

SQL and Databases: Project Report

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Objectives

- Business Overview
- Key Findings
- Insights & Recommendations

Business Overview

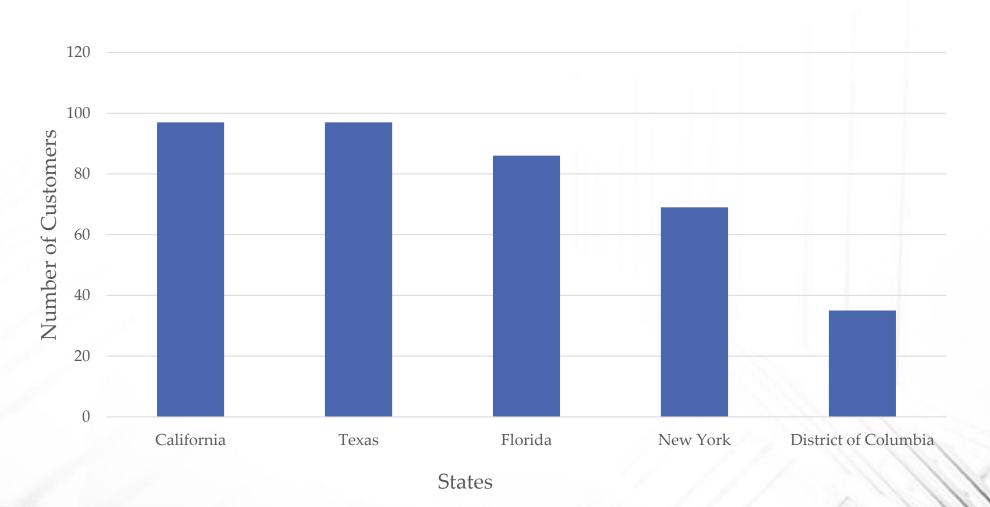
Total Revenue	Total Orders	Total Customers	Avg Rating
11.2M	1189	987	3.5
Last Quarter Revenue	Last Quarter Orders	Avg Days to Ship	% Good Feedback
1.6M	200	32	45%



