



SQL and Databases: Project Report

By: Uzoigwe Chiderah

Table of Contents

01	Business Overview	09	Trend of purchases by Quarter.
02	Customer Metrics	10	Quarter on Quarter % change in Revenue.
03	Distribution of Customers across States.	11	Trend of Revenue and Orders by Quarter.
04	Average Customer Ratings by Quarter.	12	Shipping Metrics.
05	Trend of Customer Satisfaction.	13	Average discount offered by Credit Card type.
06	Top Vehicle makers preferred by customers.	14	Time taken to ship orders by Quarter.
07	Most preferred vehicle make in each state.	15	Insights and Recommendations .
08	Revenue Metrics.		

Business Overview

TOTAL REVENUE

\$48610993.8

TOTAL ORDERS

1000

TOTAL CUSTOMERS

798

AVG. RATING

3.065

LAST QTR REVENUE

\$8573149.32

LAST QTR ORDERS

199

AVG. DAYS TO SHIP

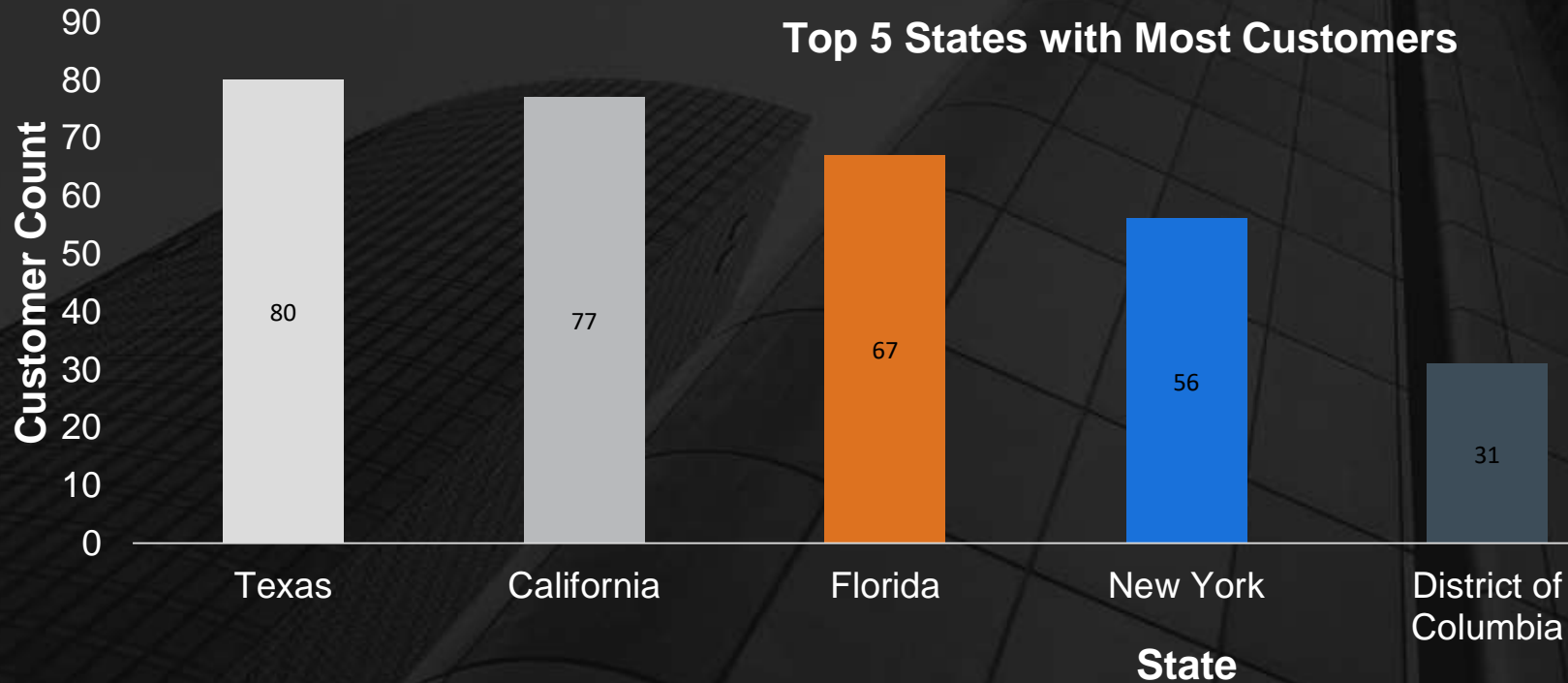
105

% GOOD FEEDBACK

21.5%

CUSTOMER METRICS

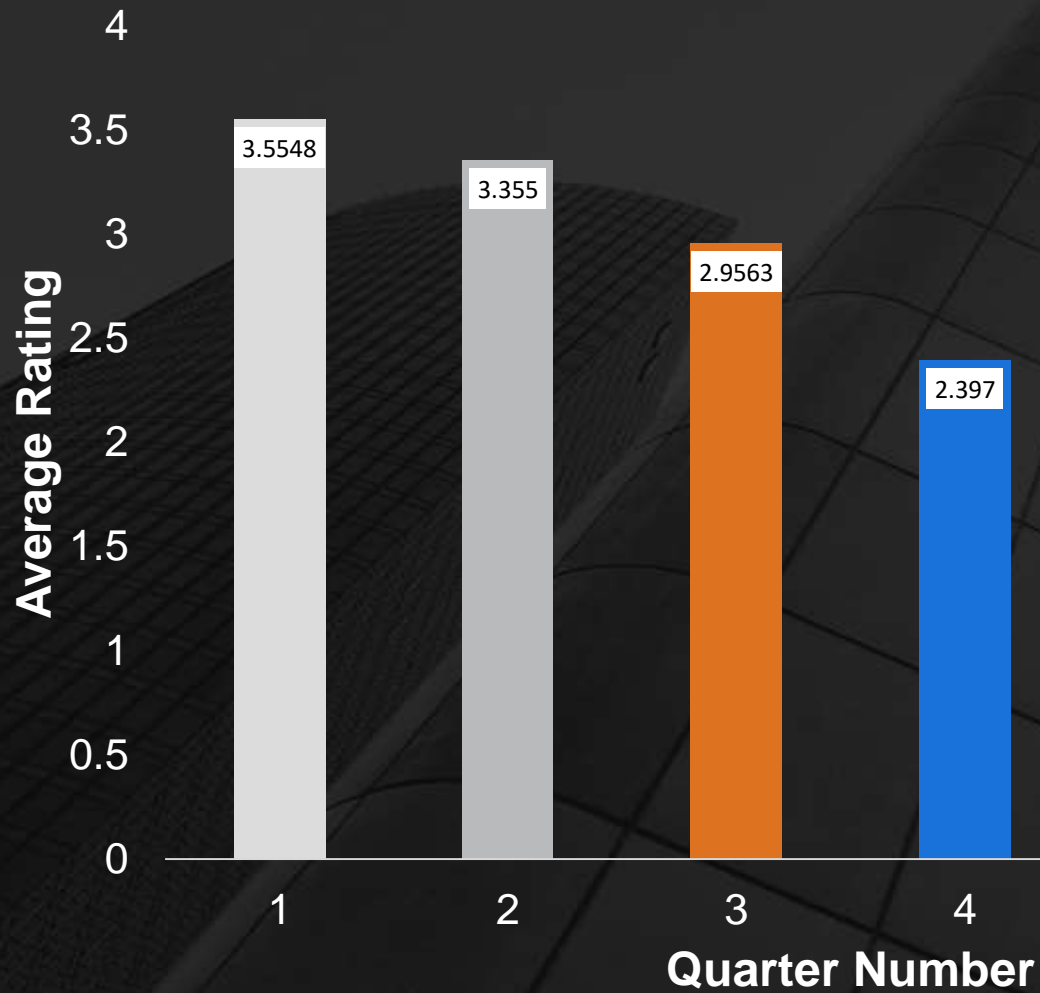
Distribution of Customers across States



Observation/Findings

The top five states where New Wheels has the most customers are Texas, California, Florida, New York, and the District of Columbia. Conversely, Montana, Wyoming, and North Dakota are among the states with the fewest New Wheels customers.

