

Analysis / Visualization:

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(1)

Note: Insights taken after visualization

1.

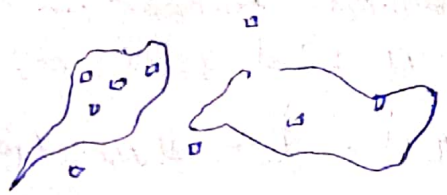
Query: Area of operations

Chart: Symbol maps

Variables: longitude & latitude.

Answer:

- operations are mostly concentrated in US and its territories.
- Going towards east, we have one instance of operation in south-east of South Africa.
- Some of operations took place in north of India and across some Chinese territories.



~~Query: Where are the orders delivered~~

2.

Query: In what states of United States were orders delivered?

Variables: ✓ Order . State ✓ Latitude ✓ Longitude

Chart: Maps

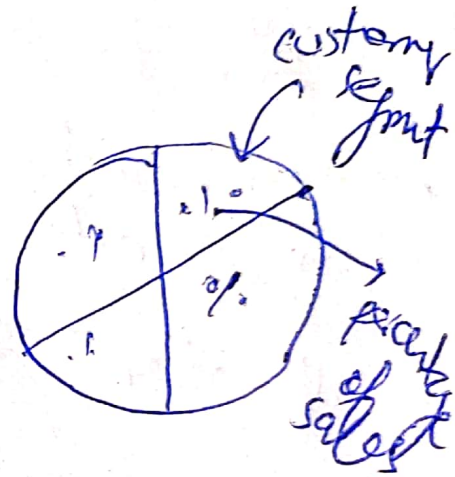
Answer:

- orders were delivered to almost all states of United States except for state of Wyoming.
- It shows that customers were typically concentrated in United States.

Query : What type of customers contributed the most to sales the most to lowest. Explain?

variables involved : customer segment
Sales . per. customer
Show percentage (for ease)

proposed charts : pie chart



Insights :

- There are 3 types of customer : Home office, consumer, corporate.
- Consumer customer's contribution is highest with 51.93% followed by corporate having 30.35% contribution.
- Home office consumer has least contribution i.e 17.43%.

3.

and safest

Queries:

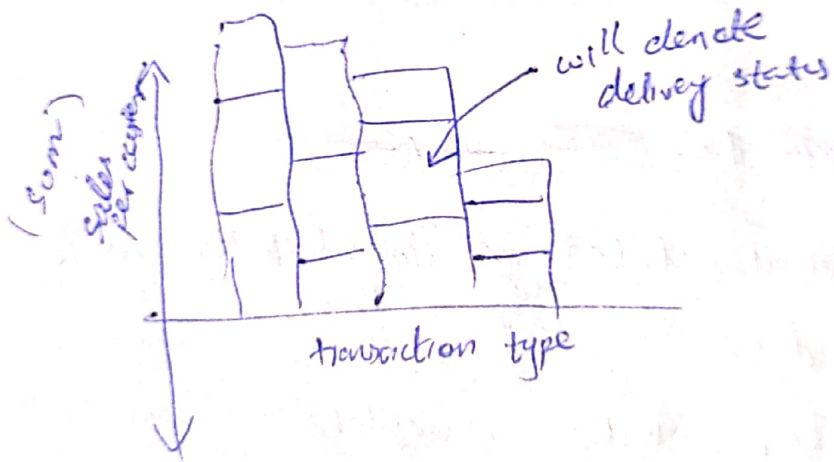
1. what transaction types were most successful in terms of total sales per customer?

2. How does these types relates to status of delivery?

Note: safest if it's status of delivery is not cancelled.

variables involved : ✓ transaction type → Dimension
 ✓ delivery status → Dimension
 ✓ sales per customer → KPI

charts proposed: stacked bar chart.



insights:

- Debit type transactions were mostly used by customers.
- Debit type generated the highest total sales per customer and grossed over 12M.
- cash type transaction generated lowest total as compared to other with over 3M.