- Customer Metrics
- Revenue Metrics
- Shipping Metrics

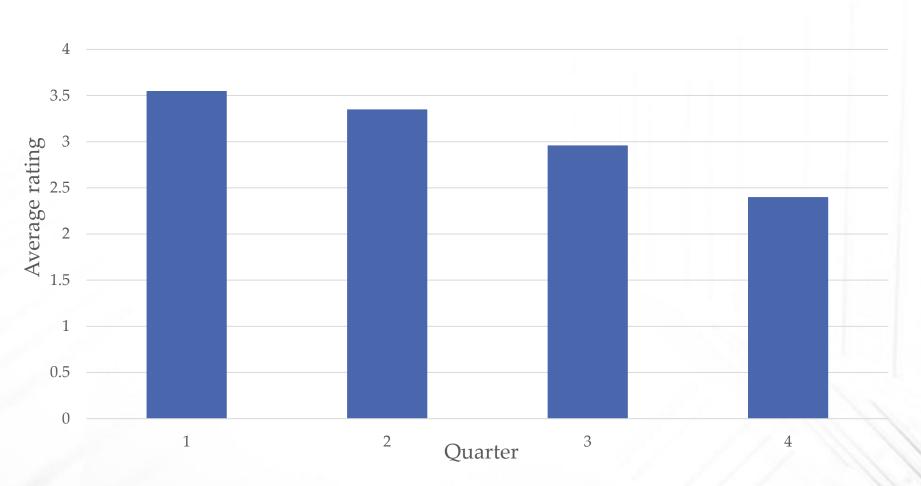


Distribution of Customers across States



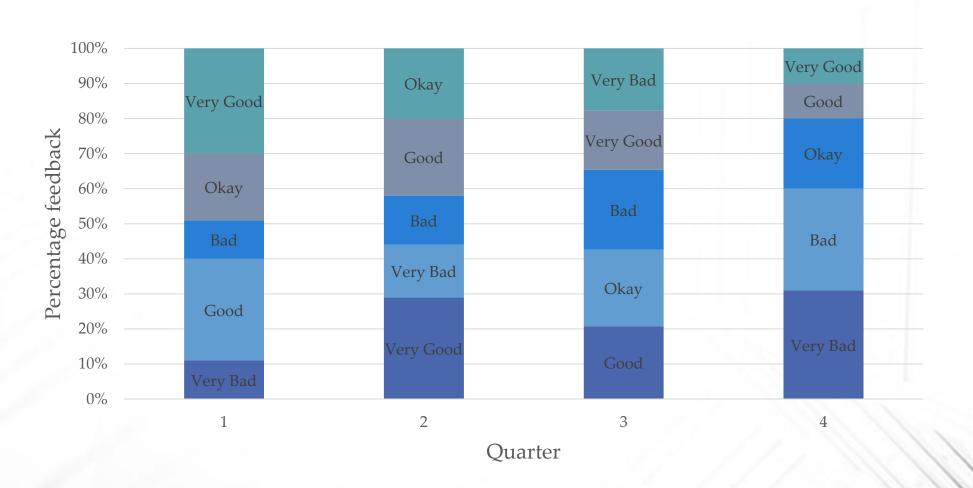
- California and Texas have the most customers, each with 97, followed by Florida with 86 and New York with 69.
- The top 5 states California, Texas, Florida, New York, and the District of Columbia represent more than half of all customers.
- The states with the most customers (California, Texas, and Florida) are also the most populous in the United States.

Average Customer Ratings by Quarters



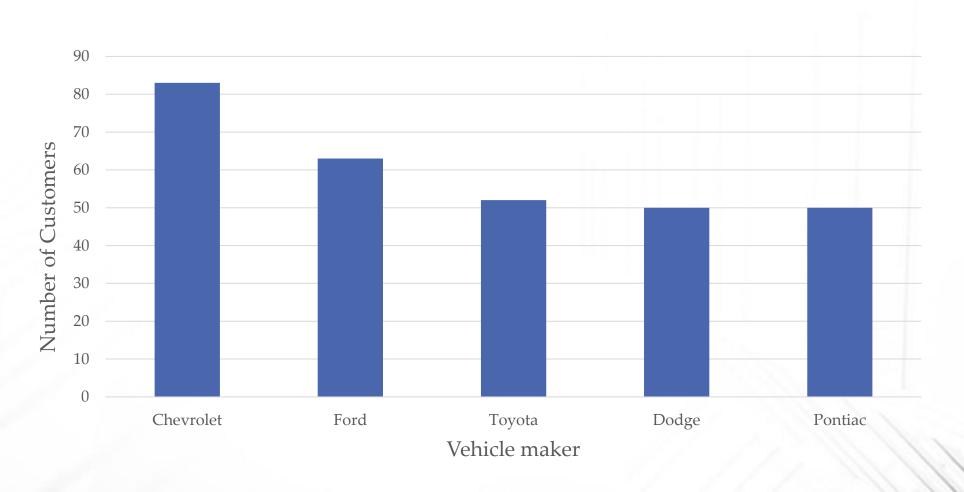
- From the chart, customer rating was highest in the 1st quarter at 3.55 and declined in each subsequent quarter.
- The 4th quarter has the lowest customer rating of 2.4.
- The 1st and 2nd quarters seem to have a close customer ratings with 0.2 difference.

Trend of Customer Satisfaction



- The customer feedback is categorized into five different categories: Very Bad, Bad, Okay, Good, and Very Good.
- The feedback is divided into four quarters, denoted by the numbers 1 to 4.
- The percentage of feedback for each category varies across quarters.
- Overall, more customers have given positive feedback (Good and Very Good) than negative or neutral feedback (Okay, Bad, and Very Bad).

Top Vehicle makers preferred by Customers



- Chevrolet has the most customers with 83, followed by Ford with 63.
- Chevrolet and Ford are the top two most popular vehicle makers among customers.
- Dodge and Pontiac are tied for fourth place, with the same number of customers.