Average Customer Ratings by Quarter

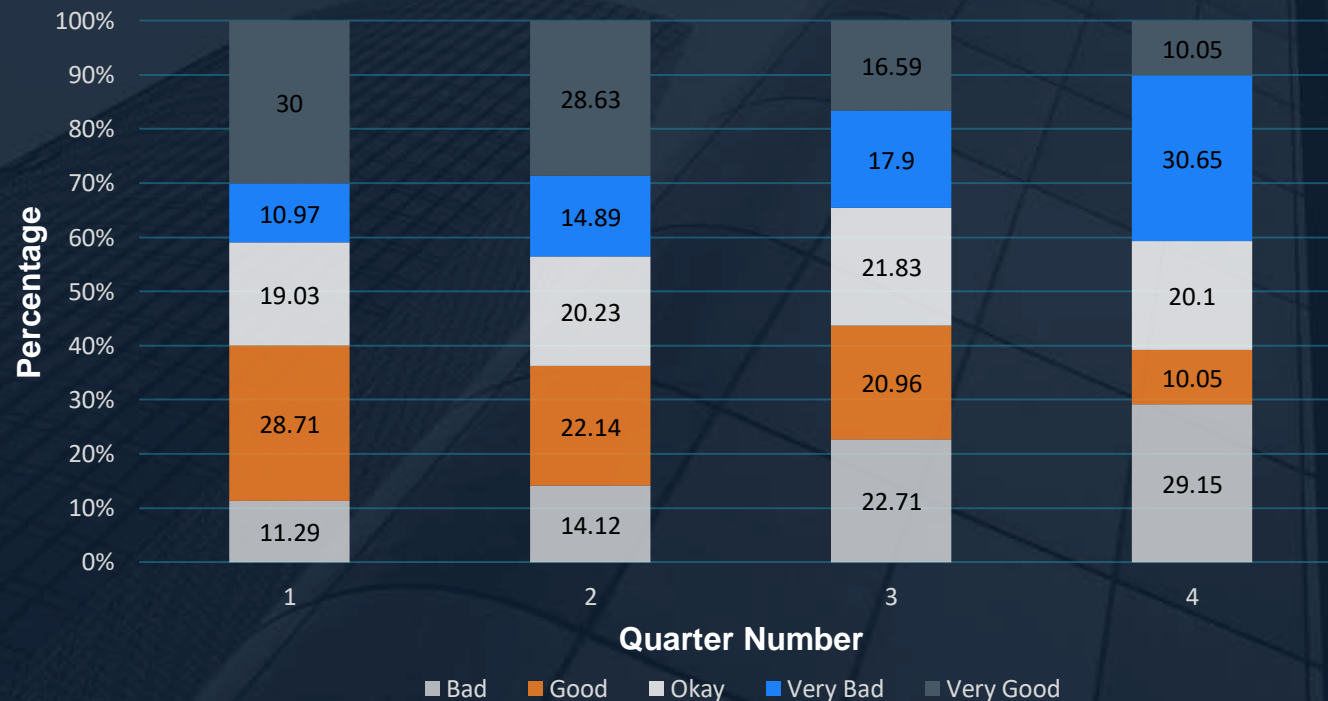


Observation/Findings

The analysis revealed that the highest average rating, at 3.5548, was observed during the first quarter. However, there appears to be a consistent decline in the average customer rating from one quarter to the next, culminating in the fourth quarter, which recorded the lowest average rating of 2.397. Notably, this average falls below the standard average of 2.5.

Trend of Customer Satisfaction