• Transfer type grossed higher (approx 1.2 M) than Payment type against sales. (3)

• In all types, most orders were delivered late.

• Mostly debit users recieved advanced shipping.

PA • Only in TRANSFER type, around 1.4 M worth of orders were cancelled.

• Debit mode is the most safest and successful.

• CASH and PAYMENT type, despite generating lower total, are safer than TRANSFER type.

4.

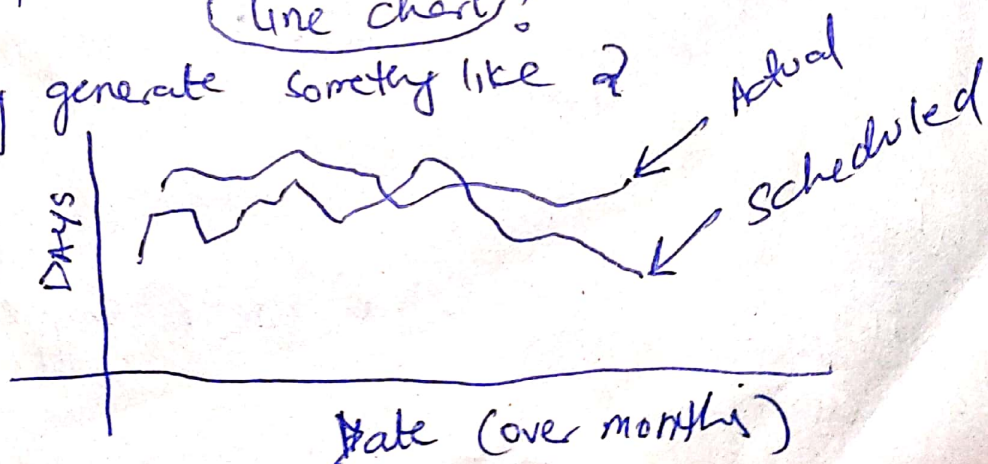
Query: Is there difference b/w Actual shipment days and scheduled shipment days? over date of order placed?

Variables involved : ✓ Order Date (Month) → Dimension
✓ AVG (Actual shipping days) → Facts
✓ AVG (~~Actual~~ scheduled shipping days) → Facts

chart proposed:

Line chart?

it may generate something like 2



Insights :

PA • From December 2014 to Dec 2017, the chart shows that Actual shipping days were always greater than scheduled shipping days.

Positive:

- This shows However, the difference (maximum) is of 1 day.

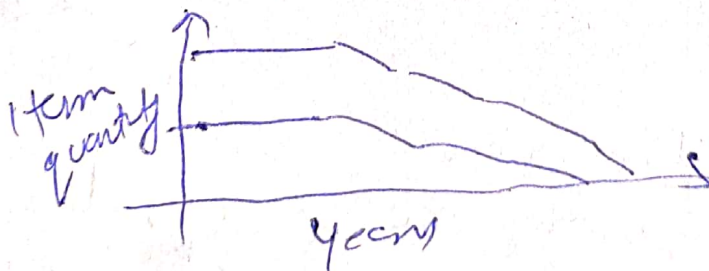
Negative:

- This shows the lower integrity of supply since products were never shipped on scheduled days.

Q. Query: Did most of the time orders were delivered late?

Variables involved : ✓ order • Date → Dimension
✓ order • Item • quantity → Fact.

proposed chart: area chart




insights :

- Most of the orders were shipped ~~late~~ late!

- this can be the major pain area
- interestingly, its effect can also be seen in the same chart i.e. orders by customer decreases sharply over years. (5)

6. Query: Evaluate product subcategory sales by month of order Date to see if we can identify any seasonal trend in data.

Variables involved:
 ✓ category.name
 ✓ product.categories (made in Tableau)
 ✓ order.date
 ✓ sales.per.customer

Proposed chart: heatmap.


