

# **Introduction to SQL**

## **Project Report**

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**Batch - AIML April 23 Group 1**

# Business Overview

Total Revenue

\$ 124.7 M

Total Orders

1000

Total Customers

994

Average Rating

3.01

Last Qtr. Revenue

\$ 23.3 M

Last Qtr. Orders

199

Avg. Days to Ship

105

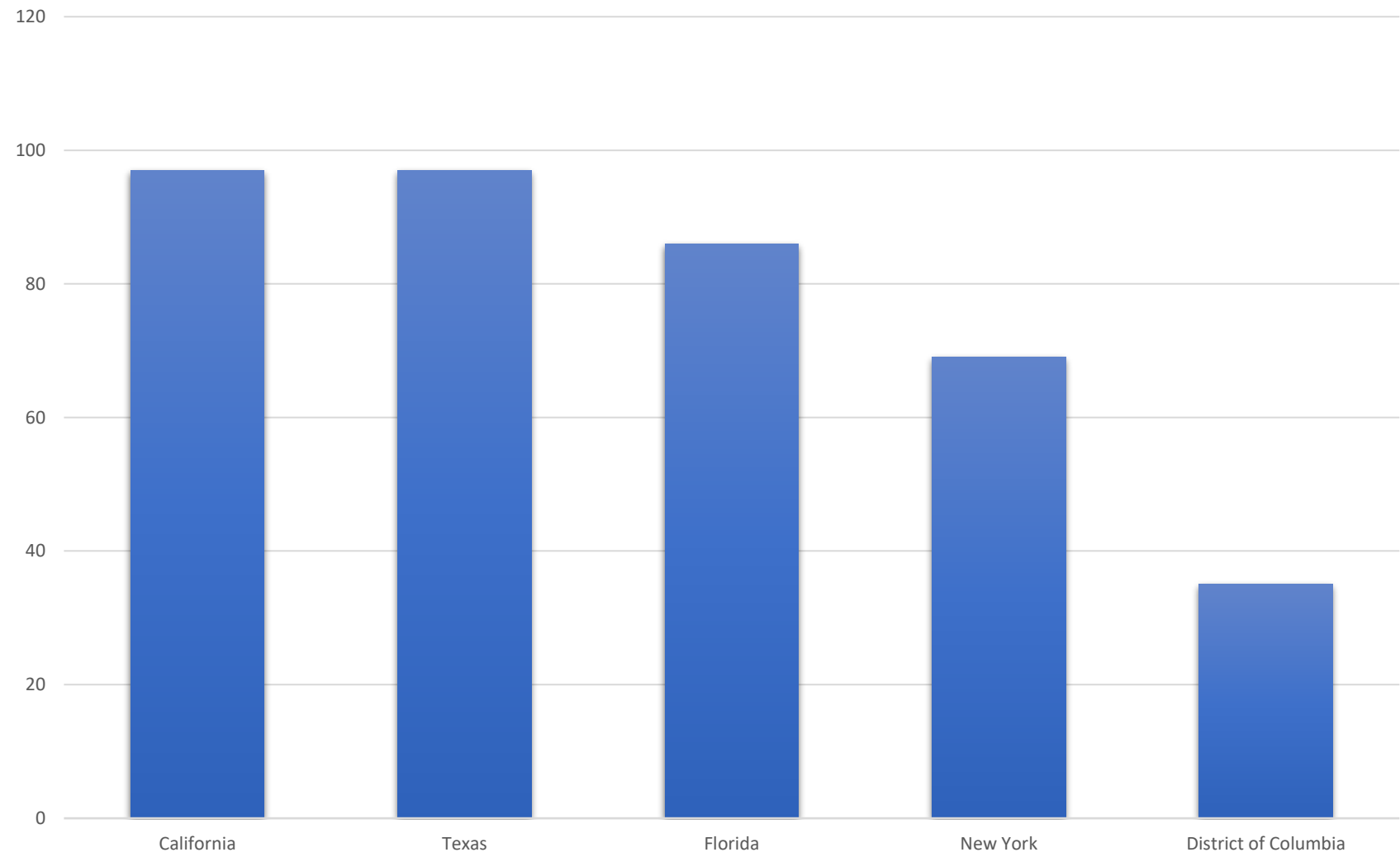