100% Stacked Bar Chart of Customer Feedback by Quarter



%Good and Very Good for QTR 1

59%

In the first quarter, the combined percentage of "good" and "very good" feedback was 59%.

%Good and Very Good for QTR 2

51%

However, during the second quarter, this percentage decreased to 51%, indicating a decline.

%Good and Very Good for QTR 3

38%

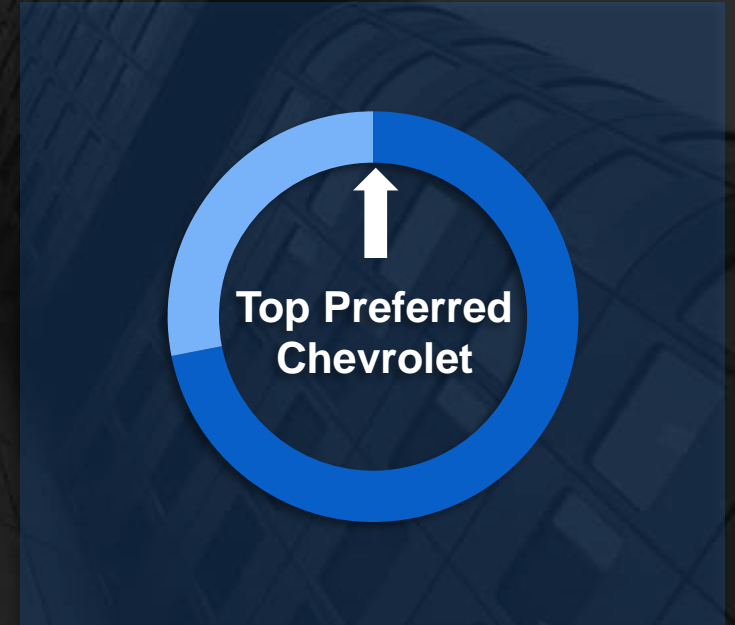
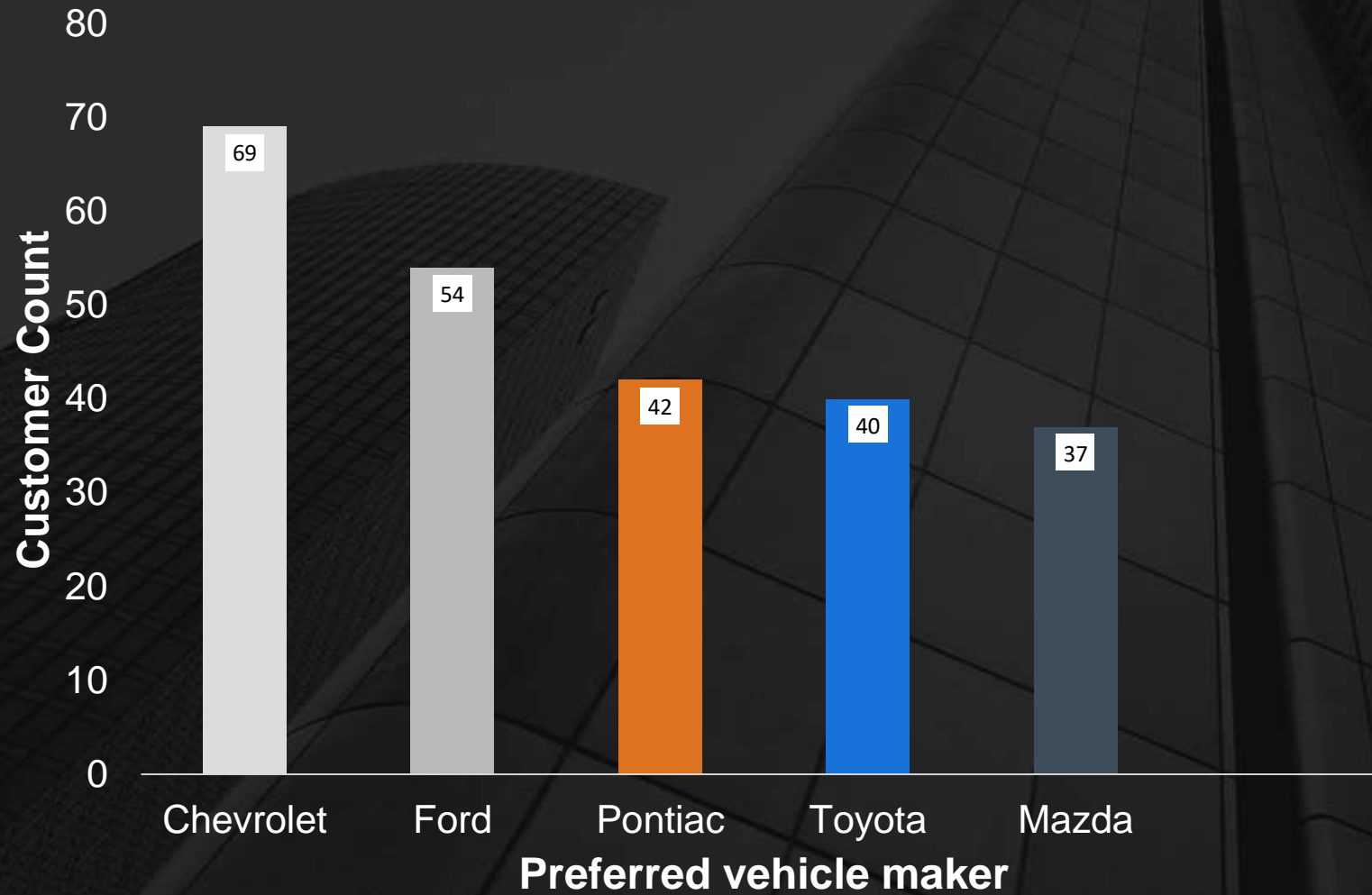
This downward trend continued into the third quarter, where the percentage dropped further to 38%.