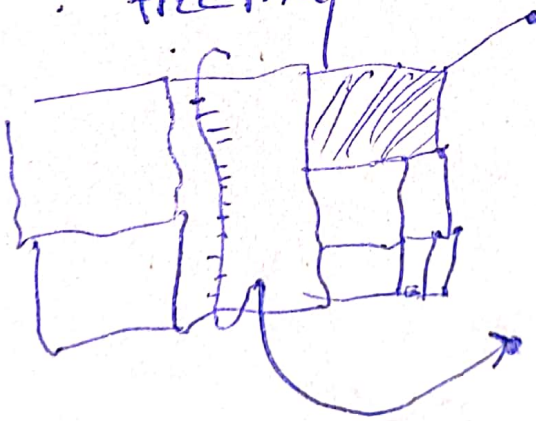
insights:
 • large and light circles would mean that a product category sold a relatively large quantity but made relatively low amount of revenue: low sales per item.
 • Small and dark circles would mean the product categories sold a relatively small quantity, but generated high revenue: high sales per item.

- ⑥
- ~~dark circles~~
 - fishing category has darker but smaller circles which suggest its ^{high} contribution to sales produced
 - cleats category has biggest but light circles throughout the month suggesting: it was sold in greatest quantity but relatively contributed lesser to sales than fishing products.
 - Then cardio products shows similar trend as cleats but with smaller circles.
 - All other categories contributed negligibly.
 - Over successive months, the size and color strength of circle reduces suggesting lower contribution to sales and ~~lower~~ lack of customer's interest.

Q. Evaluate which department recieved most order and contributed highest to profit generated per product ordered? Explain completely.

variables involved :
✓ Order. Item. quantity
✓ Order. profit. per. order
✓ Department. name → Dim

proposed chart : treemaps



color strength represent quantity sold.
(Bigger the quantity sold, darker the strength)

size of squares represents profits generated.
(higher the profit, higher the size)

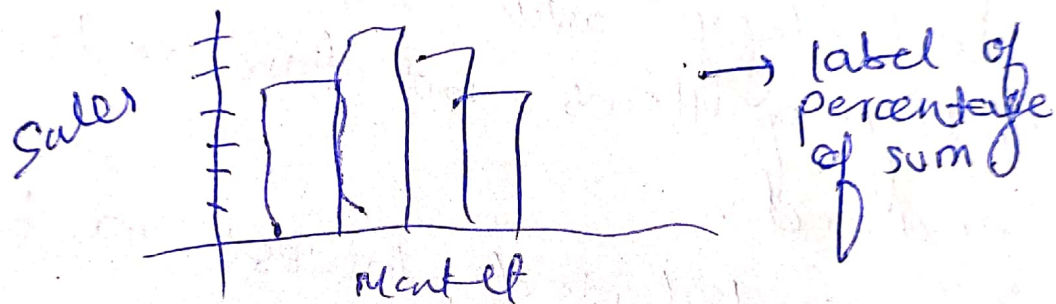
Insights from treemap:

- Color and size of squares varies similarly suggesting correlation b/w profit and quantity.
- Highest contribution in both areas is from Fam Shop department with 106K items ordered and 1.8 M generated as profit.
- Golf and Apparel departments are next in line but ~~Apparel~~ department produced twice the profit.
- Following these two are, footwear, outdoor and technology which shows drastic reduction in quantity of items but fair reduction in profit produced.
- Book shop contributed lowest in both areas.

10. which market is most valuable in terms of sales?