% Good Feedback

20.5%

# Customer Metrics

# Distribution of Customers Across States

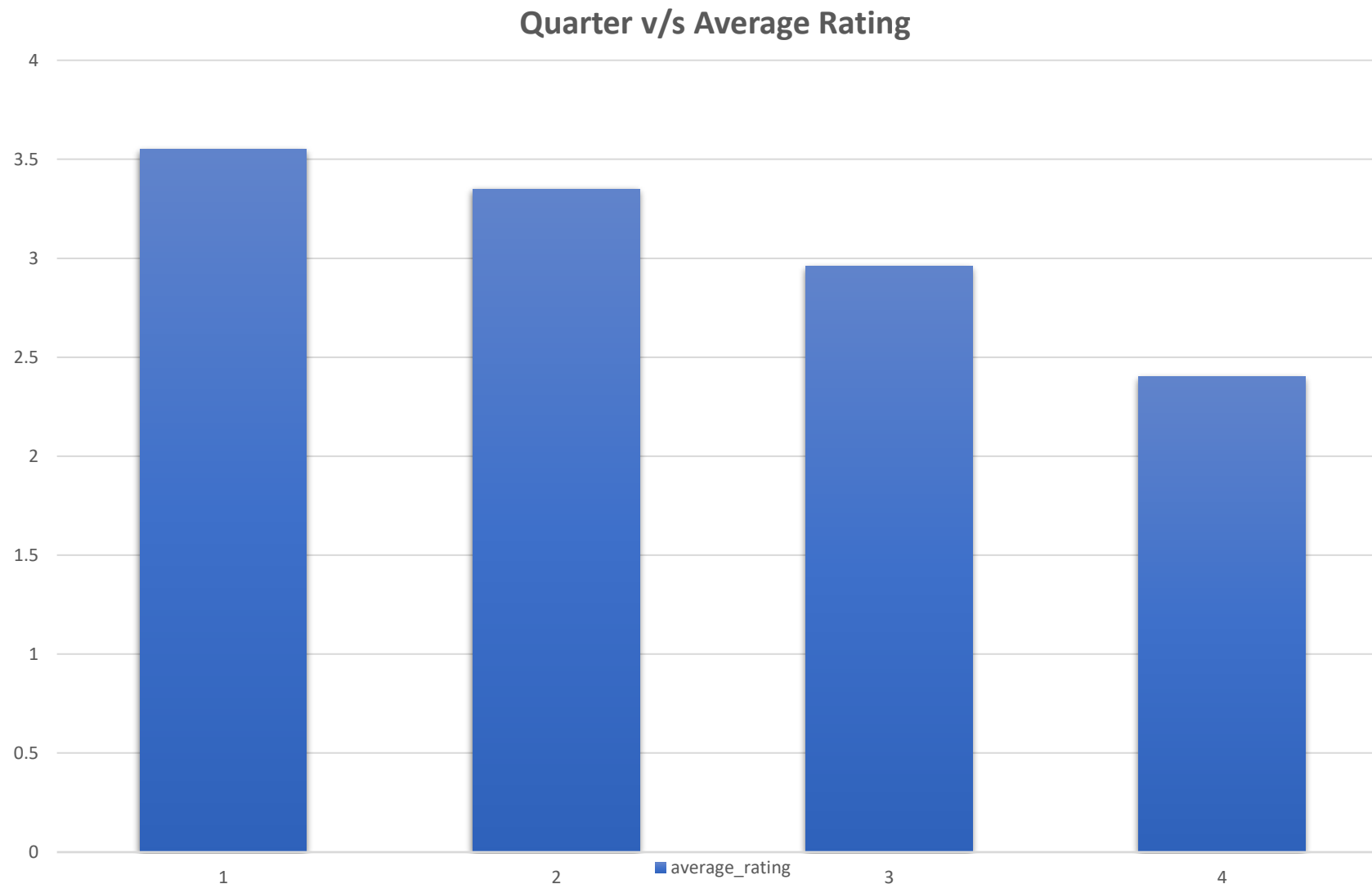
State v/s Customer Count



## Observations/Findings:

- California, Texas, Florida, New York and District of Columbia have the highest number of customers.
- California and Texas have the maximum number of customers. (97)

