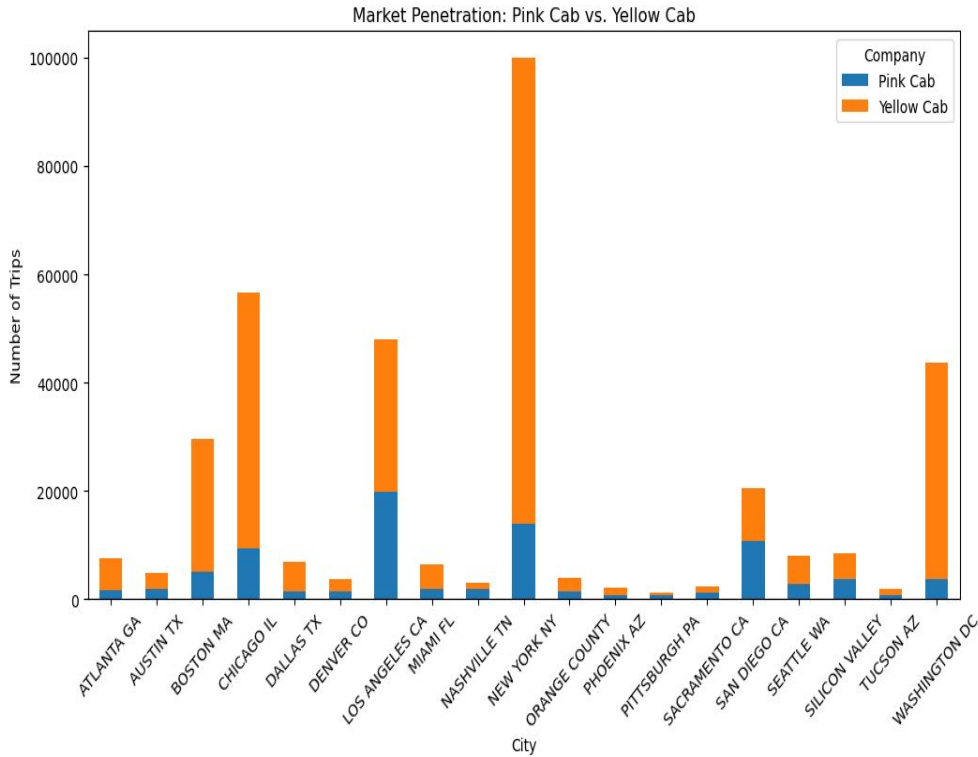
#The average number of trips for both companies is approximately 22.56, indicating similar levels of activity.

#Standard deviation for trip counts is similar for both companies, Pink Cab at 12.23 and Yellow Cab at 12.23, showing consistent variability.

#Both companies have trip counts ranging from a minimum of 1.9 trips to a maximum of 48 trips.

#Quartiles (25th, 50th, and 75th percentiles) demonstrate consistent distribution of trip counts, with a median trip count of 22.44 for both companies.

#Overall, the data suggests that both Pink Cab and Yellow Cab have comparable levels of business activity, with similar average trip counts and variability.



#Pink Cab and Yellow Cab operate in various cities across the United States.

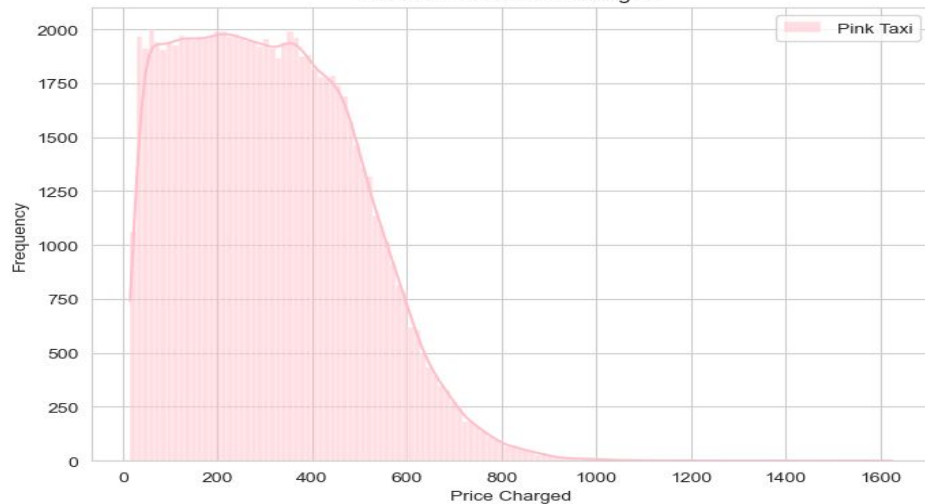
#Yellow Cab typically has a higher number of trips than Pink Cab, suggesting potentially greater market share or popularity.