Variables involved:
 ✓ Market → dimension (of continents)
 ✓ Sales → measures

chart proposed: horizontal bar chart



Insights:

- most valuable market is clearly Europe with 29.56% of total contribution in Sales. followed by LATAM with 27.94%.
- USCA contributed to 13.77% of sales followed by Africa which has least contribution i.e 6.24% (Will drill down to see the reason)

11. Compare year 2017's sales (~~this year sale~~) with previous year 2016's sales (~~last year sale~~).

Variables involved :

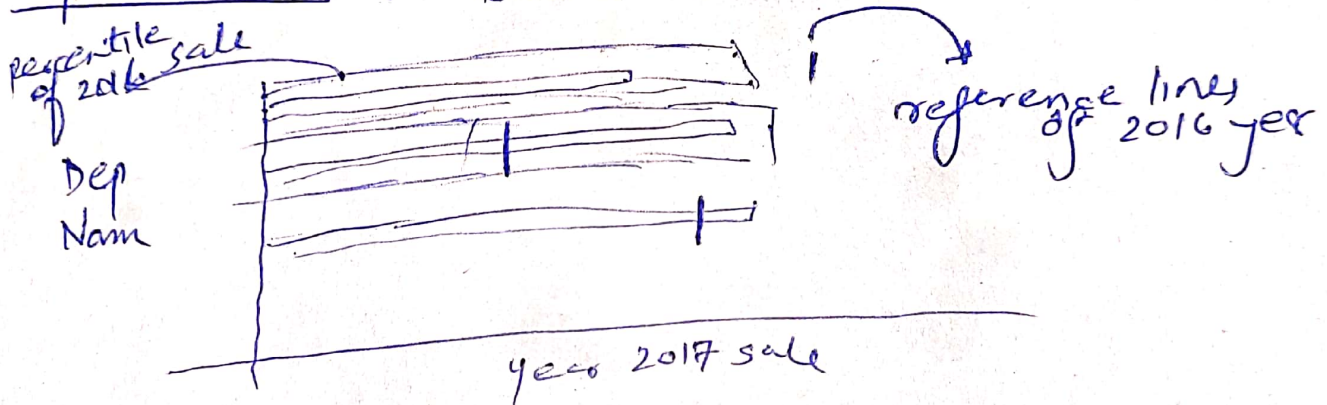
Dim : Department Name

Measures :

created 2 new variables
from sale variable

- 1) year 2017 sales -
- 2) year 2016 sales

Proposed chart : Bullet chart



Insights :

- except for Fitness & outdoor, no department could surpass the previous year sale's mark.
- Footwear, Golf and Fanshop however succeeded in producing 80% of Average of 2016 year's sale.
- Outdoors remain most successful as it produce 400K more sales in 2017 than 2016

1. Compare This year's (2018) ^{with} earnings with last year (2017) ^{earnings}. Analyze if there is any difference?

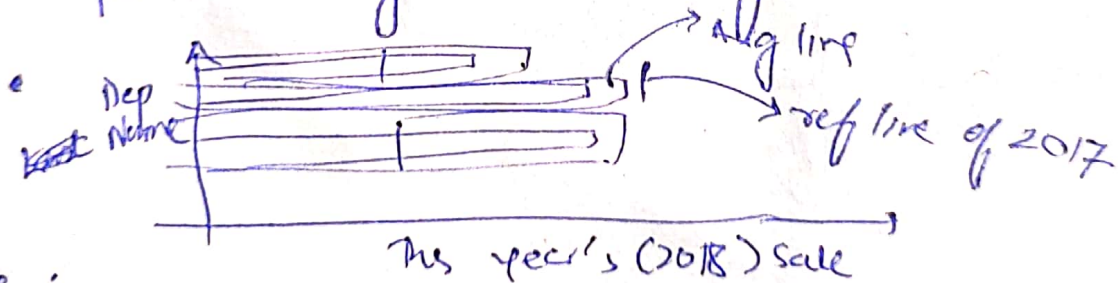
Variables involved :

- new variables created from using calculated field feature
 - ① Earning.per.order variable
 - 1 - This year's earning ✓
 - 2 - Last year's earning ✓
- Department Name → Dmr

chart proposed :

Bullet chart

- reference line will be included for last year's earning.



Insights :

- Not a single department could meet the 60% of 2018's average sales mark let alone the targeted reference line.
- Drastic decrease of sales in every department.
- This may indicate lack of data available for sale in 2018, but during sampling, no evidence of it was found.