

SQL and Databases:

Project Report

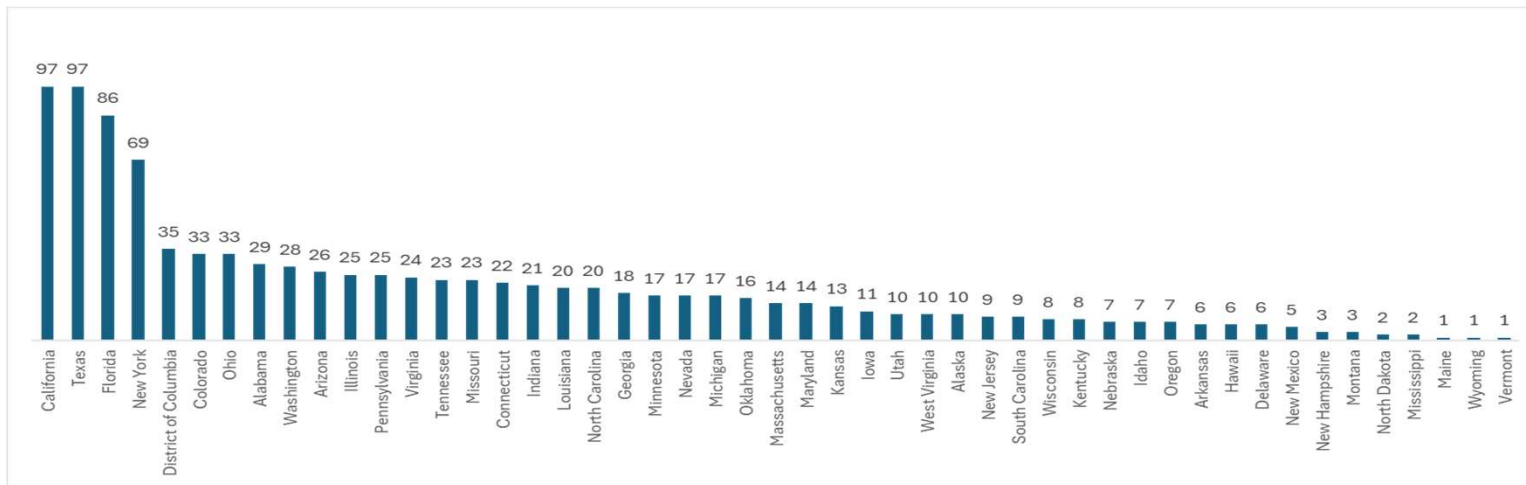
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PLMAR'24_Grp D

Business Overview

| | | | |
|------------------|-----------------|------------------|-----------------|
| Total Revenue | Total Orders | Total Customers | Avg Rating |
| 124.7 M | 1000 | 994 | 3.13 |
| Last Qtr Revenue | Last Qtr Orders | Avg Days to Ship | % Good Feedback |
| 23.3M | 199 | 97.96 | 44.1 |

