# SQL and Databases:

New-Wheels Quarterly Business Report

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BATCH: MDS DEAKIN BV - JUNE 24

# Business Overview

| Total Revenue | Total orders | Total Customers | Total AVG Rating |
|---|---|---|---|
| 12.4 | 1000 | 994 | 3.135 |

| Last Qtr Rev | Last Qtr Ord | Total Avg Days to Ship | Total % Good Feedback |
|---|---|---|---|
| 23,346,779.63 | 199 | 98 | 22.6% |

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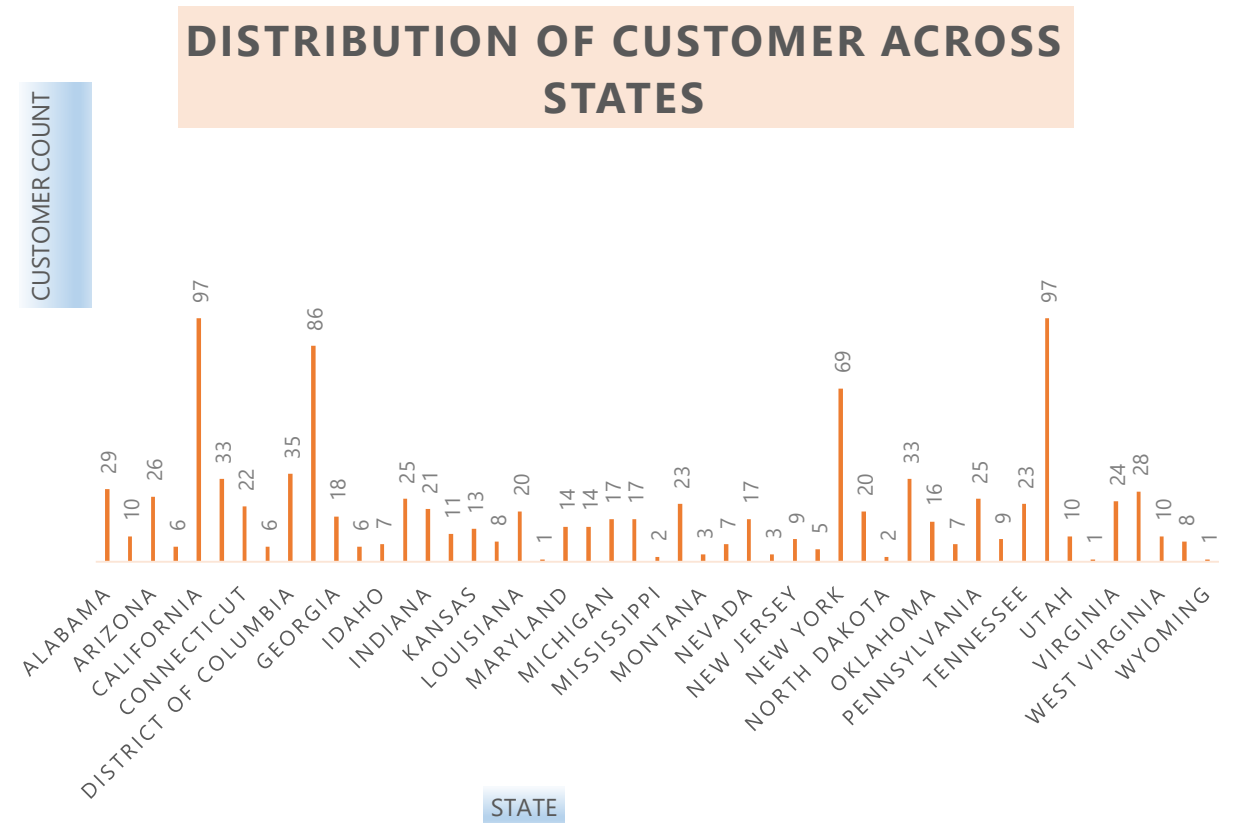**Shipping Metrics**