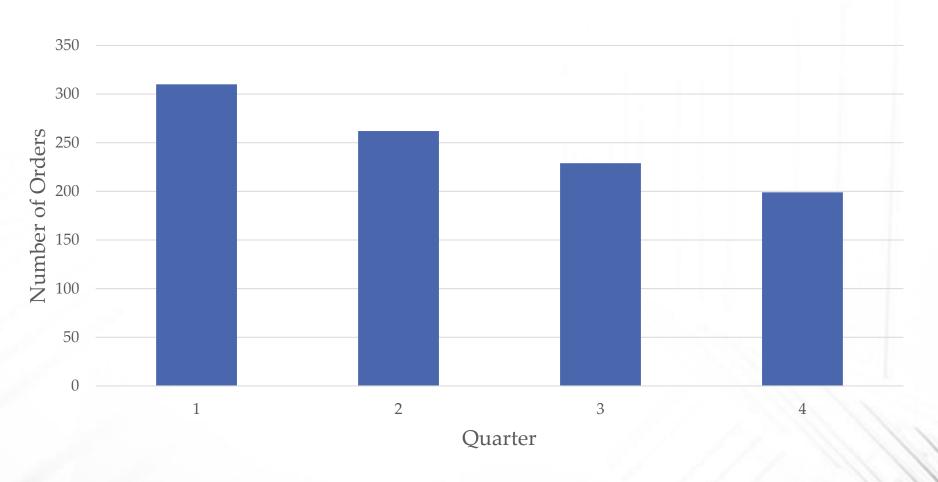
Most preferred Vehicle make in each States

States	Vehicle maker	Number of Customers	Rnk
Alabama	Dodge	5	1
Alaska	Chevrolet	2	1
California	Chevrolet	6	1
California	Nissan	6	1
California	Dodge	6	1
California	Ford	6	1
Colorado	Chevrolet	5	1
Florida	Toyota	7	1
Georgia	Toyota	3	1
Michigan	Ford	3	1
Minnesota	GMC	3	1
Maryland	Ford	5	1
Illinois	Ford	3	1
Illinois	Chevrolet	3	1
Texas	Chevrolet	9	1
Virginia	Ford	5	1
Washington	Chevrolet	5	1

- The most preferred vehicle makers vary widely by state, with different states having a preference for different vehicle makers.
- Chevrolet is the top preferred vehicle maker in the majority of US states, followed by Ford and Toyota.
- There is a strong brand preference for Chevrolet across different states in the USA.



Trend of purchase by Quarter



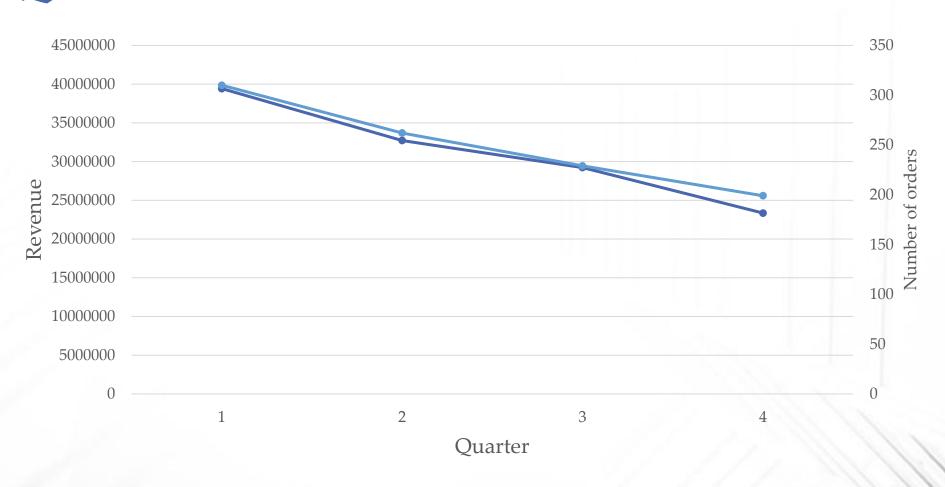
- The 1st quarter has the most orders with 310, followed by the 2nd quarter with 262.
- Orders are lower in the 3rd and 4th quarters than in the first two, with 229 and 199 orders.
- From the chart, the number of orders is decreasing over time, with each successive quarter having fewer orders than the previous one.

Quarter on Quarter % change in Revenue

Quarter		Revenue	QoQ Change
	1	39421580.15	NULL
	2	32715830.33	-17
	3	29229896.19	-10
	4	23346779.63	-20

- From the above table, the revenue for 1st quarter was the highest at 39,421,580.15.
- Revenue decreased every quarter, with QoQ changes of -17% for 2nd quarter, -10% for 3rd quarter, and -20% for 4th quarter.
- The largest decrease in revenue was observed in the 4th quarter, with a drop of 20% compared to the previous quarter.