#Certain cities such as New York NY, Los Angeles CA, and Chicago IL exhibit high demand for taxi services from both companies.

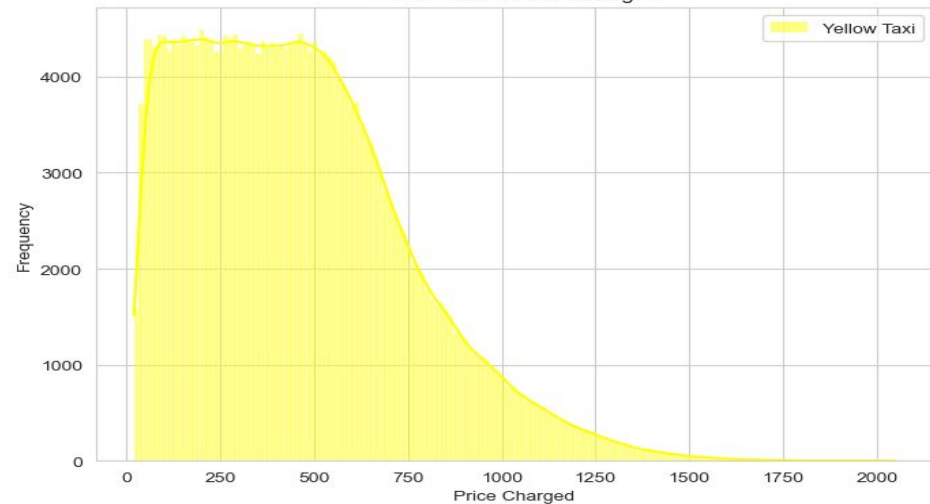
#Pink Cab maintains a significant presence in several cities, indicating effective competition with Yellow Cab in those markets.

#Some cities show relatively low trip counts for both companies, highlighting potential areas for growth or lower demand for taxi services.