**04**

**Insight and Recs**

# 01
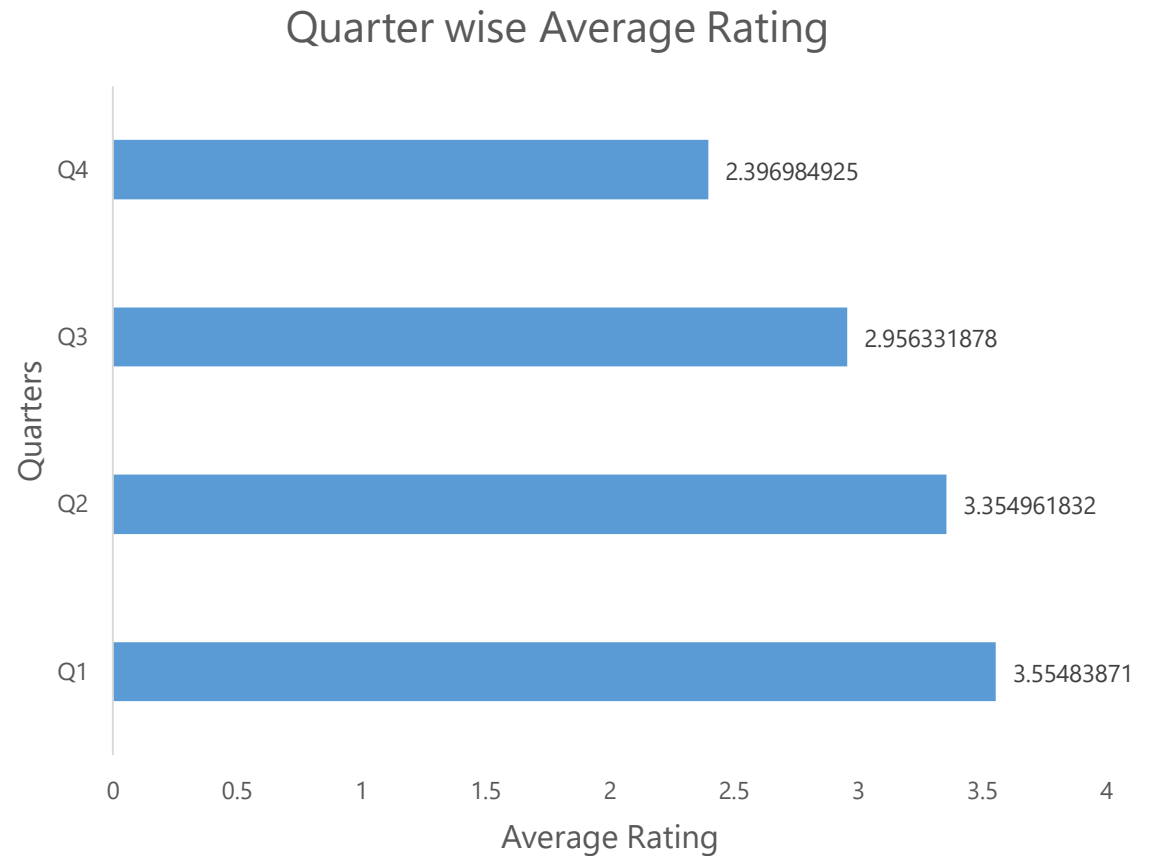# Customer Metrics

# Distribution of Customers Across States

## Observations/Findings:

● California and Texas have the most customers (97 customers)

● Followed by Florida (86), New York (69), District of Columbia(35)

● Maine, Wyoming, and Vermont have the least amount of customers (1 customer from each state)