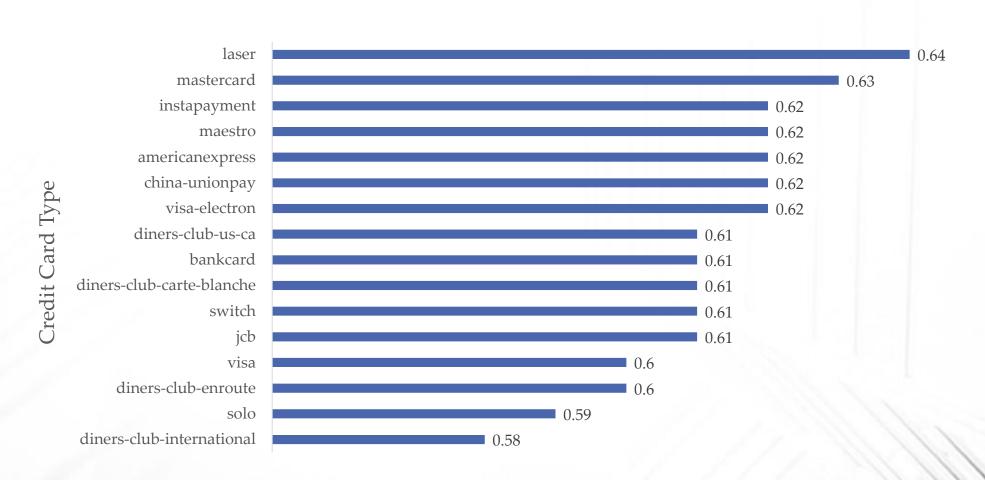
Trend of Revenue and Orders by Quarters



- The 1st quarter has the highest number of orders and revenue with 310 orders and revenue of 39,421,580.16
- The 4th quarter has the lowest revenue with 23,346,779.63 which is significantly lower than the other quarters.
- Revenue decreased over time, despite stable order numbers.

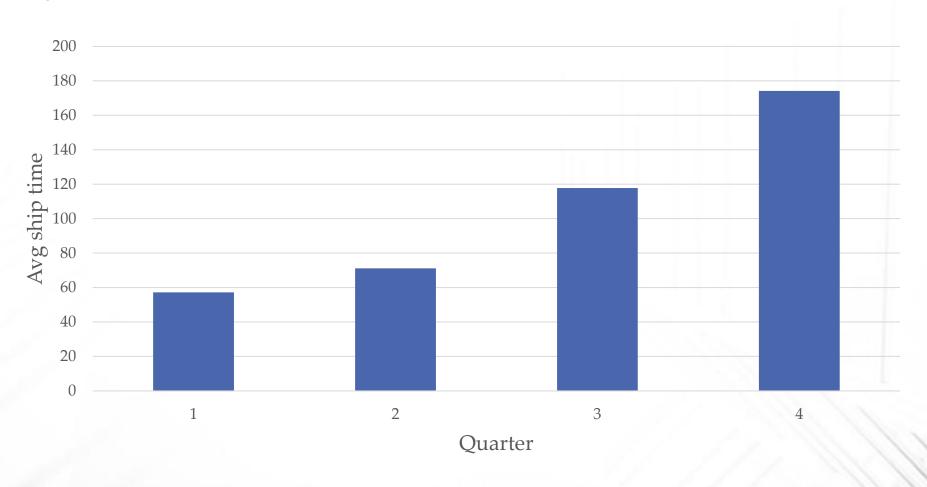


Average discount offered by Credit Card Type



- From the above chart, there are 16 different credit card types, each with its own average discount rate.
- The lowest average discount rate is for Diners Club International at 0.58, followed closely by Solo at 0.59.
- The highest average discount rate is for Laser at 0.64, followed by Mastercard at 0.63 and Instapayment at 0.62.
- The most popular credit cards, such as Visa, American Express, and Mastercard, do not have the highest average discount rates.

Time taken to ship orders by Quarter



- The 1st quarter has the shortest average shipping time at 57.17, followed by the 2nd quarter at 71.11.
- The 3rd quarter has a significantly higher average shipping time of 117.76, while the 4th quarter has the highest average shipping time of 174.10.
- The 1st quarter, on the other hand, has the shortest average shipping time, which could be attributed to lower demand after the holidays.

Insights / Recommendations

- In the USA, there is a variability in vehicle maker preference across different states.
- The most populous states have the most customers.
- It is important to monitor the average order value in order to maintain or increase revenue over time.
- Analyze customer feedback and identify reasons for lower ratings.
- Consider factors such as product quality, shipping times, customer service, and pricing.
- Monitor and track shipping times regularly.