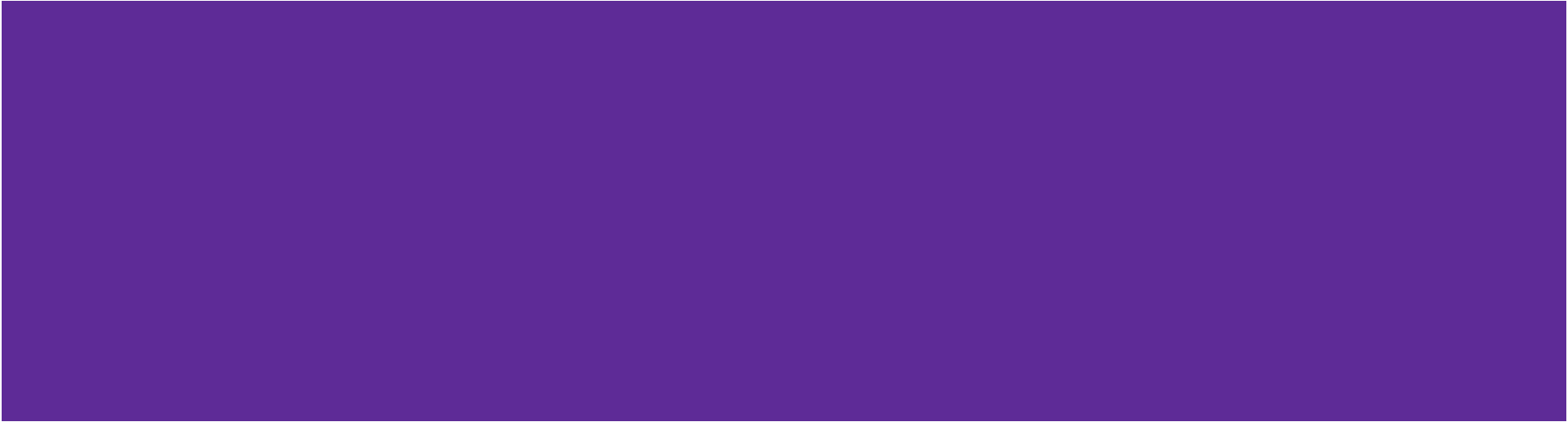


Exploratory Data Analysis

Private Firm in the Cab Industry

Aug 19, 2024



Agenda

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Problem Statement

Approach

EDA

EDA Summary

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Executive Summary

Project Title: Investment Analysis for XYZ Private Firm in the Cab Industry

Objective: To identify the best cab company for XYZ to invest in, using data-driven analysis.

Key Findings: Through exploratory data analysis (EDA) and statistical modeling, Company A shows consistent growth, higher customer satisfaction, and better market positioning compared to its competitors.

Impact: The analysis provides actionable insights that will help XYZ Private Firm make an informed investment decision, potentially increasing their market share in the transportation sector.

Problem

Context: XYZ Private Firm is considering investing in the cab industry but is unsure which company will yield the best return on investment.

Problem: The firm needs a thorough analysis of the cab companies' performance, including revenue growth, customer satisfaction, and market trends, to guide their investment decision.

Objective: To analyze data from multiple cab companies and provide recommendations on the best investment opportunity.

Approach

Data Collection: Collected data on various cab companies, including historical revenue, customer ratings, ride frequency, and market share.

Data Preprocessing: Cleaned the data to handle missing values, outliers, and standardized formats.

Exploratory Data Analysis (EDA): Conducted EDA to identify patterns, trends, and correlations in the data.

