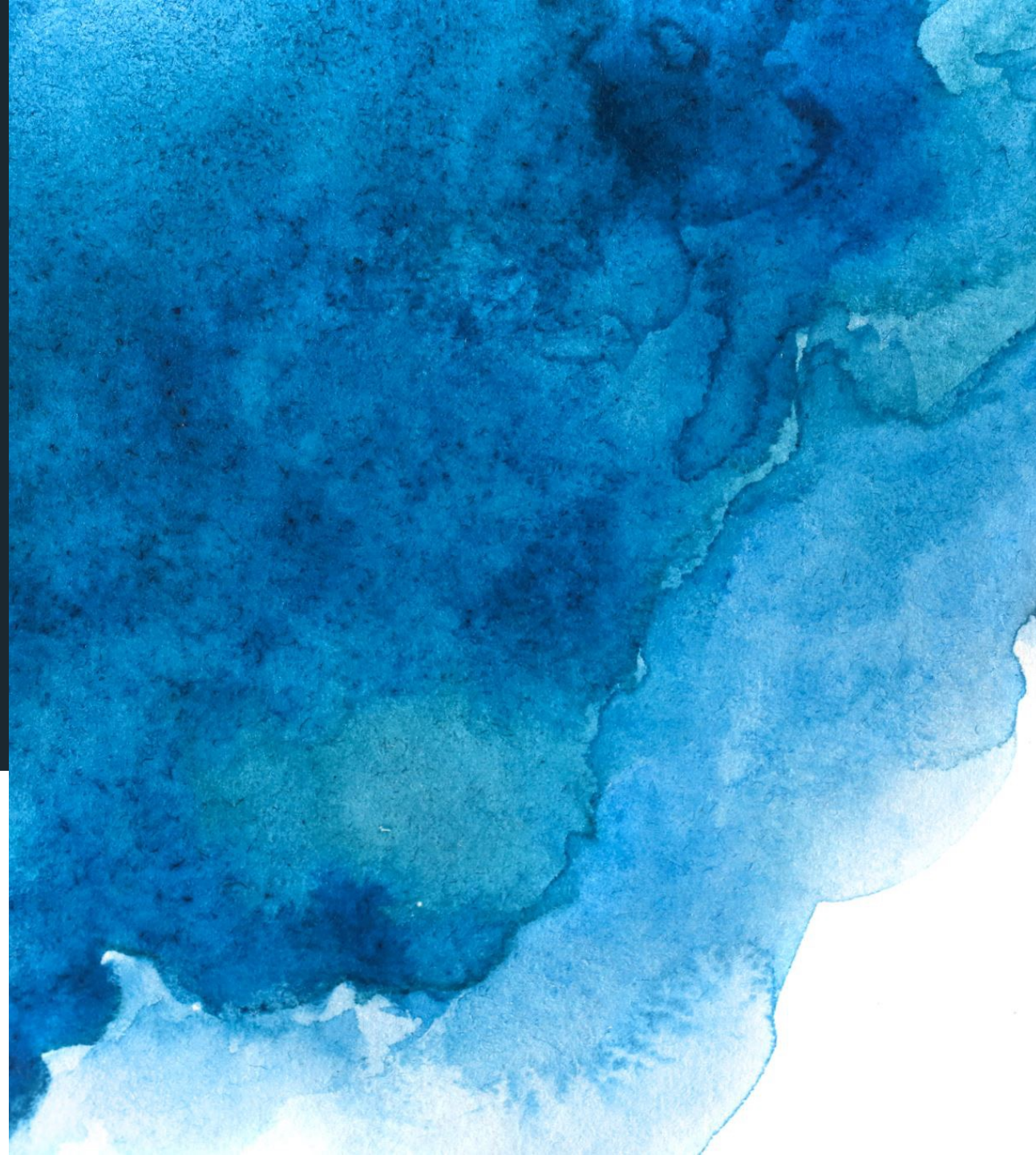


# **SQL and Databases: Project Report : New Wheels**

By: Abdullah Al Khamyasi



# Business Overview

48.61M

**Total Revenue**

1000

**Total Orders**

994

**Total Customers**

3.13

**Avg Rating**

8.57M

**Last Qtr Revenue**

199

**Last Qtr Orders**

97.96

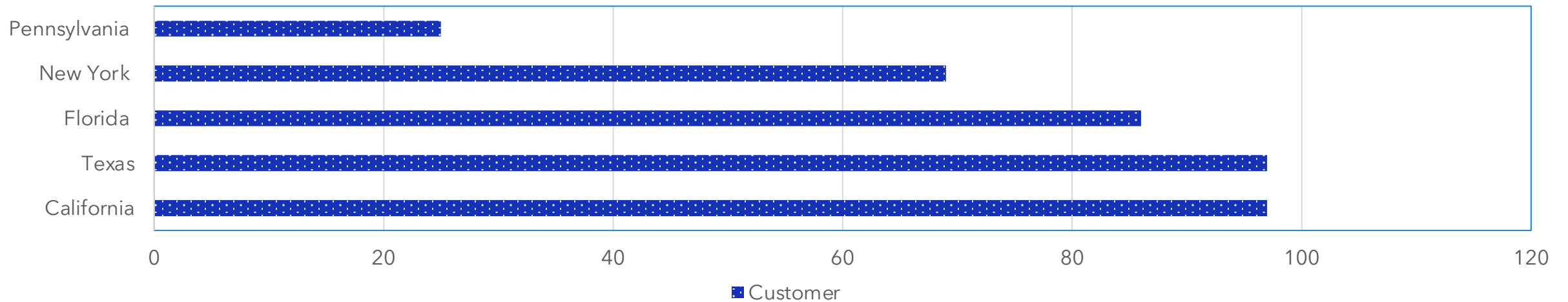
**Avg Days to Ship**

44.1

**% Good Feedback**

# Customer Metrics

# Distribution of Customers across States