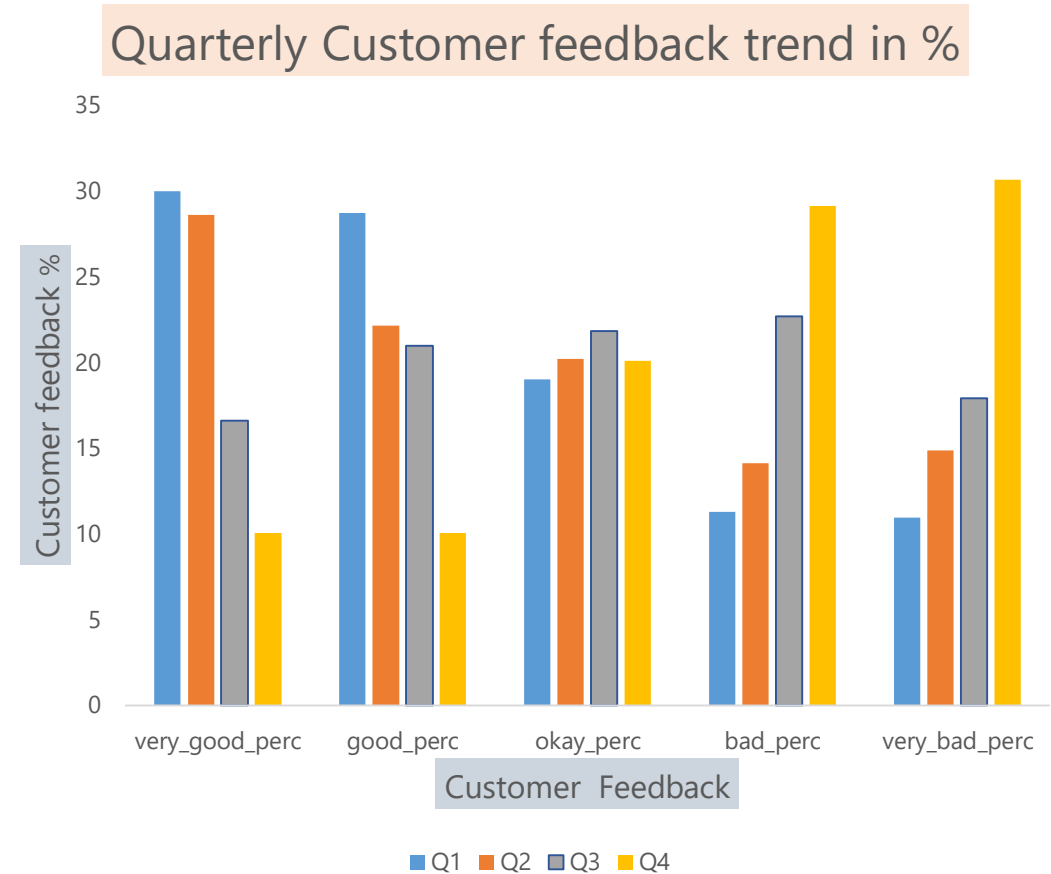DISTRIBUTION OF CUSTOMER ACROSS STATES

# Average Customer Ratings by Quarter

- ❖ Average ratings have decreased each quarter
- ❖ Average ratings are now at an all time low
- ❖ The biggest drop in average ratings was in   between Quarter 2 and Quarter 3
  - ○ Quarter 1: 3.55
  - ○ Quarter 2: 3.35
  - ○ Quarter 3: 2.96
    - ○ Quarter 4: 2.40

## Quarter wise Average Rating

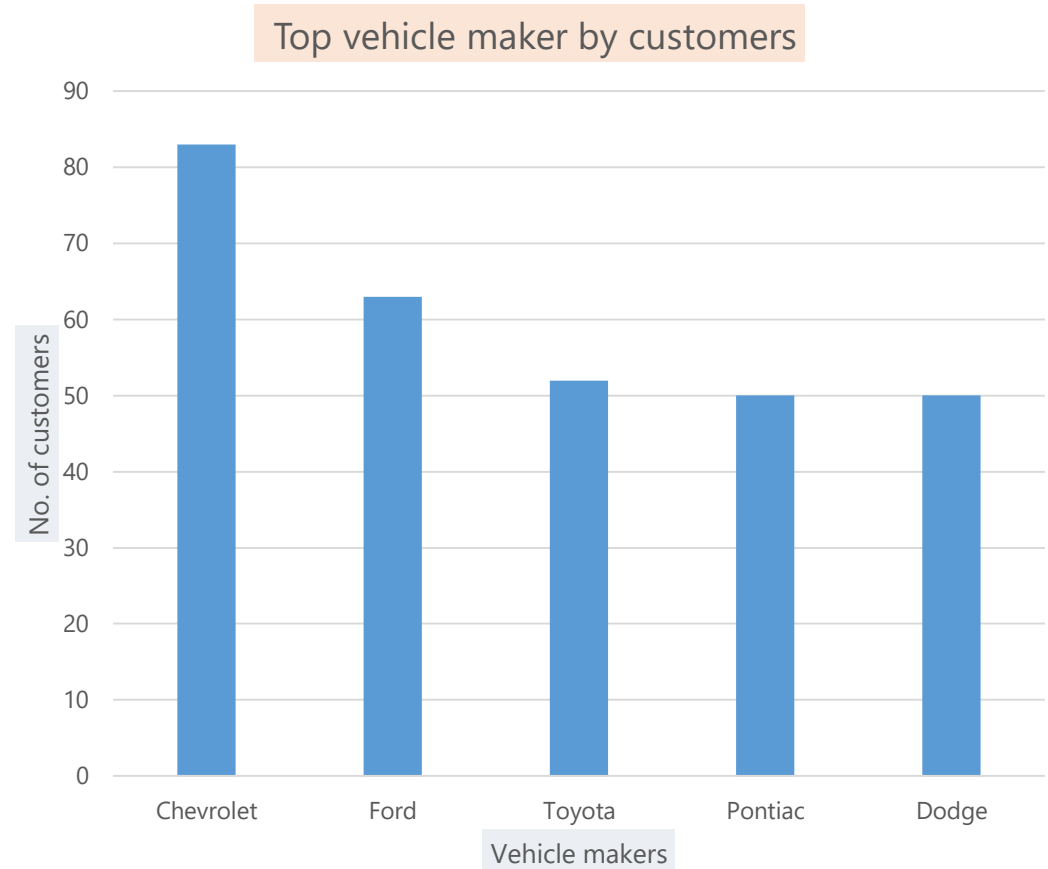| Quarter | Average Rating |
|---------|---------------|
| Q4 | 2.396984925 |
| Q3 | 2.956331878 |
| Q2 | 3.354961832 |
| Q1 | 3.55483871 |