# Average Customer Ratings by Quarter

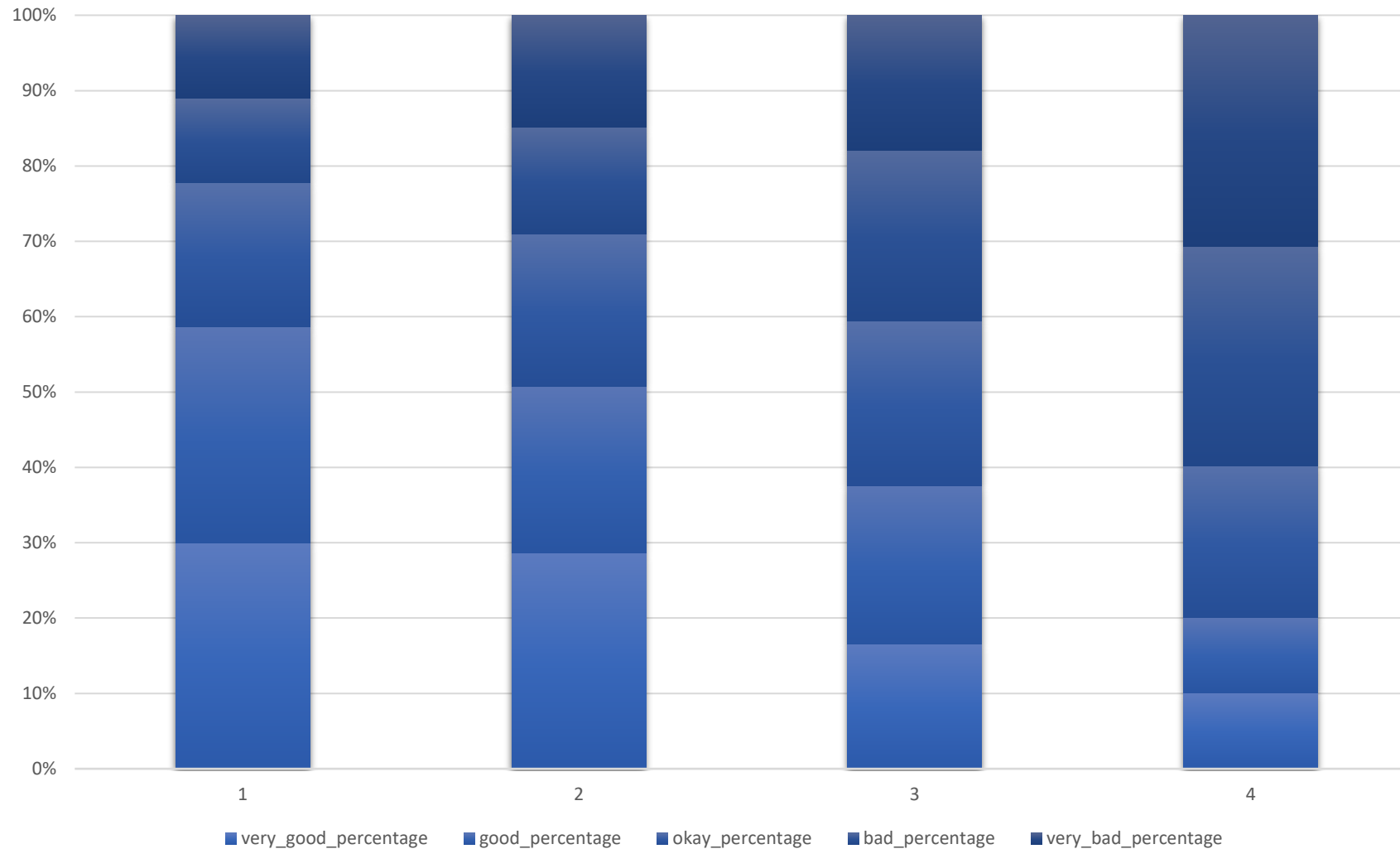


## Observations/Findings:

- There is a negative trend in customer rating.
- The overall average customer rating across quarters is 3.01.