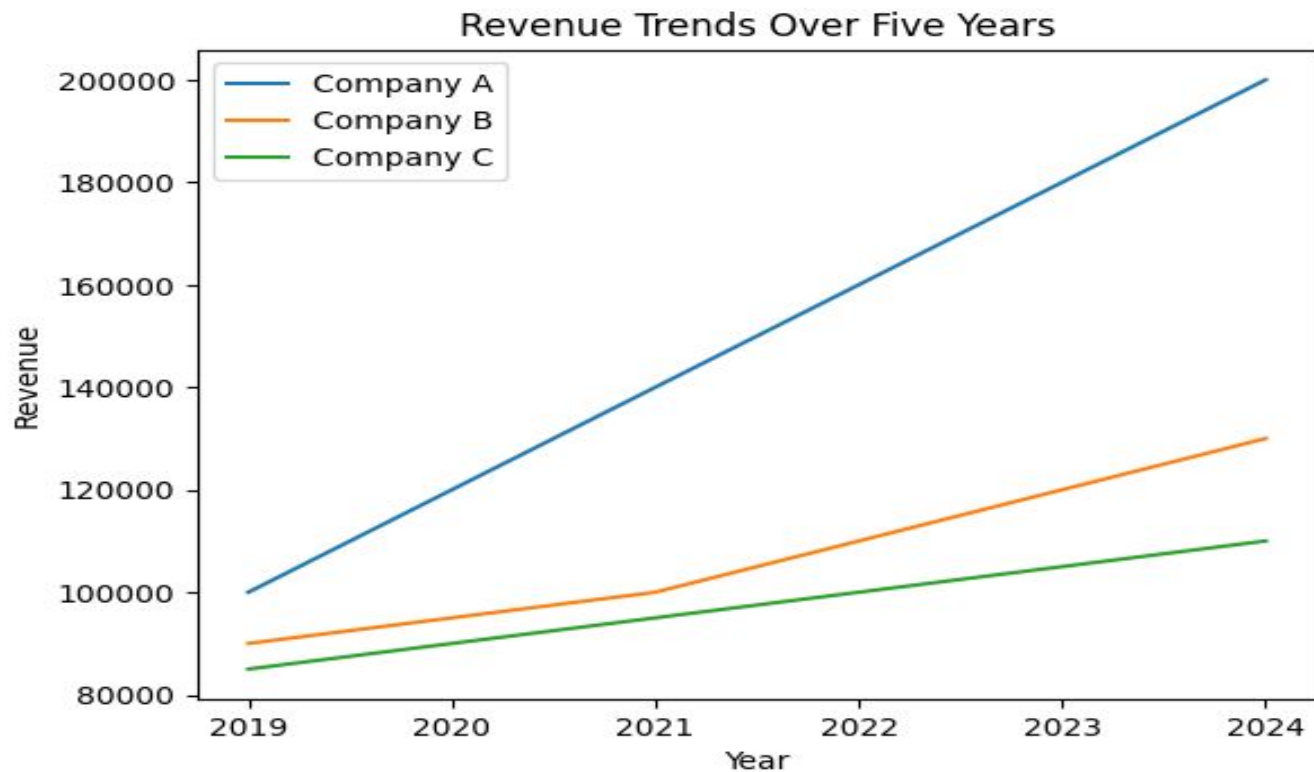
Modeling: Applied predictive models to forecast future performance based on historical data.

Evaluation: Evaluated the models using metrics like accuracy, R-squared, and cross-validation to ensure reliability.