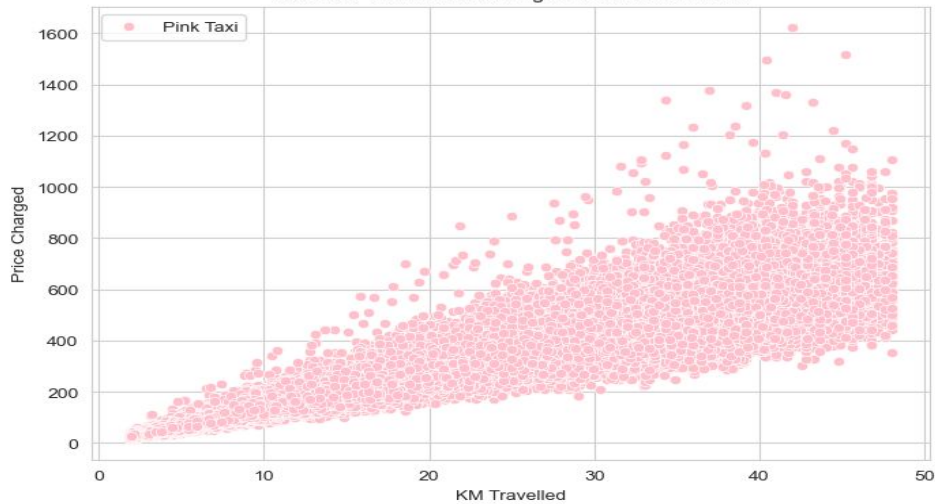
Distribution of Price Charged



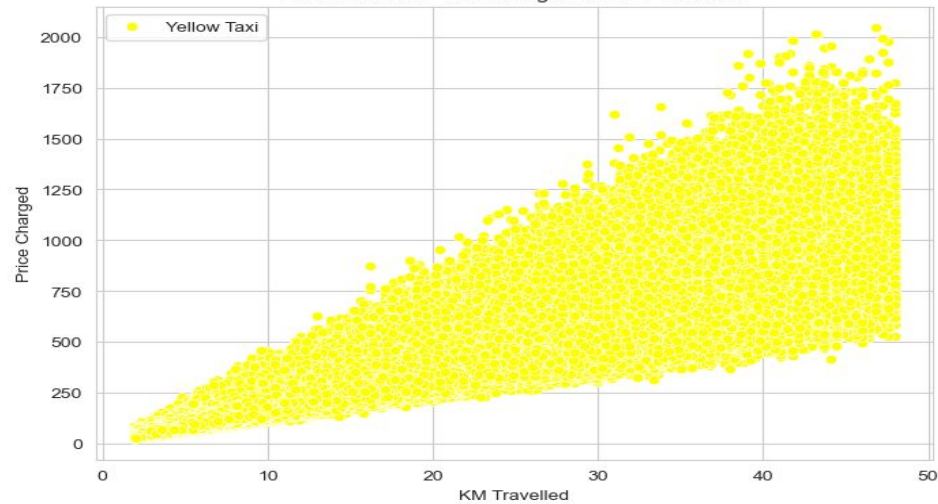
Distribution of Price Charged

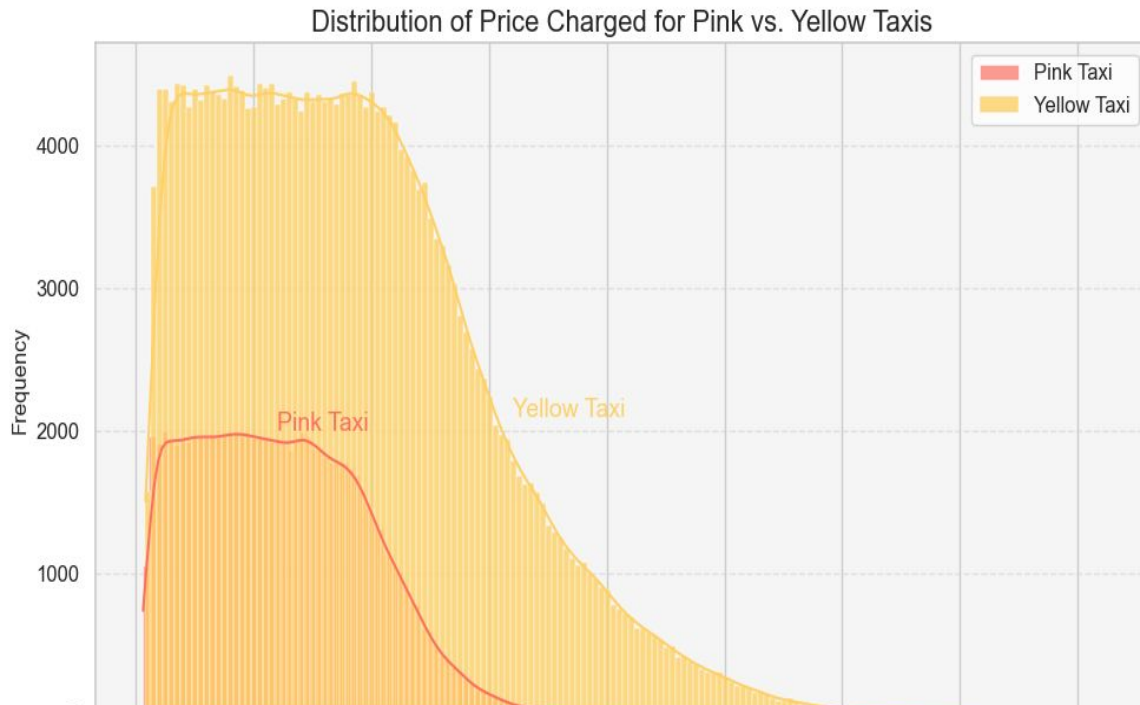


Scatter Plot of Price Charged vs. KM Travelled



Scatter Plot of Price Charged vs. KM Travelled



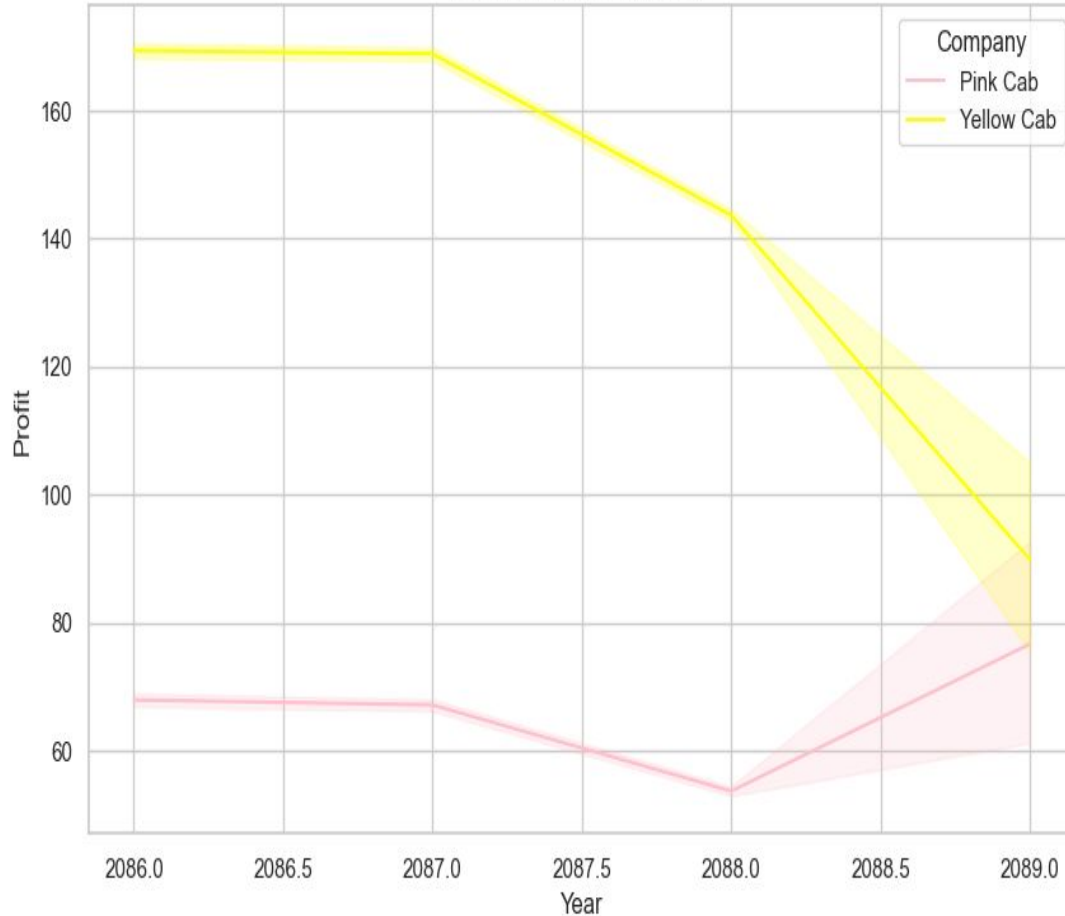


#Mean: Pink Taxi: On average, Pink Taxi charges around \$310.80 per trip. Yellow Taxi: On average, Yellow Taxi charges around \$458.18 per trip.

#Median: Pink Taxi: The middle value of Pink Taxi fares is \$298.06 per trip. Yellow Taxi: The middle value of Yellow Taxi fares is \$425.06 per trip.