# Trend of Customer Satisfaction

Quarter wise percentage split of customer feedback

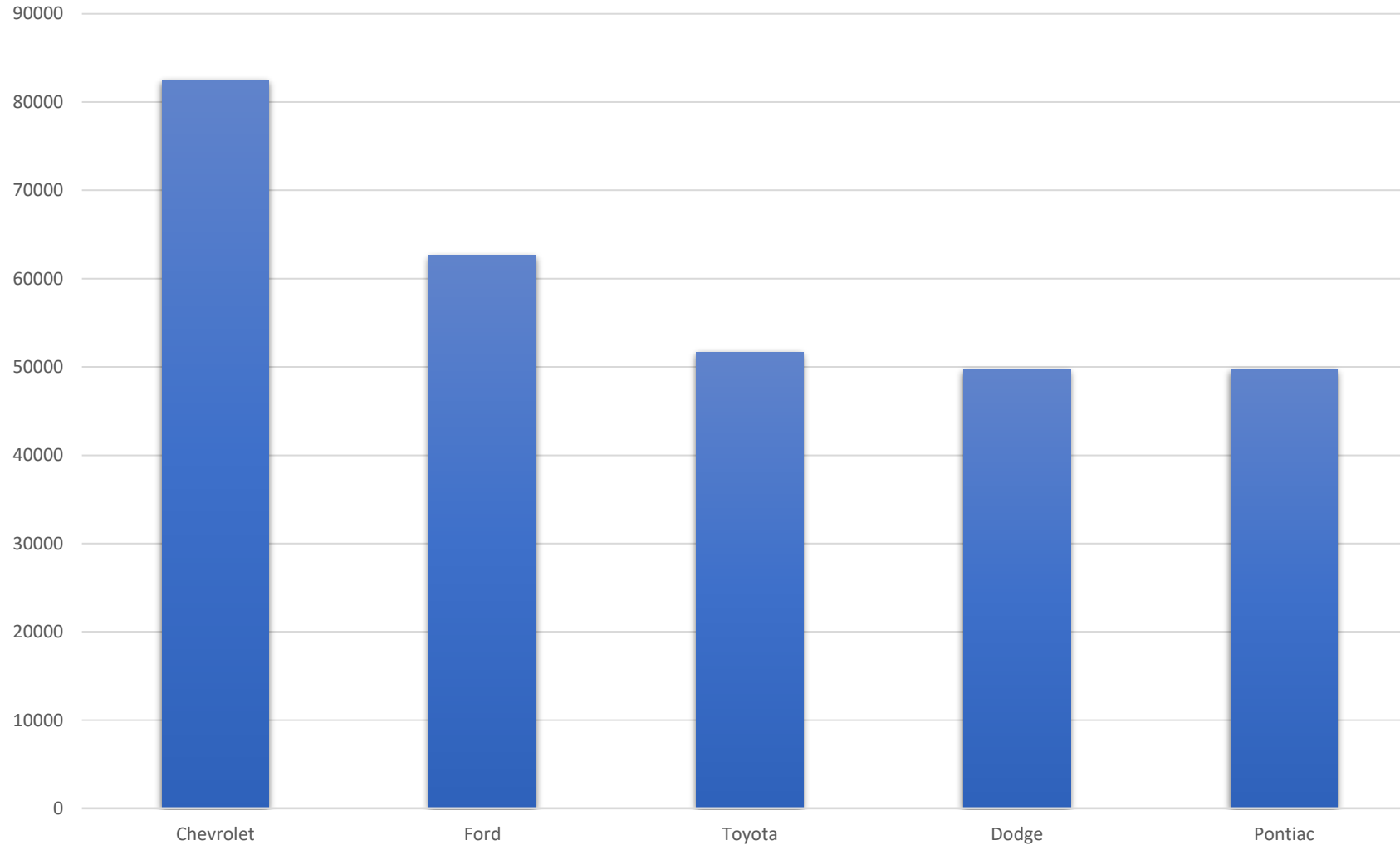


## Observations/Findings:

- There is a decreasing trend of very good and good feedback from Q1 to Q4.
- The neutral feedback (okay) is consistent throughout all quarters.
- There is an increasing trend of bad and very bad feedback from Q1 to Q4.

# Top Vehicle makers Preferred by Customers

Top 5 Vehicle Makers v/s No. of Customers



## Observations/Findings:

- The top 5 vehicle makers preferred by customers are Chevrolet, Ford, Toyota, Dodge and Pontiac.
- The most preferred vehicle maker is Chevrolet.

# Most preferred vehicle make in each state

State	Top Vehicle Maker	State	Top Vehicle Maker	State	Top Vehicle Maker
Texas	Chevrolet	Michigan	Ford	West Virginia	Mercedes-Benz
				Arkansas	Suzuki, Chevrolet, Pontiac, Volkswagen, Mitsubishi, GMC
Florida	Toyota	Minnesota	GMC	Hawaii	Ford, Toyota, Pontiac, Nissan, Cadillac, GMC
California	Ford, Dodge, Audi, Nissan, Chevrolet	Nevada	Pontiac	Iowa	Chrysler, Chevrolet, Hyundai, Isuzu, Dodge, Mazda, Porsche, Jeep, Ford, Pontiac, Subaru
Ohio	Chevrolet	North Carolina	Volvo	Kansas	GMC, Lexus, Buick, Mercedes-Benz, Suzuki, Honda, Dodge, Volkswagen, Ford, Mazda, Maserati, Nissan, Saab
Alabama	Dodge	Pennsylvania	Toyota	Kentucky	Acura, Mercury, Audi, Ram, Volvo, Pontiac, Nissan, Mercedes-Benz
Colorado	Chevrolet	Tennessee	Mazda	Maine	Mercedes-Benz
Maryland	Ford	Alaska	Chevrolet	Mississippi	Dodge, Toyota
New York	Toyota, Pontiac	Connecticut	Chevrolet, Mercury, Maserati	Montana	Chevrolet, Mitsubishi, Dodge
Virginia	Ford	Delaware	Mitsubishi	Nebraska	Chevrolet, Mercedes-Benz, Volkswagen, Nissan, Pontiac, Toyota, Cadillac
Washington	Chevrolet	Idaho	Dodge	New Hampshire	Chrysler, Lincoln, Lexus
District of Columbia	Chevrolet	Louisiana	BMW, Nissan, Ford, Pontiac, Kia	North Dakota	Hyundai, Ford
Indiana	Mazda	Massachusetts	Dodge, Chevrolet	South Carolina	Acura, Buick, BMW, Kia, Mazda, Mitsubishi, Dodge, Jaguar, Isuzu
Missouri	Chevrolet	New Jersey	Mercedes-Benz, Hyundai	Utah	Maybach, Volkswagen, Isuzu, Subaru, Lincoln, Chevrolet, Oldsmobile, Pontiac, Dodge, Buick
Arizona	Pontiac, Cadillac	New Mexico	Dodge	Vermont	Mazda
Georgia	Toyota	Oklahoma	Toyota, Ferrari, Mazda	Wisconsin	Pontiac, Chevrolet, Acura, Mazda, Nissan, Cadillac, Dodge, Honda
Illinois	Ford, GMC, Chevrolet	Oregon	Toyota	Wyoming	Buick