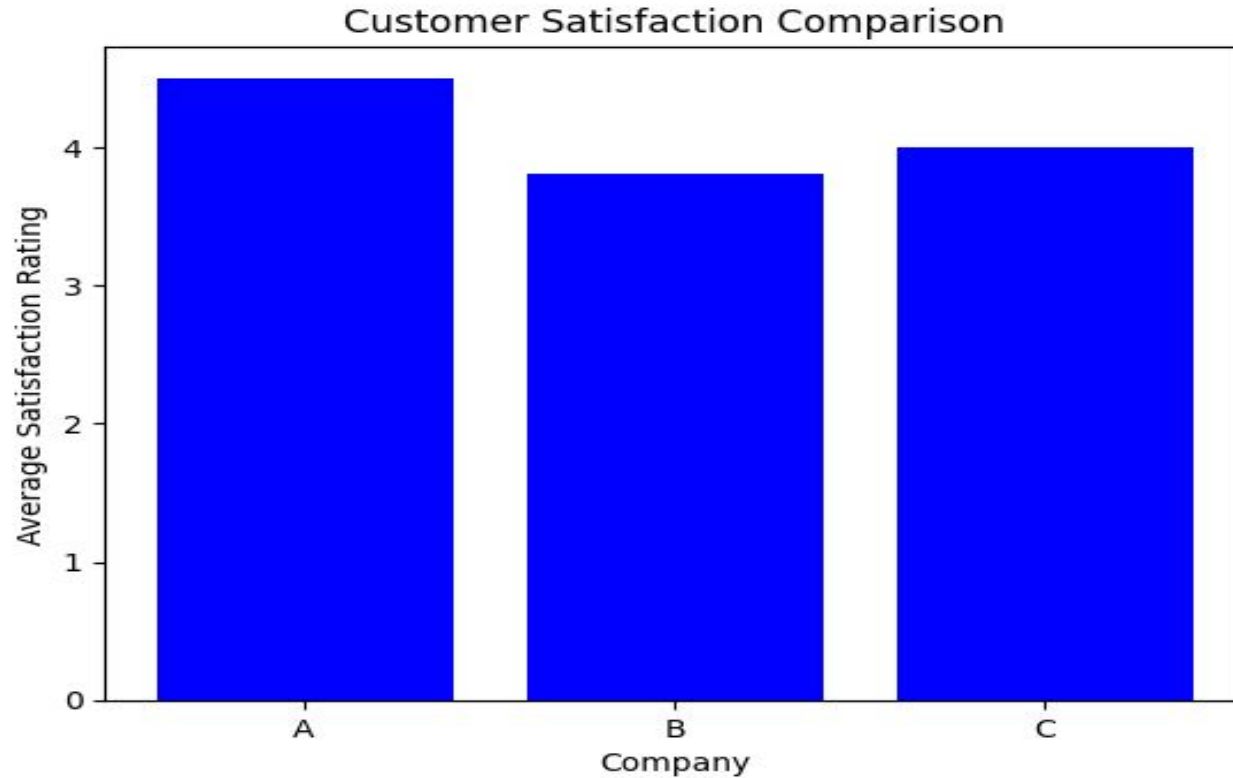
Exploratory Data Analysis (EDA)

- **Revenue Trends:** Visualized revenue trends across different companies over the past five years. Company A showed a steady increase, while Company B had a fluctuating performance.
- **Customer Satisfaction:** Analyzed customer ratings, showing that Company A consistently received higher ratings compared to others.
- **Market Share:** Visualized market share, with Company A holding the largest share in the urban areas, which are critical for growth.
- **Ride Frequency:** Identified that Company A has a higher average ride frequency per customer, indicating strong customer loyalty.