%Good and Very Good for QTR 4

20%

The fourth quarter marked the lowest point, with only 20% of feedback falling into the "good" and "very good" categories, highlighting a significant decline in positive feedback.

Top Vehicle makers preferred by customers



Observation/Findings

The preferred vehicle makers among New Wheels customers are, in descending order, Chevrolet, Ford, Pontiac, Toyota, and Mazda.

Most preferred vehicle make in each state

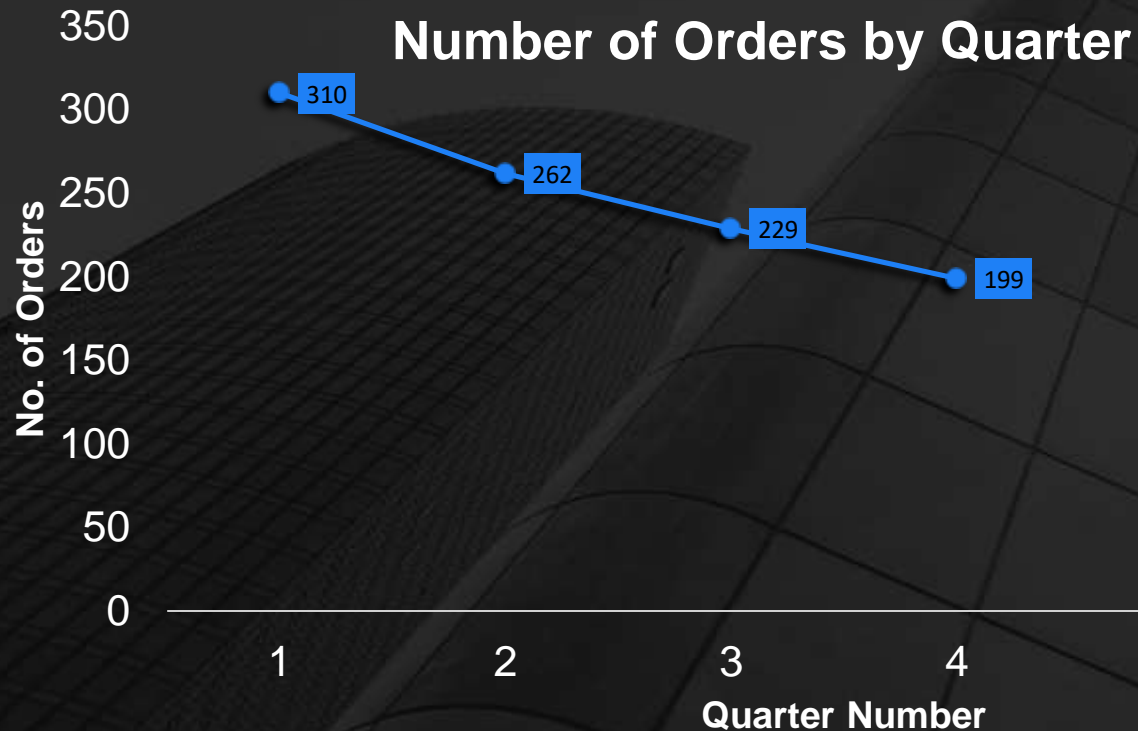
State	Most preferred vehicle maker
Alabama	Dodge
Alabama	Ford
Alaska	Chevrolet
Arizona	Nissan
Arizona	Pontiac
...	...
West Virginia	Volkswagen
Wisconsin	Dodge
Wisconsin	Nissan
Wisconsin	Pontiac
Wyoming	Buick

Observation/Findings

In certain states, there is more than one most preferred vehicle manufacturer. For instance, in Alabama, both Dodge and Ford are highly favored. Similarly, Arizona has Nissan and Pontiac as its top preferences. Conversely, in states like Alaska, Chevrolet stands out as the most preferred choice, while in West Virginia, Volkswagen takes the lead in preference.