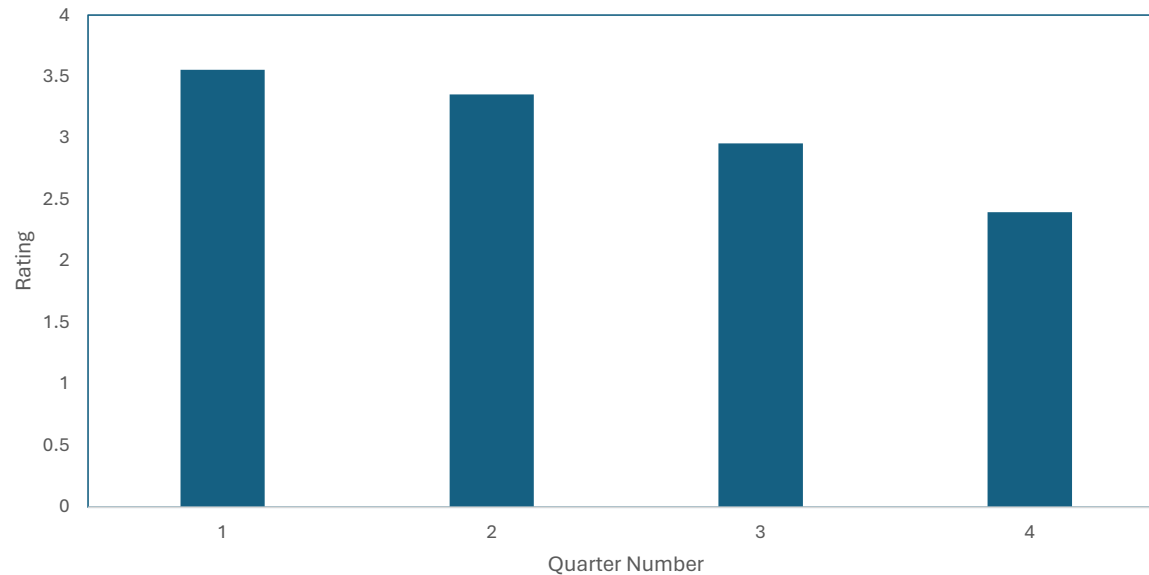
Customer Metrics

Distribution of Customers across States



- California has the maximum number of customers
- Top 3 states are California, Texas, Florida
- Almost no sales in Maine, Wyoming, Vermont

Average Customer Ratings by Quarter



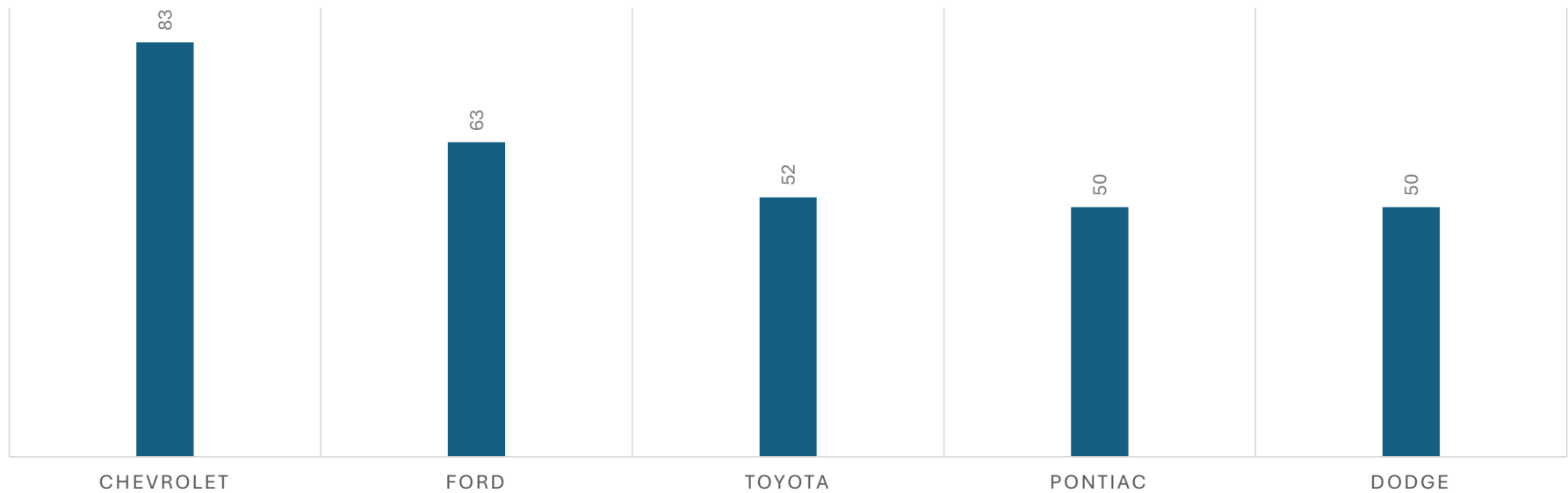
- Rating scale 1-5 with 5 being Very Good and 3 being “Okay”
- Rating is positive in Quarters 1 and 2 by a small margin
- Rating goes below “Okay” in Quarters 3 and 4

Trend of Customer Satisfaction



- Decline in positive feedback by quarter
- Increase in negative feedback by quarter
- “Okay” ratings remain relatively stable by quarter
- Quarter 4 has the worst ratings

Top Vehicle makers preferred by customers



- Most popular make is Chevrolet
- Top 5 sellers are Chevrolet, Ford, Toyota, Pontiac, Dodge