Average Rating

Quarters

# Trend of Customer Satisfaction

❖There is an increase in 'Very Bad' and 'Bad' ratings

throughout the Quarters

❖There is a decrease in 'Good' and 'Very_Good' Ratings throughout the Quarters

❖ Quarter 4 has the most 'Very Bad' and 'Bad'

Ratings and the least amount of 'Good' and

❖'Very_Good' ratings compared to the other quarters



Quarterly Customer feedback trend in %

# Top Vehicle Makers preferred by Customers

❖ Chevrolet is the top favorite Vehicle Maker preferred by customers (83 customers)

❖ Ford (63 customers)

❖ Toyota (52 customers)

❖ Dodge and Pontiac (50 customers) are the least preferred vehicle makers by customers with only 1 customer each.



Top vehicle maker by customers

# Most Preferred Vehicle Make in each State

❖In California 97 customers preferred the vehicle make Isuzu

❖ In Texas, 97 customers preferred the vehicle make Chrysler

❖In Florida, 86 customers preferred the vehicle make GMC

❖In New York, the most preferred vehicle make is Buick with 69 customers

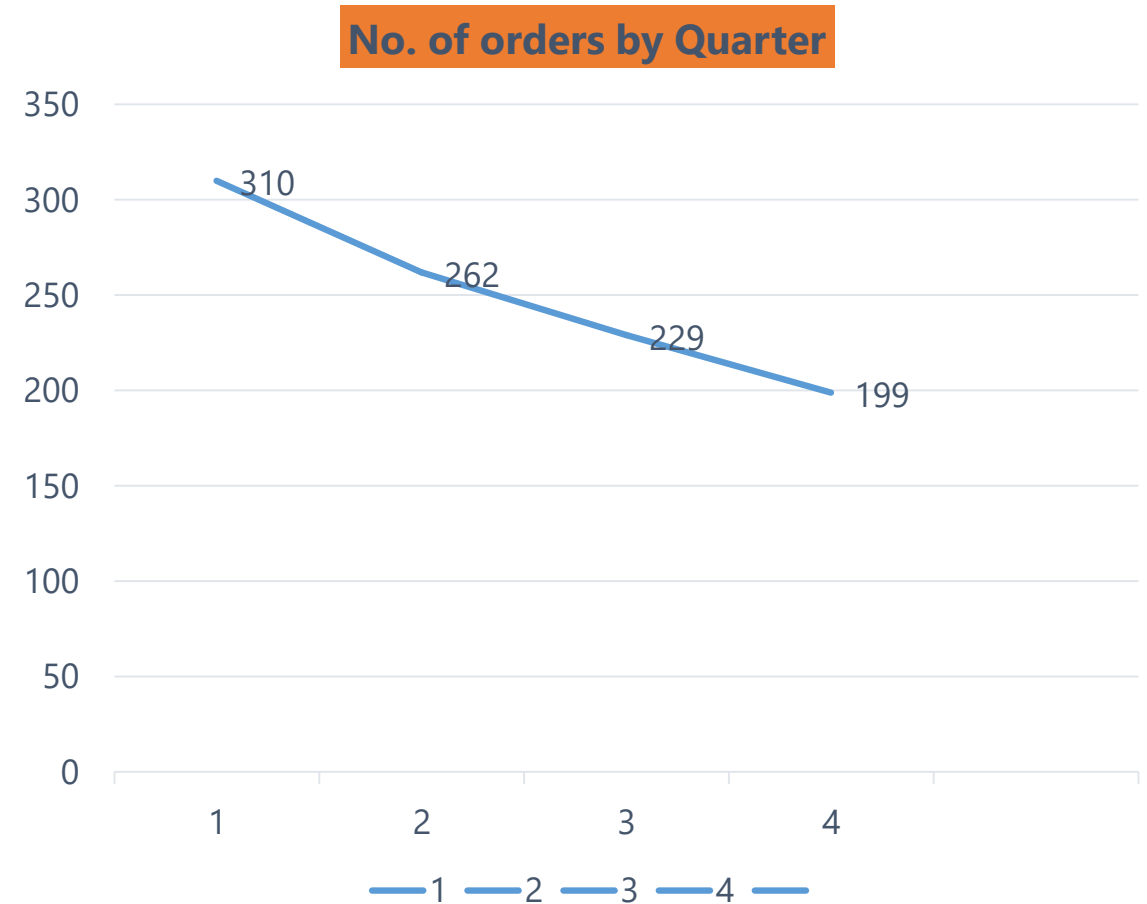❖In the District of Columbia, 35 customers preferred the vehicle make Mazda