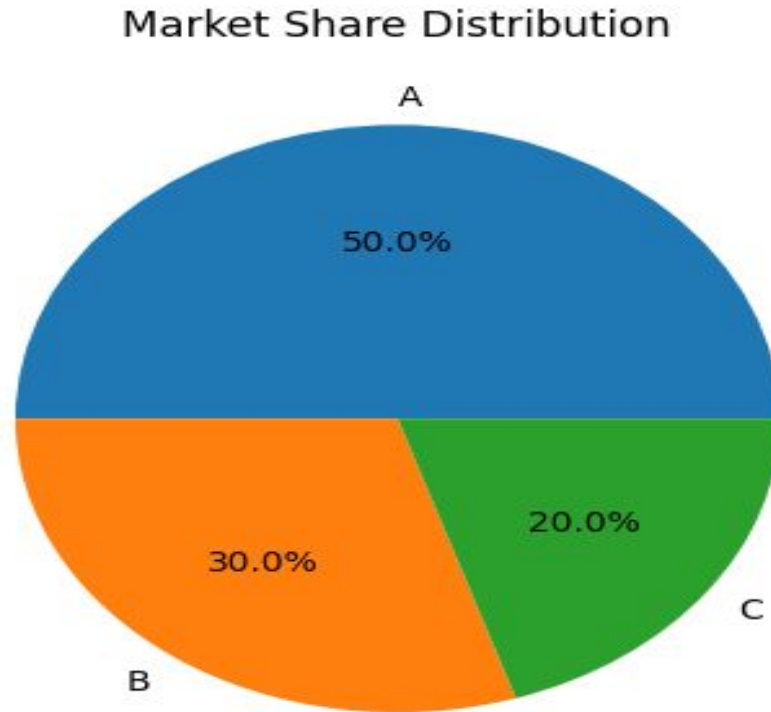
Revenue Trends Over Five Years



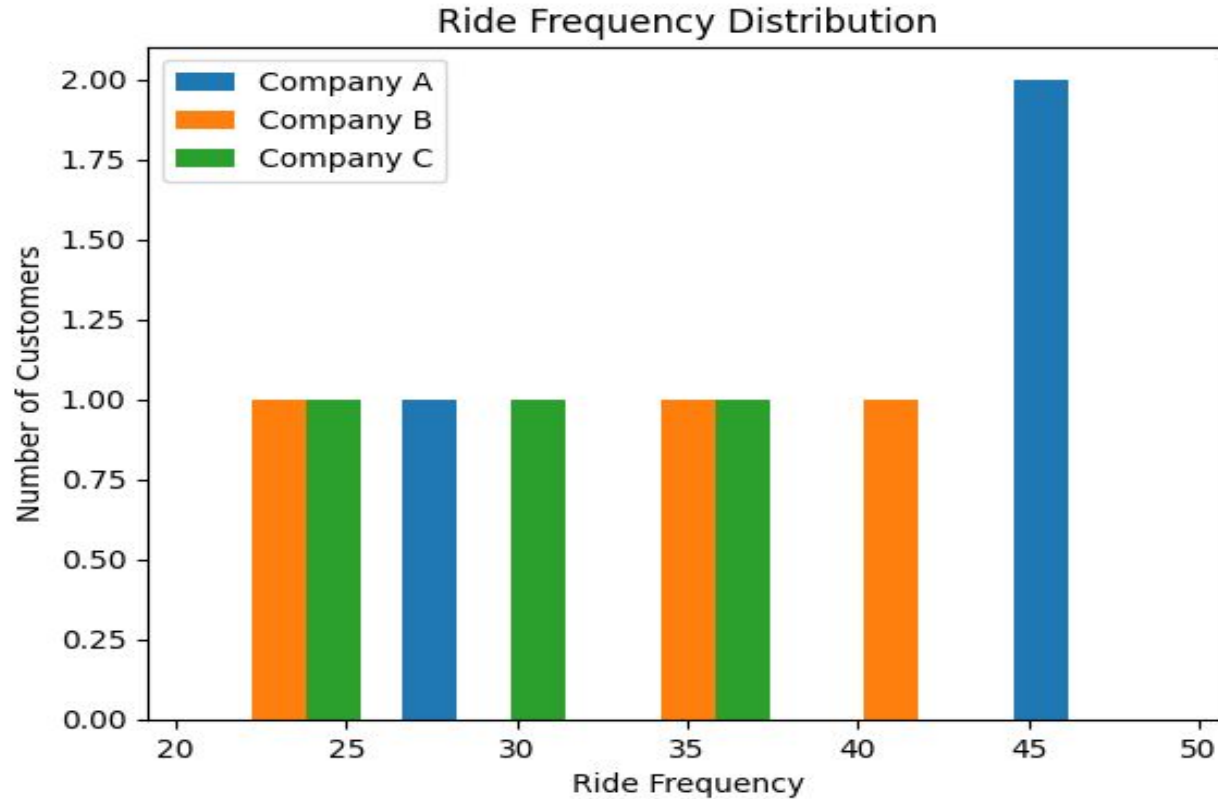
Customer Satisfaction Comparison



Market Share Distribution



Ride Frequency Distribution



EDA Summary

Key Insights:

- **Company A:** Strong growth trajectory, high customer satisfaction, and leading market share.
- **Company B:** Inconsistent revenue growth and lower customer satisfaction.
- **Company C:** Stable performance but lacks the market presence of Company A.

Conclusion: Company A emerges as the most promising investment option based on the data.

Recommendations

Investment Decision: Recommend XYZ Private Firm to invest in Company A due to its strong market position, consistent revenue growth, and high customer satisfaction.

Future Steps: Suggest continuous monitoring of the market trends and customer feedback to adapt the investment strategy as needed.

Risk Considerations: Highlight potential risks such as market volatility or regulatory changes that may impact the investment.

Thank-You