REVENUE METRICS

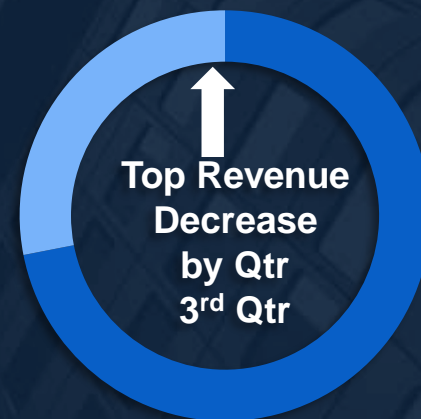
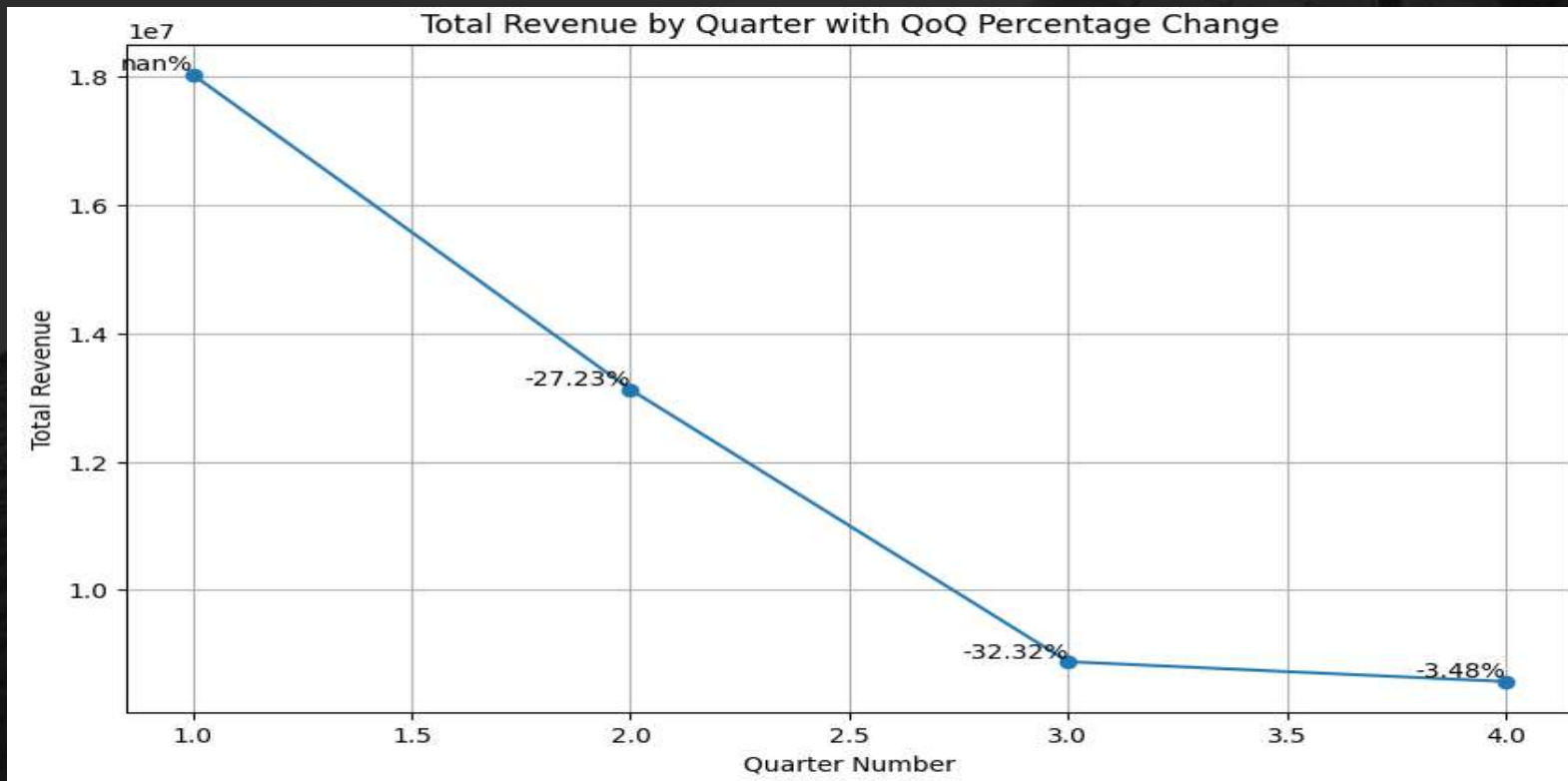
Trend of purchases by Quarter



Observation/Findings

During the first quarter of the year, New Wheels company received the highest number of orders, totaling 310 out of 1000 orders. However, this figure steadily decreased throughout the year, reaching its lowest point in the fourth quarter, with only 199 orders.