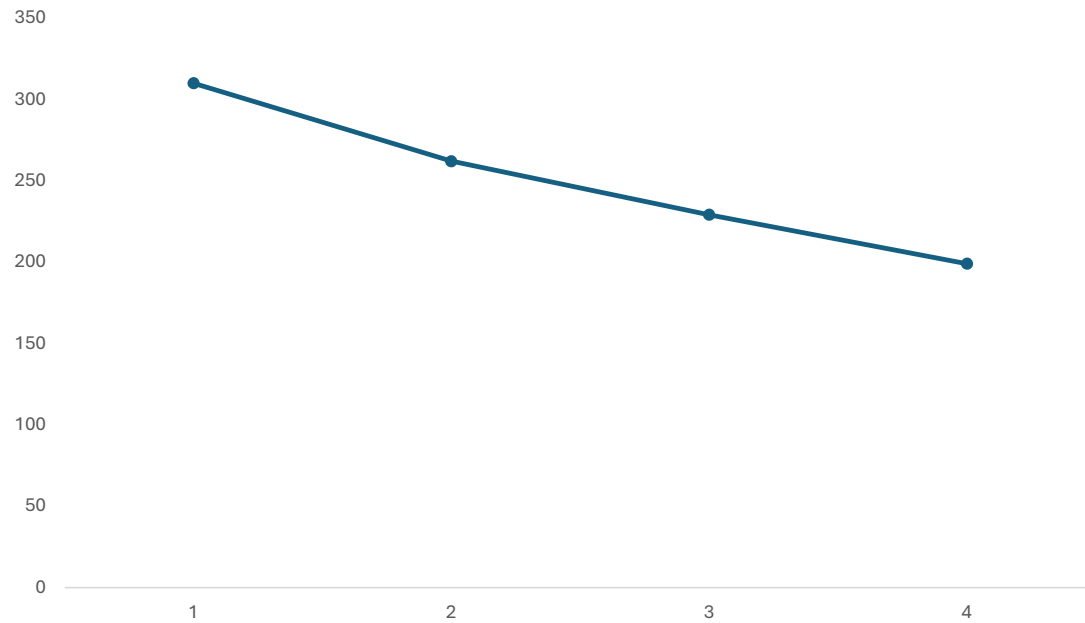
Most preferred vehicle make in each state

| Vehicles by State | | Iowa | Kentucky |
|-------------------|----------------------|---------------|---------------|
| Alabama | Colorado | Chevrolet | Acura |
| Dodge | Chevrolet | Chrysler | Audi |
| Alaska | Connecticut | Dodge | Mercedes-Benz |
| Chevrolet | Chevrolet | Ford | Mercury |
| Arizona | Maserati | Hyundai | Nissan |
| Cadillac | Mercury | Isuzu | Pontiac |
| Pontiac | Volvo | Jeep | Ram |
| Arkansas | Delaware | Mazda | Volvo |
| Chevrolet | Mitsubishi | Pontiac | |
| GMC | District of Columbia | Porsche | Louisiana |
| Mitsubishi | Chevrolet | Subaru | BMW |
| Pontiac | Florida | | Ford |
| Suzuki | Toyota | Kansas | Kia |
| Volkswagen | Georgia | Buick | Nissan |
| California | Toyota | Dodge | Pontiac |
| Audi | Hawaii | Ford | |
| Chevrolet | Cadillac | GMC | Maine |
| Dodge | Ford | Honda | Mercedes-Benz |
| Ford | GMC | Lexus | Maryland |
| Nissan | Nissan | Maserati | Ford |
| | Pontiac | Mazda | Massachusetts |
| | Toyota | Mercedes-Benz | Chevrolet |
| | Idaho | Nissan | Dodge |
| | Dodge | Saab | Michigan |
| | Illinois | Suzuki | Ford |
| | Chevrolet | Volkswagen | |
| | Ford | | |
| | GMC | | |
| | Indiana | | |
| | Mazda | | |

- Sectional sample of states displayed
- Varied distribution of preferred vehicles across states
- Many states have multiple preferred vehicles
- Some states show only one preferred vehicle make