## Observations / Findings:

### Customer Distribution Across States:

- California and Texas have the highest customer counts.
- New York follows with a substantial number of customers.

# Average Customer Ratings by Quarter

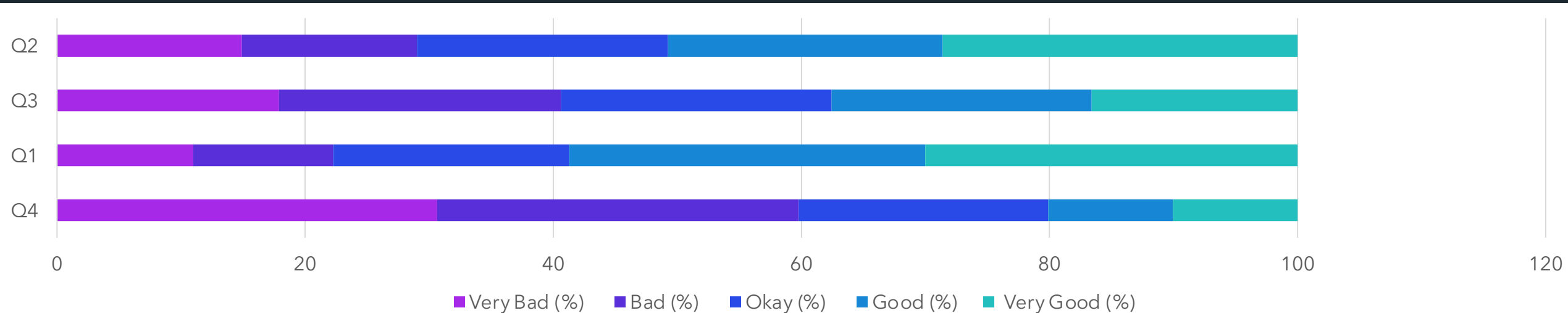


## Observations / Findings :

### Customer Feedback Trends:

- Ratings are highest in Quarters 2 and 1, lower in Q3, and lowest in Q4.
- Customer satisfaction fluctuates across the year.

