SQL and Databases:Project Report

Thomas Nowakowski Group B

Business Overview



Total Revenue

124.1 M

Total Orders

1000

Total Customers

994

Avg Rating

3.15

Last Qtr Revenue

72,275 M

Last Qtr Orders

199

Avg Days to Ship

97.9

% Good Feedback

45%



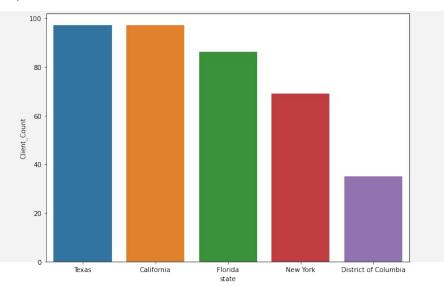
Customer Metrics

Distribution of Customers across States



Hint: You can use a bar chart to show the top 5 states with most customers. State in the

x-axis and Customer Count as the y-axis



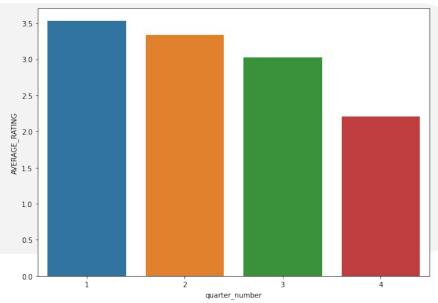
- The top 5 states are listed in chart above, hence represent the most important market segments by number of customers
- •
- •

Average Customer Ratings by Quarter



Hint: You can make a bar chart with Quarter Number on the x-axis and the average

customer rating in the y-axis



- Customer satisfaction is clearly dropping with ratings consistently going down

Trend of Customer Satisfaction



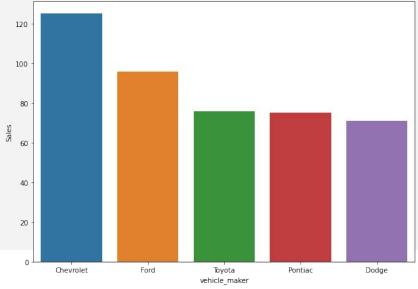
Hint: You can make a 100% Stacked bar chart with Quarter Number on the x-axis and percentage split of customer feedback [good, very good, bad, very bad, okay] in the y-axis with a colour legend

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- •
- •

Top Vehicle makers preferred by customers



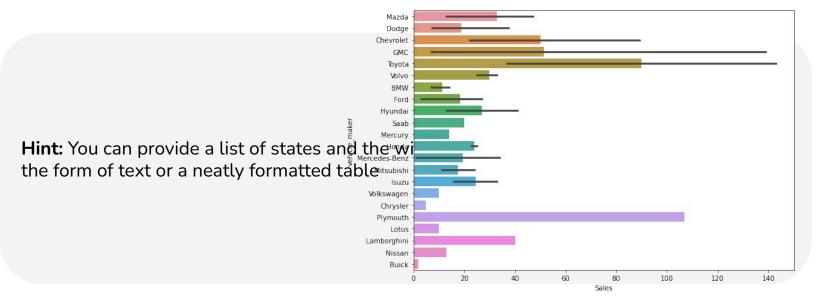
Hint: You can make a bar chart with top N vehicle makers on the x-axis and the number of customers in the y-axis



- The top 5 vehicle makers across all states are listed in chart above with their corresponding sale figures
- Chevrolet is by far Americas favorite Clearly the company must focus on offering tob makers

Most preferred vehicle make in each state





- Ideally segmenting the local preferences and coming up with an offer per state of favorite vehicles ranked per state will
- be the more customized approach



Revenue Metrics

Trend of purchases by Quarter



```
# quarter_number, Orders
'1', '308'
'2', '261'
'3', '228'
'4', '197'
```

- orders are consistently dropping over the 4 quarters

Quarter on Quarter % change in Revenue



Hint: You can use a line chart with Quarter Number in the x-axis and revenue in the y-axis, and give the % change as text at each point, OR you can just have a neatly formatted table with the % changes, if that would look cleaner

- •
- •
- •

Trend of Revenue and Orders by Quarter



```
1 187829
2 140607
3 94453
4 72275
```

Hint: You can create a dual axis line chart with Quarter Number in the x-axis, and Revenue as the 1st y-axis and Orders as the 2nd y-axis in the same chart.

- revenues are dramatically and consistantly dropping
- there is a festering problem clearly and not a flucke



Shipping Metrics

Average discount offered by Credit Card type



credit_card_type, AVG_discount 'laser', '0.643846' 'mastercard', '0.628481' 'maestro', '0.623810' 'visa-electron', '0.623333' 'china-unionpay', '0.623333' 'instapayment', '0.620625' 'diners-club-carte-blanche', '0.616667' 'americanexpress', '0.616327' 'diners-club-us-ca', '0.614615' 'switch', '0.610233' 'bankcard', '0.609545' 'jcb', '0.607258' 'visa', '0.600833' 'diners-club-enroute', '0.599792' 'solo', '0.585000' 'diners-club-international', '0.584000'

- discounts are fairly consistent and close to one another the type of card and discount are unlikely to make an inmpact
- on sales

Time taken to ship orders by Quarter



Hint: You can make a bar chart with Quarter Number on the x-axis and average time to ship in the y-axis

```
1 57.0812
2 71.1456
3 118.1184
4 173.6650
```

- the average days to ship have DRAMATICALLY incressed from 57 in Q1 to 173 in Q4
- This is likely the oot of the problem of dropping sales people do not want to wait
- half a hear



Insights and Recommendations



New Wheels must make an customized offering of favorite or top 3 favorite vehicle makers per state. Better yet to dig deeper in model and check for favorite types of models per state and make a customized offer.

- As we can see the average days to ship have DRAMATICALLY incressed from 57 in Q1 to 173 in Q4
- This is likely the root of the problem of dropping sales people do not want to wait half a hear. This is
- most lilelu the main reason for dramatic drop in sales as sales drop with increasing days
- discounts are fairly consistent and close to one another the type of card and discount are unlikely to make an
- inmpact on sales
- revenues are dramatically and consistantly dropping there is a festering problem clearly and not a flucke
 - orders are consistently dropping over the 4 quarters