## Observations/Findings:

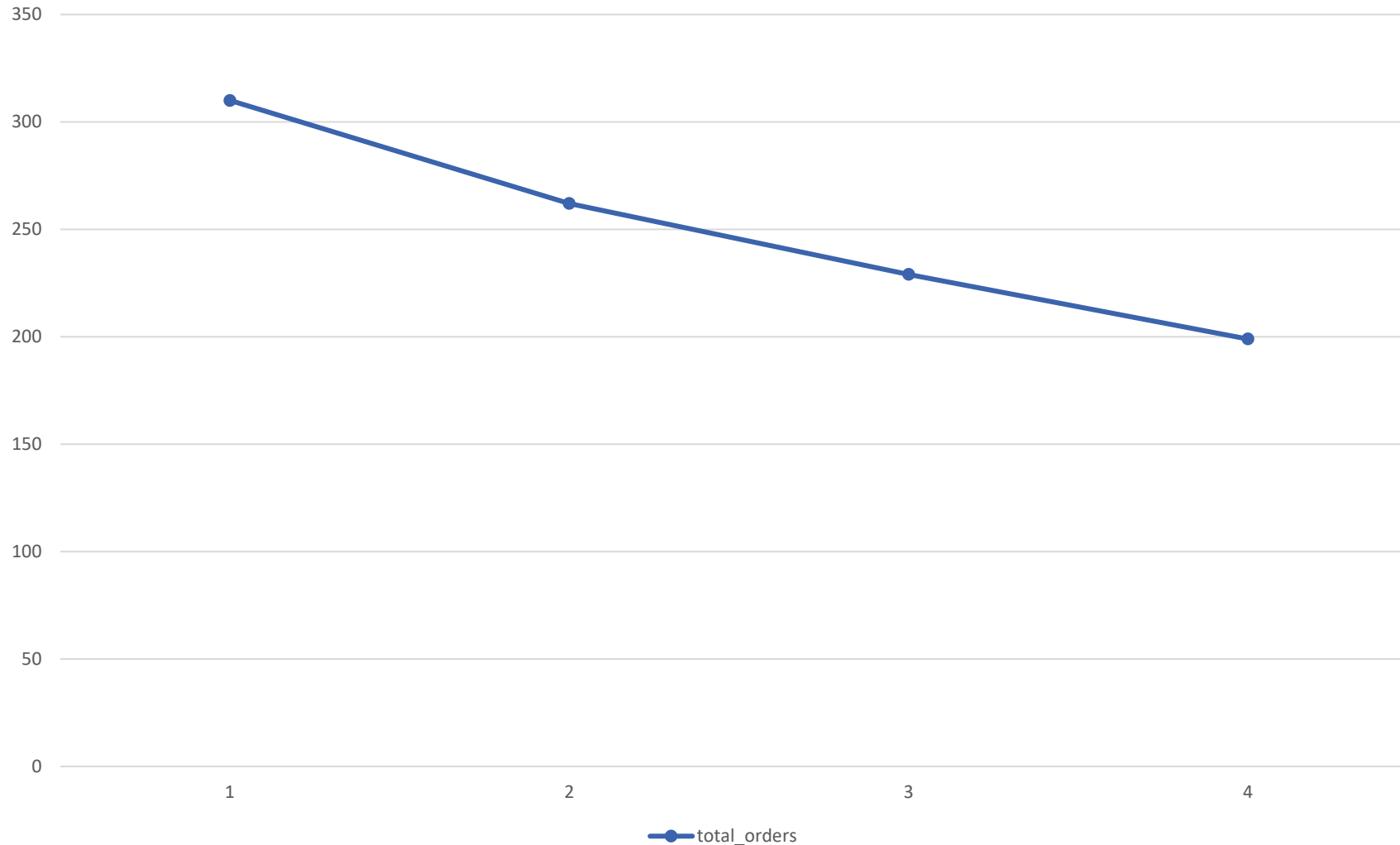
- Chevrolet is the most preferred vehicle for majority of the states.
- California and Texas have the highest number of customers.