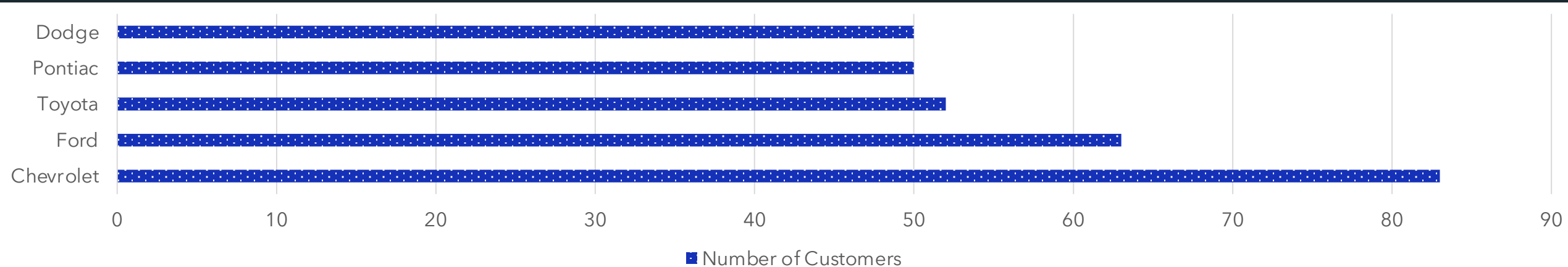
# Trend of Customer Satisfaction



## Observations/ Findings :

- The 100% stacked bar chart illustrates the distribution of customer feedback types across quarters.
- There is a noticeable increase in positive feedback (good and very good) over the four quarters.
- Negative feedback (very bad and bad) shows a decline, suggesting improvements in customer satisfaction.
- Okay feedback remains relatively stable, indicating a consistent level of satisfaction.
- This chart aids in identifying shifts in customer sentiment and highlights areas for further investigation and improvement.

# Top Vehicle makers preferred by customers



## Observations/Findings:

- 1.Popular Choices:** Chevrolet is the preferred vehicle maker, attracting 83 customers.
- 2.Diverse Selection:** The top 5 brands Chevrolet, Ford, Toyota, Pontiac, and Dodge reflect diverse customer preferences.
- 3.Competitive Landscape:** The customer distribution indicates market competition and brand appeal.
- 4.Marketing Insights:** Understanding customer preferences aids targeted marketing and inventory management.
- 5.Customer Engagement:** High customer counts underscore brand popularity and engagement.

# Most preferred vehicle make in each state

State	Preferred Vehicle Make
Alabama	Dodge
Alaska	Chevrolet
Arizona	Pontiac
Arkansas	Chevrolet

**Observations/Findings:**

- The table shows the most preferred vehicle makes in various states.
- Dodge is the most preferred vehicle make in the state of Alabama.
- Chevrolet is the preferred choice in Alaska.
- Pontiac is the preferred make in Arizona.
- Chevrolet is also preferred in Arkansas.
- This information provides insights into regional vehicle preferences across different states.



# Revenue Metrics

# Trend of purchases by Quarter



## Observations/Findings:

- The number of orders showed a declining trend over the quarters in the year 2018.
- The highest number of orders was observed in the first quarter, followed by the second, third, and fourth quarters.
- There was a consistent decrease in the number of orders as the year progressed, suggesting potential seasonality or changes in customer behaviour.
- Understanding these quarterly trends in order volume can help in planning inventory, staffing, and other operational aspects efficiently.

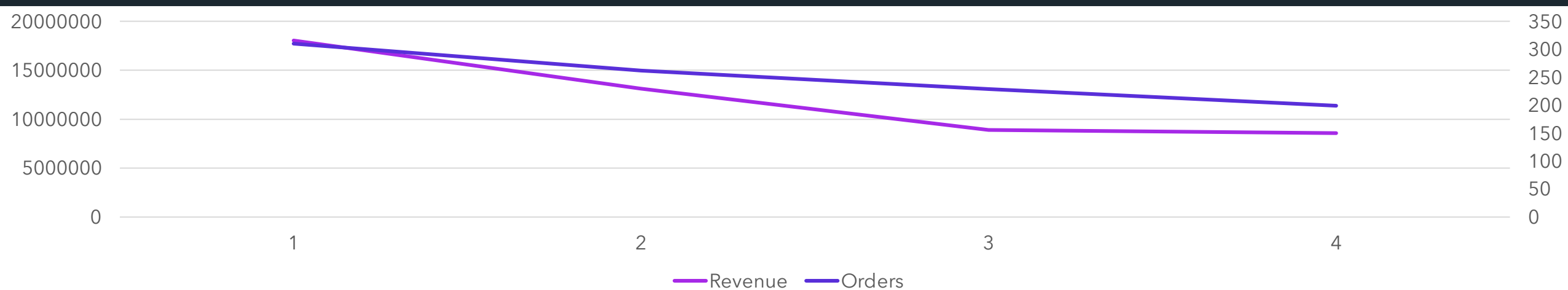
## Quarter on Quarter % change in Revenue

Year	Quarter	QoQ Revenue Change (%)
2018	2	-27.22606714
2018	3	-32.31500635
2018	4	-3.48051298

### Observations/Findings:

- The revenue experienced a significant decline in Quarter 2 and Quarter 3 with a QoQ revenue change of approximately -27.23% and -32.32%, respectively.
- In Quarter 4, the decline in revenue was less pronounced compared to the previous quarters, with a QoQ revenue change of about -3.48%.
- The revenue trend shows some fluctuations over the quarters, with the most substantial drops occurring in Quarters 2 and 3.
- The revenue performance seems to have stabilized somewhat in Quarter 4 compared to the more significant drops in the previous two quarters.