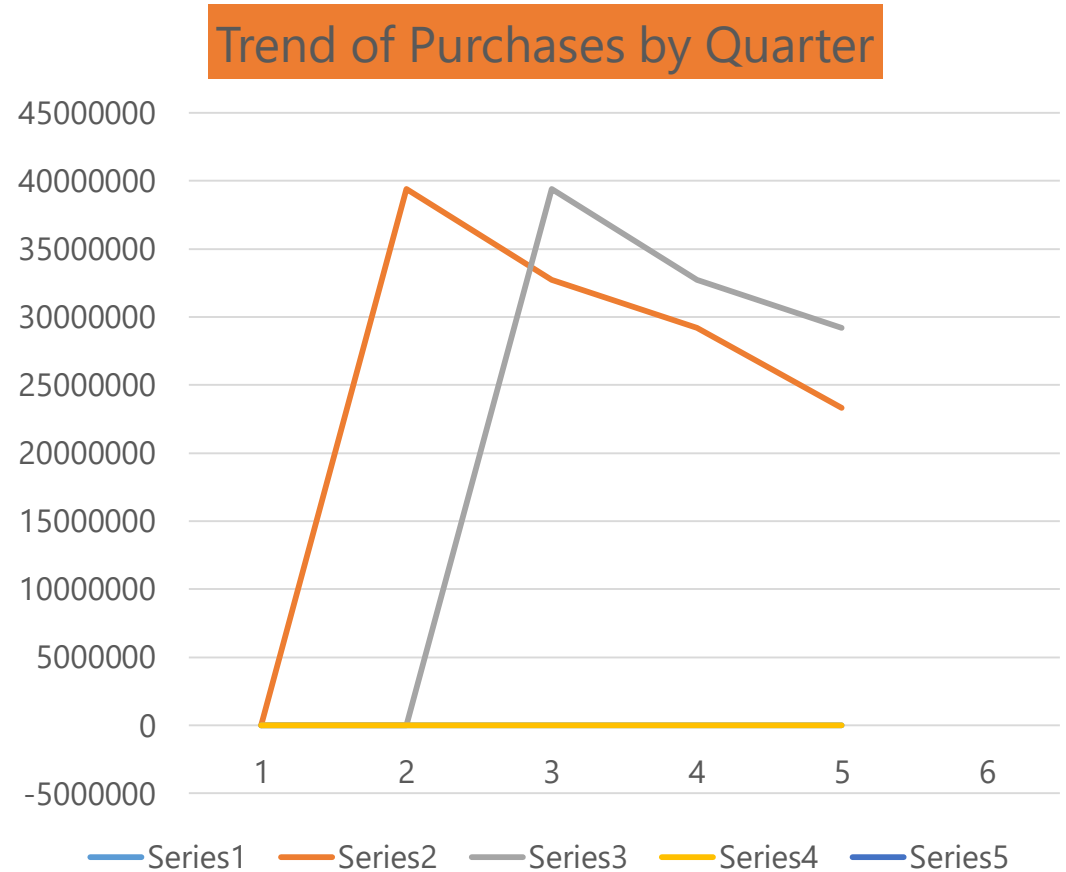| State | Vehicle_Maker |
|---|---|
| Alabama | Dodge |
| Alaska | Chevrolet |
| Arizona | Cadillac |
| Arizona | Pontiac |
| Arkansas | Chevrolet |
| Arkansas | GMC |
| Arkansas | Mitsubishi |
| Arkansas | Pontiac |
| Arkansas | Suzuki |
| Arkansas | Volkswagen |
| California | Audi |
| California | Chevrolet |
| California | Dodge |
| California | Ford |