# Revenue Metrics

# Trend of Purchases by Quarter

Quarter v/s Total Orders



## Observations/Findings:

- There is a declining trend of orders from Q1 to Q4.
- There is a reduction of 111 orders from Q1 to Q4.

# Quarter on Quarter % Change in Revenue

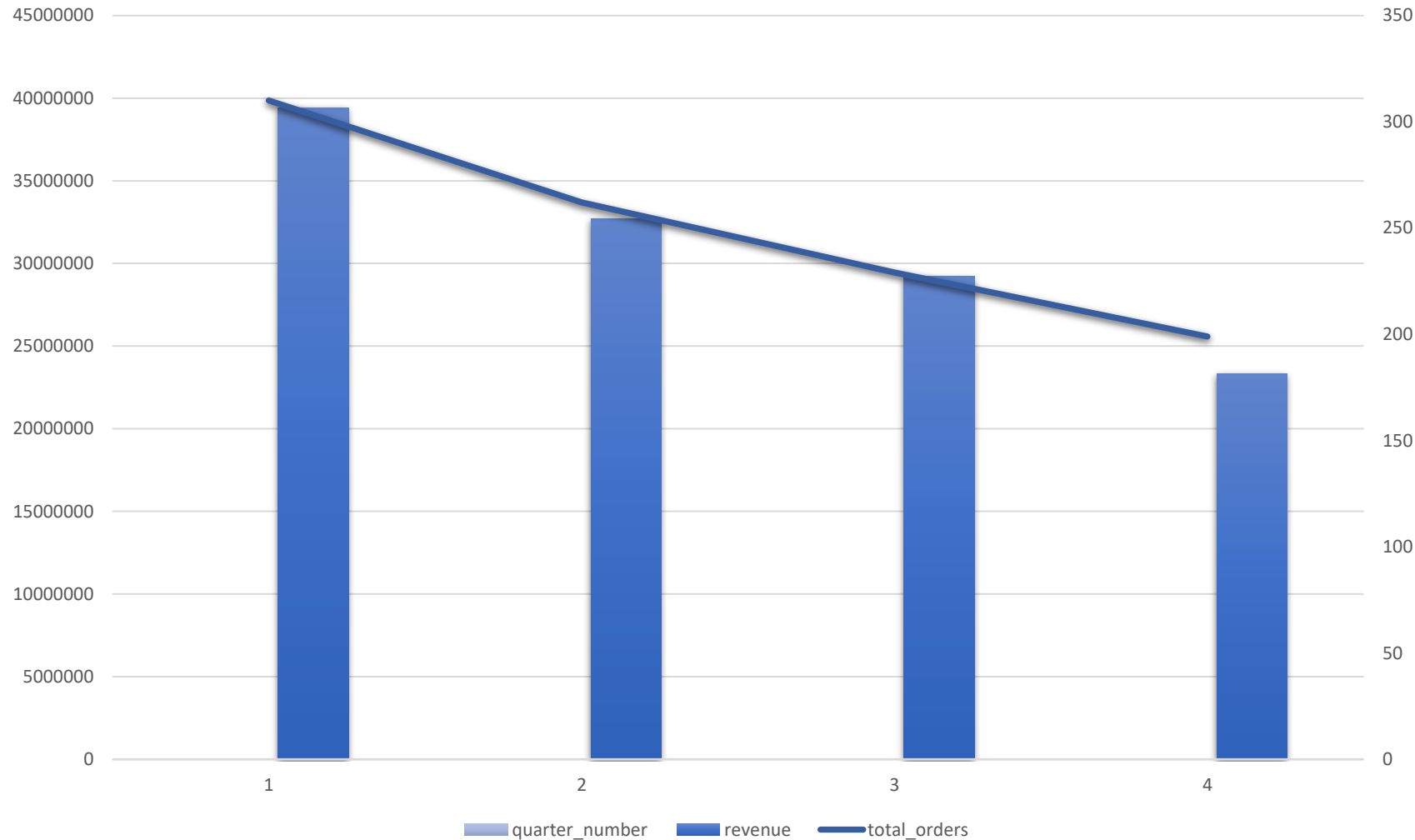
Quarter Number	Revenue	QOQ % Change
1	\$ 39421580	-
2	\$ 32715830	-17.01%
3	\$ 29229896	-10.66%
4	\$ 23346780	-20.13%

## Observations/Findings:

- There is a decline in revenue when compared with previous quarters.
- There is 17% decrease in Q2 revenue when compared with Q1.
- There is a 10% decrease in Q3 revenue when compared with Q2.
- There is a 20% decrease in Q4 revenue when compared with Q3.