# Trend of Revenue and Orders by Quarter



## Observations/Findings:

- Quarter 1 had the highest Revenue of \$18,032,549.90 and 310 Orders.
- Quarter 2 experienced a decrease in Revenue to \$13,122,995.76, along with 262 Orders.
- Quarter 3 saw further reduction in Revenue to \$8,882,298.84, and 229 Orders.
- Quarter 4 had Revenue of \$8,573,149.28 with the lowest number of Orders, totaling 199.

# Shipping Metrics

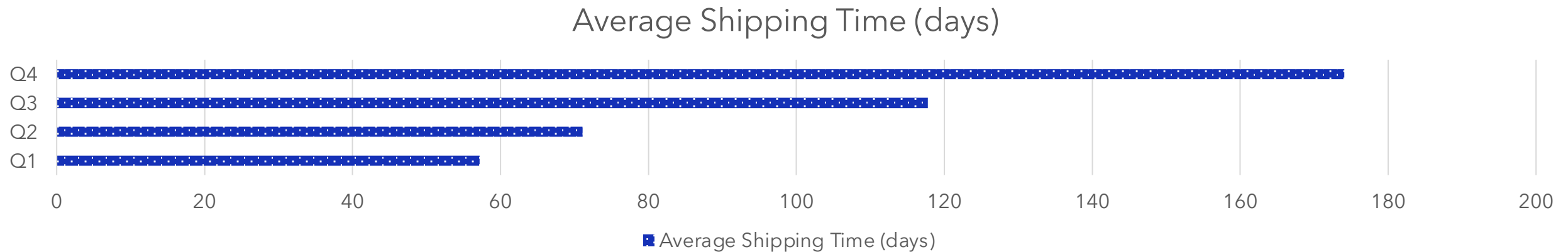
## Average discount offered by Credit Card type

Credit Card Type	Average Discount
jcb	0.607382
visa-electron	0.623469
switch	0.610233

### Observations/Findings:

- Average discounts vary by credit card type.
- "visa-electron" has the highest average discount (0.623469).
- Diversity in average discounts across card types.

# Time taken to ship orders by Quarter



## Observations/Findings:

- Shipping times vary by quarter.
- Q4 has the longest average shipping time.
- Q1 has the shortest average shipping time.
- There is fluctuation in shipping times throughout the year.

# Insights & Recommendations



## **Conclusion and Recommendations:**

### **Findings:**

#### **1.Customer Metrics:**

1. High customer counts in California, Texas, and New York indicate potential focus areas for marketing and expansion.
2. Customer feedback varies across quarters, with higher ratings in Q2 and Q1.
3. Positive feedback shows improvement over time, while negative feedback decreases.

#### **2.Revenue Metrics:**

1. Orders decline over quarters, signaling possible seasonal shifts or changing consumer behaviour.
2. Revenue fluctuations with significant declines in Q2 and Q3.
3. Quarter 1 leads in revenue and orders, followed by gradual decreases.

#### **3.Shipping Metrics:**

1. Varied average discounts based on credit card types.
2. Shipping times fluctuate, with longest times in Q4.

## **Business Overview:**

- Total revenue: \$48,610,993.78
- Total orders: 1,000
- Total customers: 994
- Avg. rating: 3.14
- Last Qtr revenue: \$8,573,149.28
- Last Qtr orders: 199
- Avg. days to ship: 97.96
- % Good feedback: 44.1%

## **Recommendations:**

- 1.Targeted Marketing: Focus efforts in high customer states for better engagement.
- 2.Seasonal Strategies: Align strategies with customer feedback and revenue trends.
- 3.Inventory Management: Optimize inventory based on order patterns.
- 4.Customer Satisfaction: Improve shipping times, especially in Q4.
- 5.Discount Strategy: Tailor discounts to credit card preferences.
- 6.Revenue Enhancement: Address Q2 and Q3 revenue drops with strategies.
- 7.Continuous Monitoring: Stay vigilant on trends for further improvement.

Applying these recommendations can boost customer satisfaction, revenue, and overall business success.