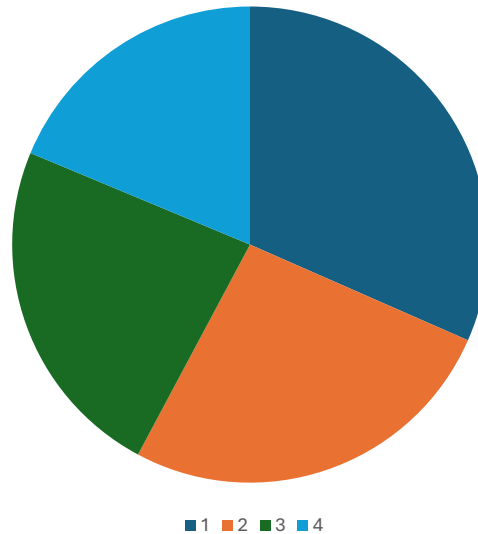
Revenue Metrics

Trend of purchases by Quarter



- There is a decline in number of orders by quarter

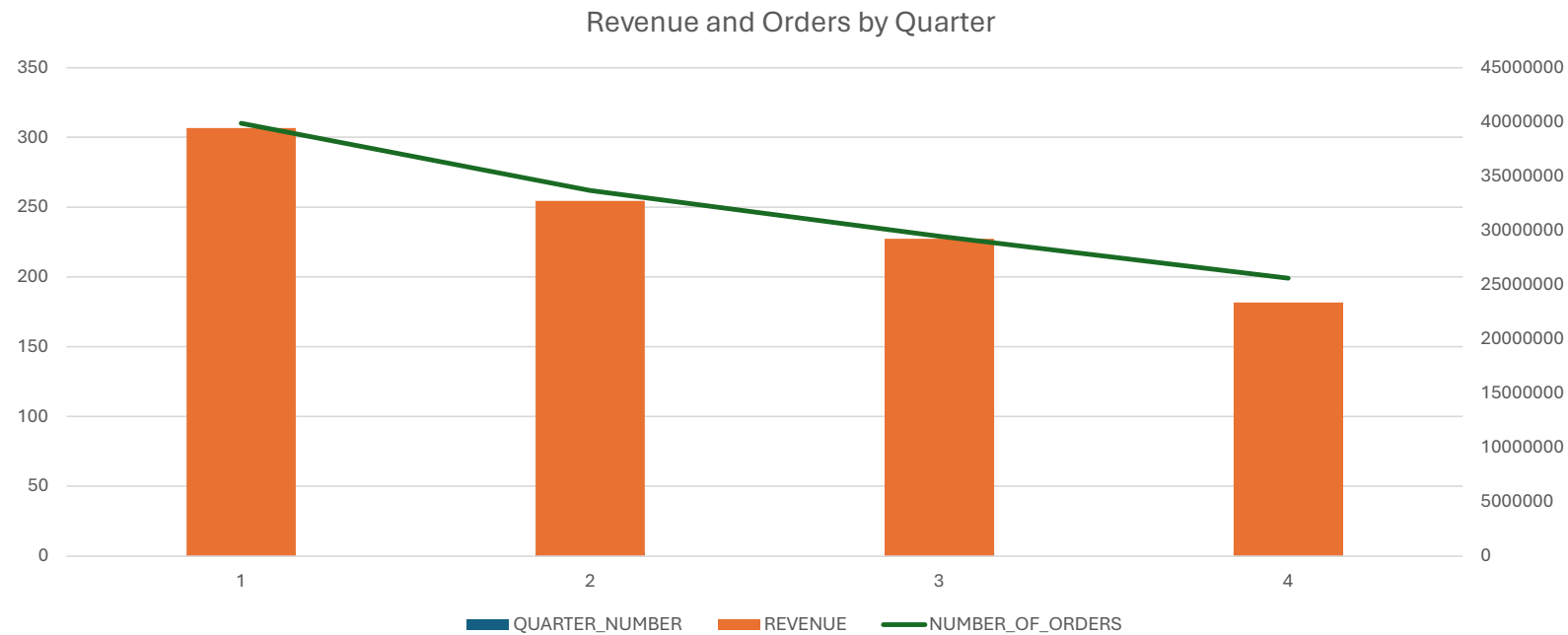
Quarter on Quarter % change in Revenue



Revenue has progressively reduced with each quarter

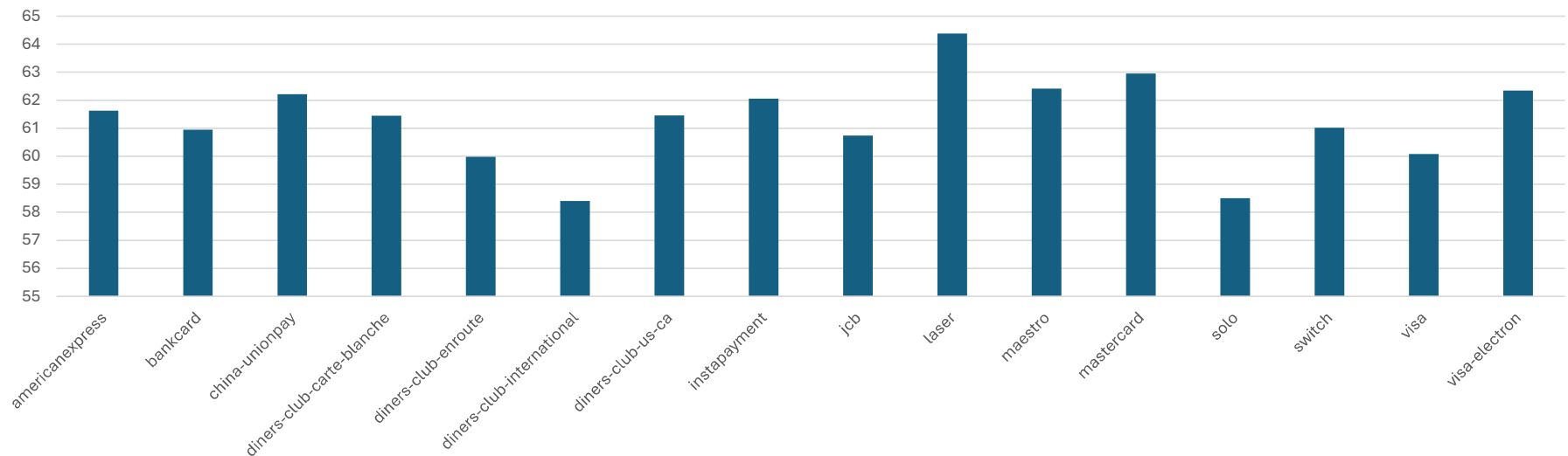
Shipping Metrics

Trend of Revenue and Orders by Quarter



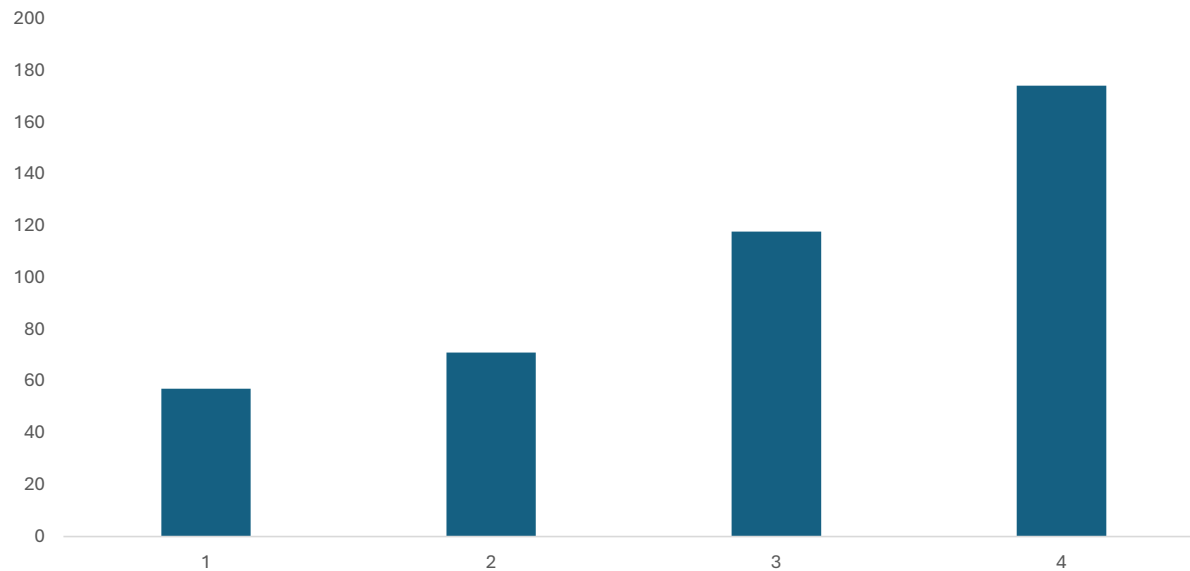
- The revenue declines by quarter
- Number of Orders decline by quarter

Average discount offered by Credit Card type



- Every credit card used has a discount associated with it
- 'laser' has the maximum discount and 'diners-club-international' has the least discount
- There is no extreme deviation in discounts across credit cards

Time taken to ship orders by Quarter



- Steady increase in time-to-ship with quarter
- The difference in ship days Q1 and Q4 is significant (116.9)

Insights and Recommendations

- Decrease in number of orders by quarter is leading to decline in revenue
- Feedback by customers should be studied as a decline in good ratings by quarter is observed
- Investigate shipping time - Is shipping delay increase by quarter a direct result of less orders or Have the number of orders reduced because of increased delays
- Increase marketing in states that have less sales to create additional revenue
- Ensure availability of top vehicle makes to reduce likely delivery time