# Trend of Revenue and Orders by Quarter

Quarter v/s Revenue & Total Orders



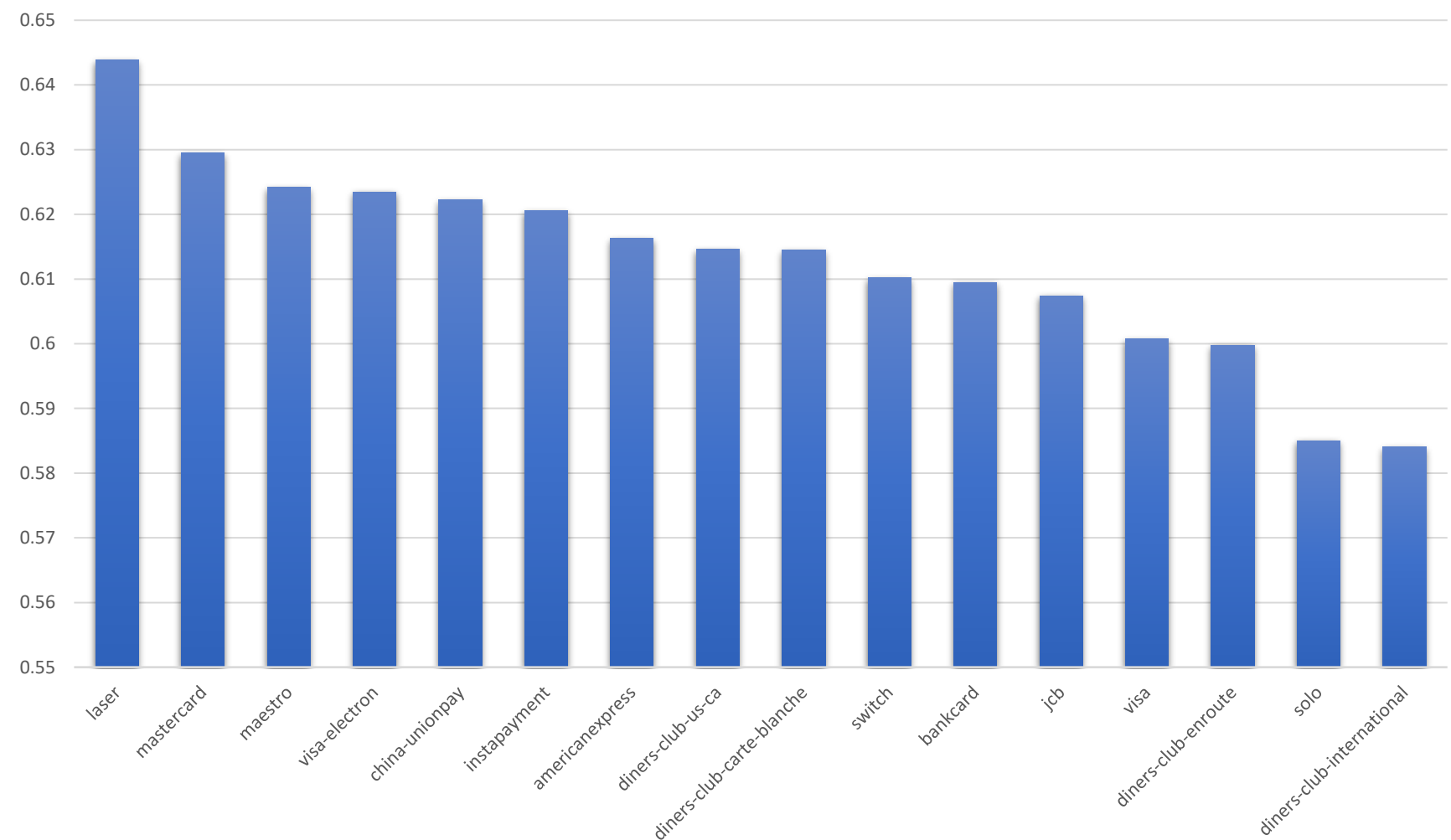
## Observations/Findings:

- There is a declining trend of revenue and total orders from Q1 to Q4.
- There is a 47% reduction in revenue from Q1 to Q4.
- There is a reduction of 111 orders from Q1 to Q4.