# 02
# Revenue Metrics

# Trend of Purchases by Quarter

❖ Over the quarters the number of orders have steadily decreased

❖ At Quarter 4 the company has reached its lowest number of orders

❖ More than 100 orders were lost between Quarter 1 and Quarter 4 (Now)

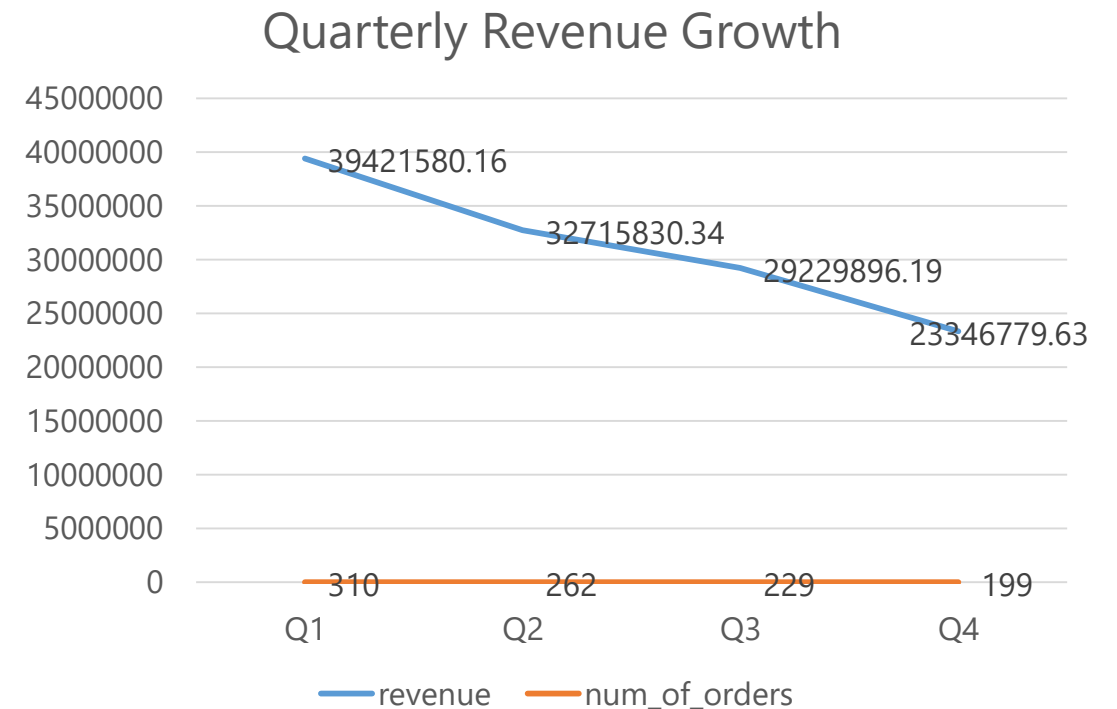❖ The most orders lost were in between Quarter 1 and Quarter 2 (48 orders lost)

**No. of orders by Quarter**

| | | | |
|---|---|---|---|
| 310 | 262 | 229 | 199 |

350
300
250
200
150
100
50
0

1    2    3    4

— 1 — 2 — 3 — 4 —

# Quarter on Quarter % change in Revenue

❖Each quarter % change is negative meaning there was no increase in Revenue whatsoever