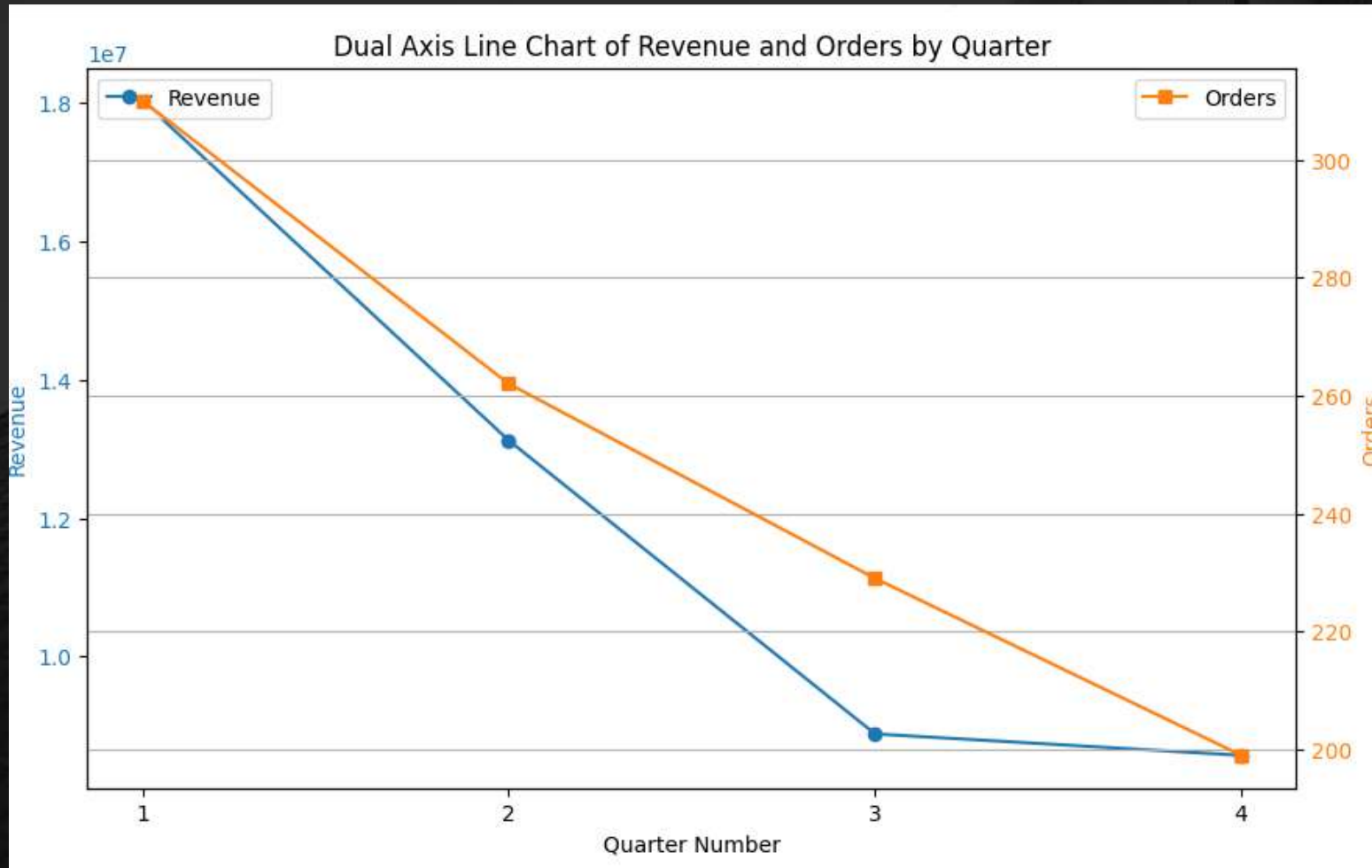
Quarter on Quarter % change in Revenue



Observation/Findings

In the third quarter, there was a notable negative percentage change in revenue, reaching -32.32%, making it the quarter with the most significant decrease in revenue.