# Shipping Metrics

# Average Discount offered by Credit Card type

Credit Card type v/s Average Discount

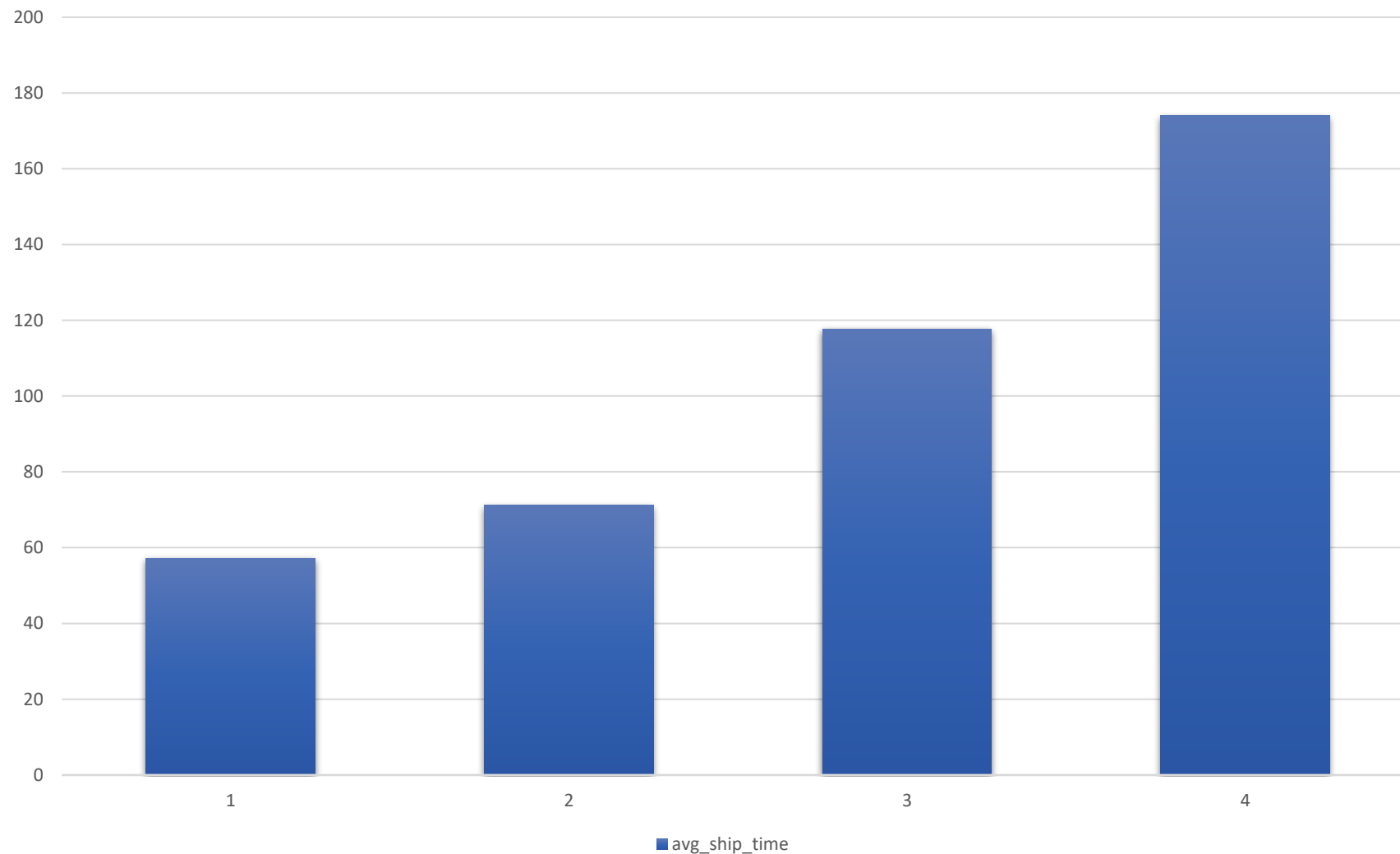


Observations/Findings:

- Lowest discount is given by Diners Club International (58.4%)
- Highest discount is given by Laser (64.4%)
- Average discount ranges from 58.4% to 64.4%

# Time taken to ship orders by Quarter

Quarter v/s Average Ship Time



## Observations/Findings:

- The average shipping time has increased from Q1 to Q4.
- This implies that there is a delay in average shipping time throughout the quarters.

# **Insights and Recommendations**



- The cause of declining ratings can be analysed.
- The negative trend in customer feedback can be analysed.
- Feedback surveys can be conducted to improve ratings and customer contentment.
- The cause of declining orders across quarters can be analysed.
- The cause of decline in revenue can be analysed.
- Decline in revenue can be studied to find out top popular vehicles/vehicle makes.
- Decline in revenue can also be studied to find out least popular vehicles/vehicle makes.
- The cause of delay in average shipping time can be analysed to improve the metric.

**Thank you**