❖The largest percentage decrease in Revenue was in Quarter 4

❖The smallest percentage decrease in Revenue was in Quarter 3



Trend of Purchases by Quarter

Series1 — Series2 — Series3 — Series4 — Series5

# Trend of Revenue and Orders by Quarter

❖ As orders decreased linearly by each Quarter, revenue also decreased linearly

❖ Quarter 1 was the peak of orders and the peak of revenue

❖ Orders: 310

❖ Revenue: $39,374,179

❖ Quarter 4 is the lowest point for the company with the lowest amount of orders and lowest total revenue

❖ Orders: 199

❖ Revenue: $23,276,651

### Quarterly Revenue Growth



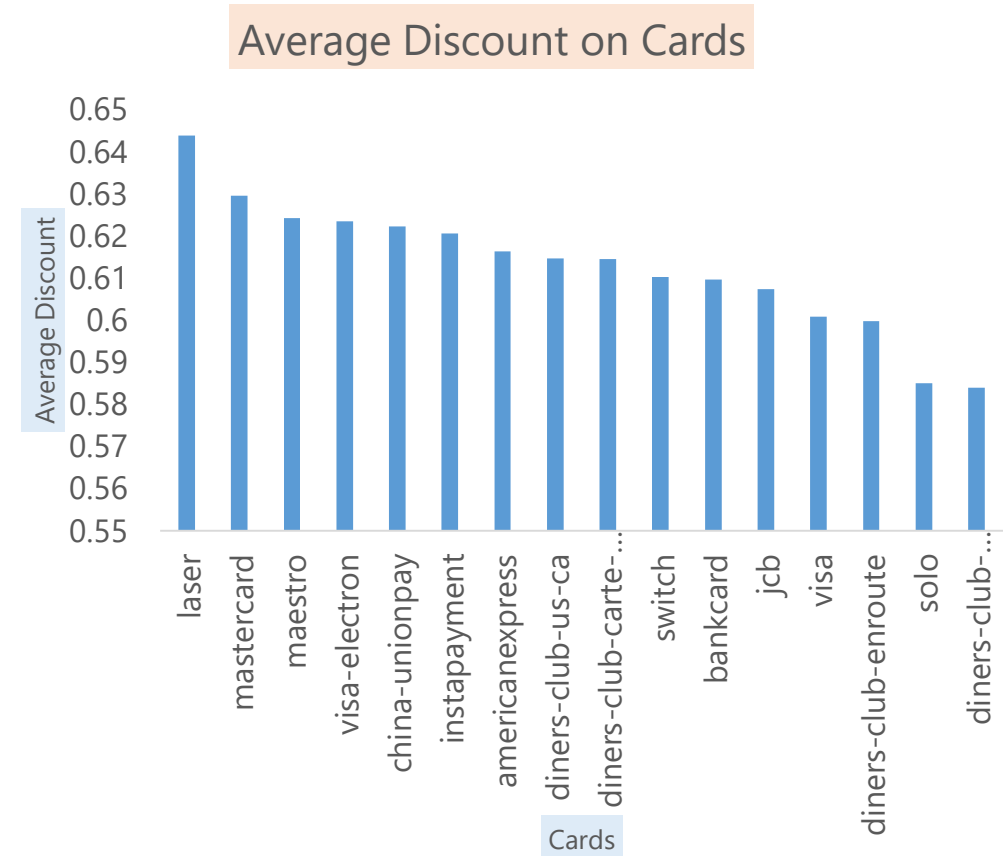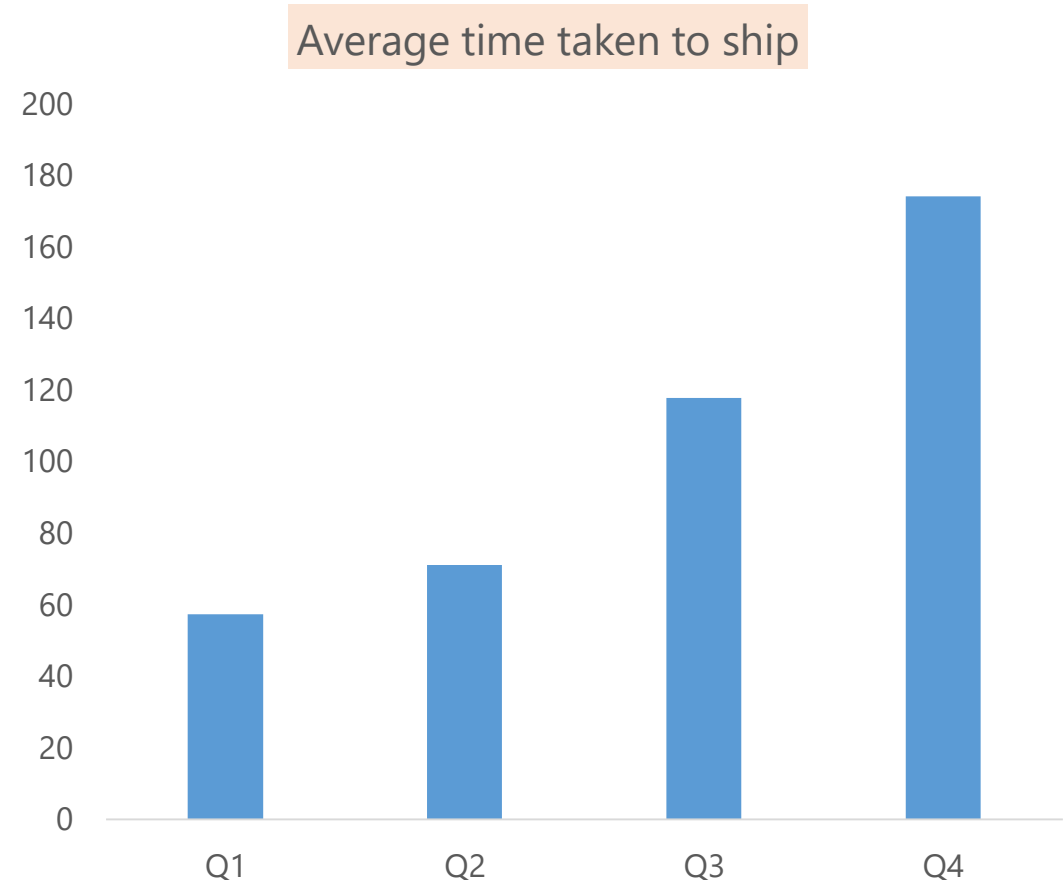| | Q1 | Q2 | Q3 | Q4 |
|---|---|---|---|---|
| revenue | 39421580.16 | 32715830.34 | 29229896.19 | 23346779.63 |
| num_of_orders | 310 | 262 | 229 | 199 |