Trend of Revenue and Orders by Quarter

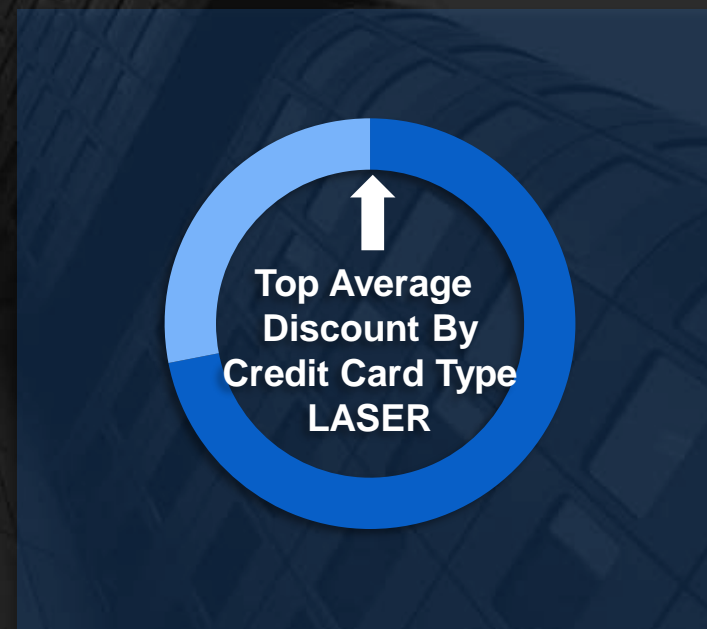
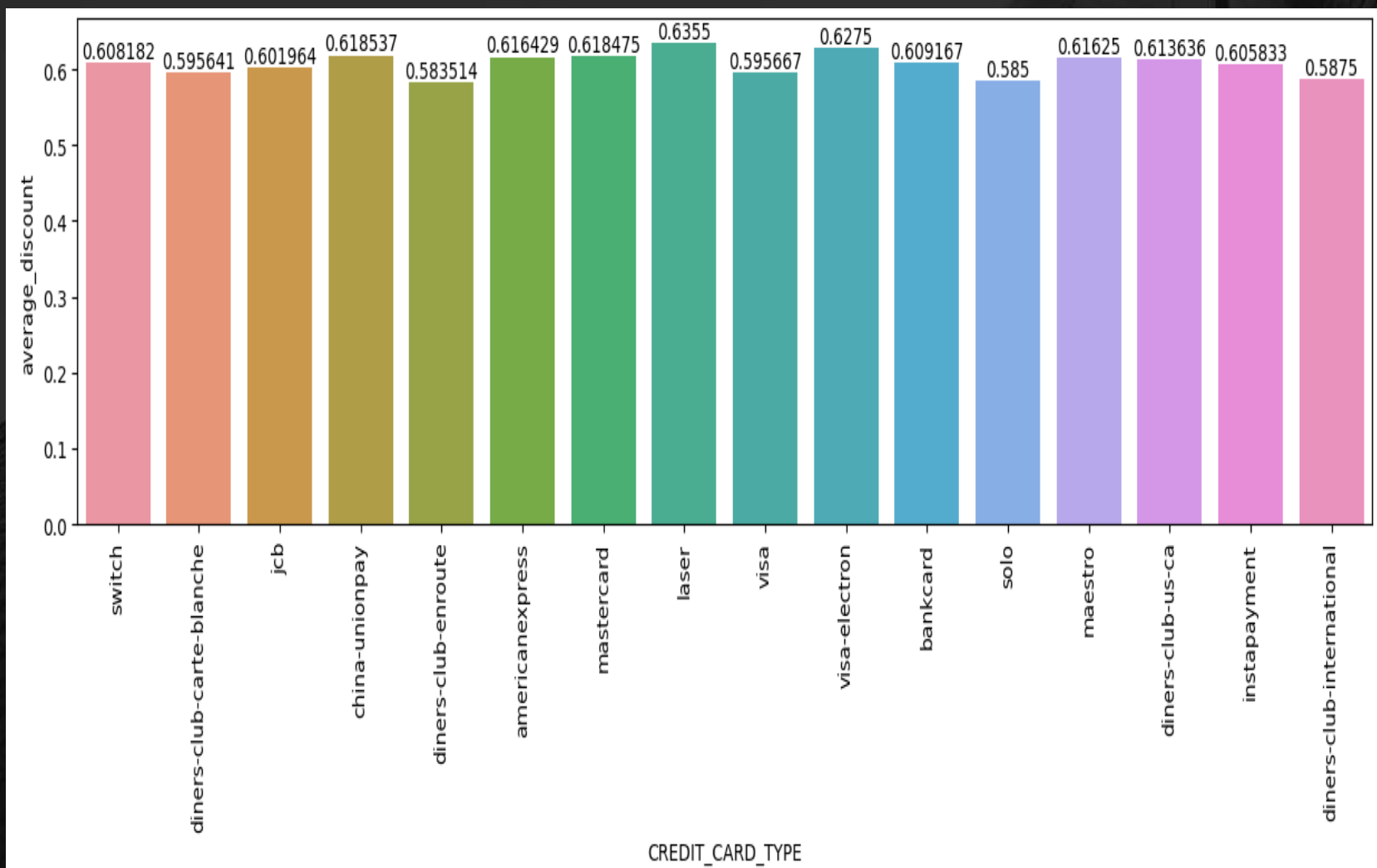


Observation/Findings

The first quarter saw a substantial revenue of \$18,032,549.96. However, as the number of orders declined, there was a significant drop to \$8,882,298.80 in the third quarter. This decline continued further in the fourth quarter, reaching \$8,573,149.32.