#Standard Deviation: Pink Taxi: The prices charged by Pink Taxi vary around \$181.99 from the average fare. Yellow Taxi: The prices charged by Yellow Taxi vary around \$288.39 from the average fare.

Yearly Profit Analysis



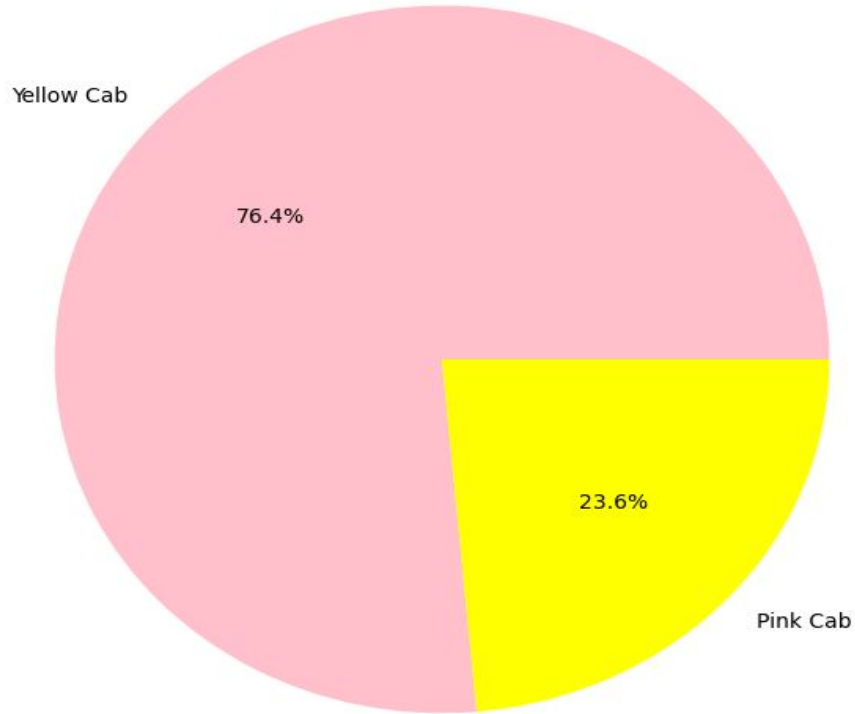
#In 2086, Pink Cab generated a profit of around \$1,686,457.51, whereas Yellow Cab made approximately \$13,786,940 in profit.

#In 2087, Pink Cab's profit increased to approximately \$2,033,435.13, while Yellow Cab's profit rose to about \$16,586,610.

#In 2088, Pink Cab's profit slightly decreased to roughly \$1,582,991.52, while Yellow Cab's profit remained steady at around \$13,629,040.

#In 2089, Pink Cab's profit significantly dropped to approximately \$4,444.16, whereas Yellow Cab's profit also decreased to about \$17,787.61.

Customer Distribution: Pink Cab vs. Yellow Cab



#Yellow Cab has provided rides for 274,681 trips.

#Pink Cab has provided rides for 84,711 trips.

#Yellow Cab has served more customers or completed more trips compared to Pink Cab.

Key Points

#Profitability: Yellow Cab consistently outperforms Pink Cab in terms of profitability, with higher profits recorded over the years.

#Market Penetration: Yellow Cab demonstrates better market penetration with a higher number of trips in most cities compared to Pink Cab.

#Customer Satisfaction: There is no available data on customer satisfaction to make a direct assessment.

#Revenue Comparison: Yellow Cab also generates higher total revenue compared to Pink Cab over the observed period.

#Cost Efficiency: Both companies exhibit similar cost efficiency, with comparable mean and median values for the price charged per trip and distance traveled.

#Trip Characteristics: Pink Cab and Yellow Cab show similar trip characteristics in terms of distance traveled and price charged.

Recommendations

Recommendation: Based on the provided data, Yellow Cab appears to be the more lucrative investment option due to its consistent profitability and higher market penetration.

However, additional factors such as customer satisfaction and market share should be considered before making a final investment decision.

Therefore, while Yellow Cab shows promise in terms of profits, a comprehensive analysis of all relevant factors is advisable before making an investment choice.



Thank You