# 03
# Shipping Metrics

# Average discount offered by Credit Card type

❖ The credit card type with the highest average discount is Laser with a 64% discount

❖ The credit card type with the lowest average discount is Diners-club-international with a 58% discount

❖ The average discount offered by each credit card type ranges from 64% to 58%, with a majority of the discounts being over 60%

Average Discount on Cards

# Time Taken to Ship Orders by Quarter

❖ The average shipping time has gradually increased over each quarter

❖ Quarter 1 had the fastest shipping time averaging 57 days

❖ Quarter 4 had the slowest shipping time averaging 174 days

❖ The average shipping time has tripled since Quarter 1



Average time taken to ship

# 04
# Insights and Recommendations

# Insight and Recommendations

➢ Orders have steadily declined over the quarters, reaching an all-time low in Quarter 4.

➢ Ratings have declined every quarter, with an increase in "Very Bad" and "Bad" ratings and a decrease in "Very Good" and "Good" ratings

➢ There has been no increase in revenue over the four quarters, with each percent change being negative.

➢ Orders have decreased due to an increase in negative customer feedback and slower shipping times. Revenue has decreased linearly as well, with the largest percentage decrease occurring in Quarter 4. Ratings have decreased, which may be closely correlated with the average shipping time increasing since it has tripled since Quarter 1. The company needs to focus on shipping times and reduce them in order to receive more positive feedback from customers. Revenue will increase if there is more positive feedback from customers.

# Insight and Recommendations

➢ The average discounts given to each form of credit card is one major problem that has reduced the company's revenue.

➢ Each type of credit card offers a discount that runs from an average of 64% to 58%, with most of the reductions being greater than 60%.

➢ Given that each credit card type deducts more than 50% of the revenue from each order, it might be a good business decision to reduce the amount of discounts offered to each type. Additionally, since the top 5 vehicle brands that customers prefer are Chevrolet, Ford, Toyota, Dodge, and Pontiac, it might be worthwhile to collaborate more closely with these automakers.