SHIPPING METRICS

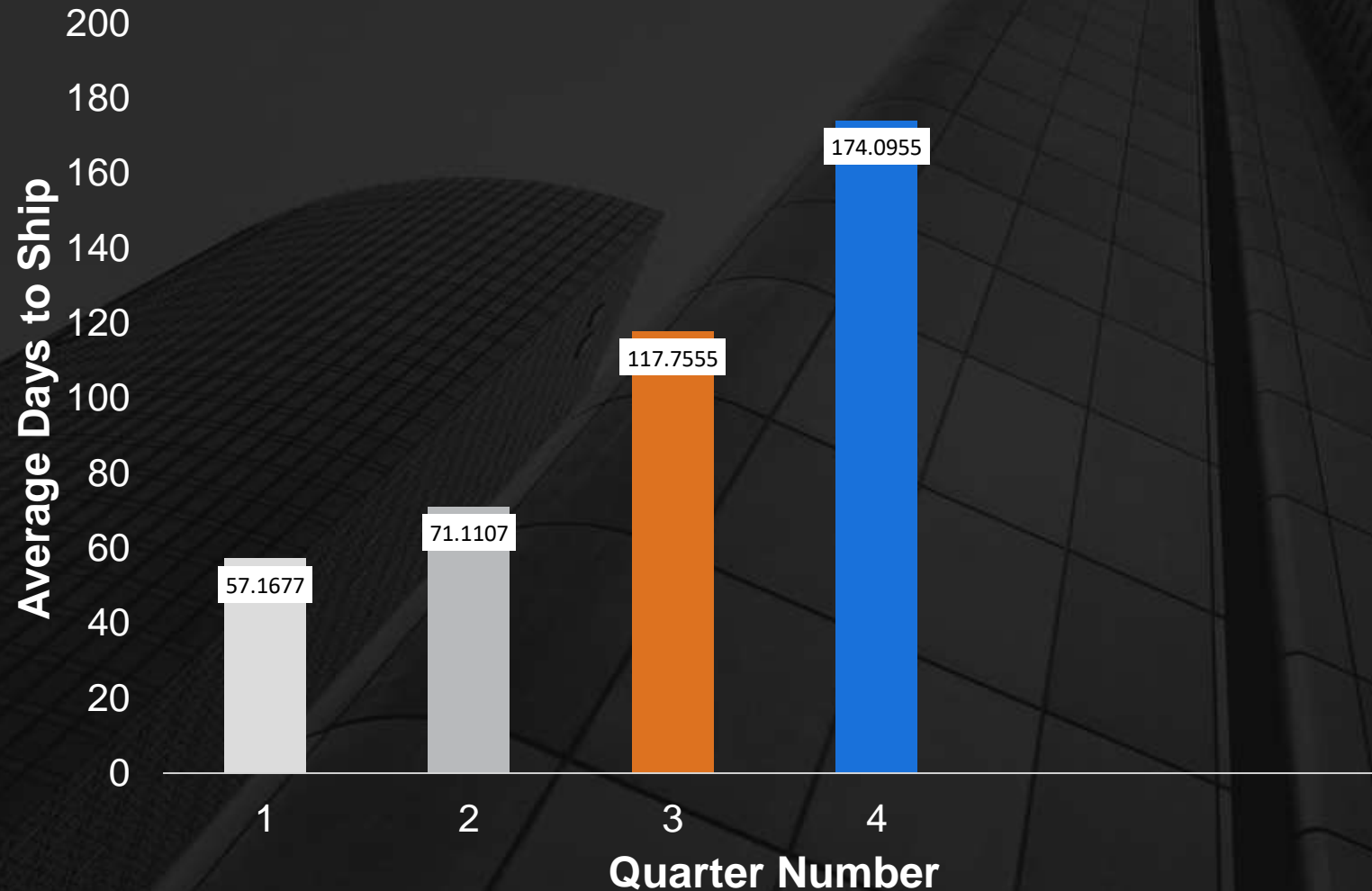
Average discount offered by Credit Card type



Observation/Findings

The bar chart displays the average discounts offered by different credit card types. It reveals that Laser, Visa-electron, and China-UnionPay are the top three credit card types that provide the most substantial discounts. Conversely, Diners-Club-Enroute, Diners-Club-International, and Solo credit cards are among those offering the lowest discounts.

Time taken to ship orders by Quarter



Observation/Findings

During the first quarter of the year, the average time to ship an order to a customer was 57 days. However, as time progressed, the average number of days for order shipment continued to rise. The fourth quarter marked the highest average shipping time, reaching 174 days to deliver products to customers.

INSIGHTS AND RECOMMENDATIONS

Insights

- The majority of New Wheels' customers are concentrated in states like Texas, California, Florida, New York, and the District of Columbia. These states represent the highest customer bases.
- The fourth quarter had the lowest average customer rating, falling below the standard average of 2.5. This indicates a need for improvement in customer satisfaction and service quality.
- The decline in positive feedback ("good" and "very good") from the first quarter (59%) to the fourth quarter (20%) is concerning. It suggests a potential decline in customer satisfaction or product/service quality.
- In some states, there is a preference for more than one vehicle manufacturer, indicating diversity in customer preferences.
- New Wheels experienced a decline in the number of orders as the year progressed, with the fourth quarter having the lowest number of orders (199) compared to the first quarter (310).
- Laser, Visa-electron, and China-UnionPay are offering the highest discounts, which could be a factor in attracting more customers.
- The average time to ship orders increased over the year, with the fourth quarter having the highest average shipping time (174 days).

Recommendations

➤ New Wheels should implement measures to improve customer satisfaction, especially during the later quarters. This might involve enhancing product quality, customer service, and the overall shopping experience.

➤ New Wheels should consider tailoring marketing and promotional strategies to attract and retain customers in states with lower customer bases.

➤ New Wheels should evaluate the product range to ensure it aligns with customer preferences and market demand.

➤ New Wheels should streamline shipping and order fulfillment processes to reduce delivery times and improve customer experience.

➤ New Wheels should continuously monitor and analyze customer feedback to identify areas for improvement and promptly address customer concerns.

➤ New Wheels should develop strategies to stabilize revenue during quarters of decline, such as exploring new sales channels or promotions.

➤ New Wheels should assess the impact of credit card-specific discounts on customer behavior and consider expanding partnerships with credit card providers to attract more customers.

➤ New Wheels should explore opportunities to expand into new markets or regions where customer demand may be higher.

THANK YOU

Email: Flexxme2015@yahoo.com