SALES DATA ANALYSIS

CONTENT

PURPOSE

Analyze sales data to identify trends, top-selling products, and revenue metrics for business decision-making.

DESCRIPTION

In this project, you will dive into a large sales dataset to extract valuable insights. You will explore sales trends over time, identify the best-selling products, calculate revenue metrics such as total sales and profit margins, and create visualizations to present your findings effectively. This project showcases your ability to manipulate and derive insights from large datasets, enabling you to make data-driven recommendations for optimizing sales strategies.

COLUMN DESCRIPTION OF SALES DATA

- ORDER ID
- PRODUCT
- QUANTITY ORDERED
- PRICE EACH
- ORDER DATE
- PURCHASE ADDRESS
- MONTH
- SALES
- CITY
- HOUR

TRANSFORMATION OF DATA.

TRANSFORMATION OF DATA

STEP 1:

I downloaded the dataset, uploaded it using the 'Get Data' option in Power BI, and then proceeded to transform the data.

TRANSFORMATION OF DATA

STEP 2:

The column headers are identified in the first row and should be kept as headers

STEP 3:

After promoting the headers, navigate to the 'Transform' tab and select

'Detect Data Type.' This action will automatically identify the data type of each column and convert them as needed.

TRANSFORMATION OF DATA

STEP 4:

- Split the datetime into date and time stamp
- The after mentioned process starts with selecting the desired column.

Following the selection, the option to split the column becomes visible.

TRANSFORMATION OF DATA

- Choose the 'Split Column' option and select the space as the delimiter.
- Upon completing the data transformation, click on 'Close & Apply'
located at the top left.
- Remember, this step is crucial after any data transformation process.

VISUALIZATION OF DATA

Visualization using Power bi.

VISUALIZATION OF DATA

STEP 1:

Sales trend over time using the line chart

- Simply click on the Month name and Sales column, drag it to the desired position.
- To create a Chronological order for the months, follow these steps:

1. Select the column containing the months.
2. Navigate to the "Column Tools" and choose "Sort Column."
3. Select "Sort by Month Number" to sort the months in chronological order.

VISUALIZATION OF DATA

STEP 2:

Best selling products using tree map

• To edit them for background color and font size, access the "Format" option for the visualization and adjust the settings as desired.

STEP 3:

Top 5 best selling product using stacked bar chart

1. To manipulate the visualization, perform the following steps:

• Drag and drop the "Product" into the Y-axis.

• Place the "Quantity" into the X-axis for appropriate ordering.

VISUALIZATION OF DATA

STEP 4: Top 5 cities by sales using map.

STEP 5: Weekly sales distribution by weekday using column chart.

STEP 6: Slicer is used to make this kind of visual

- To create a slicer visualization, drag and drop the "Month Name" field into the slicer option. To display the slicer in a vertical list, access the slicer settings and choose the option for a vertical column layout.

VISUALIZATION OF DATA

STEP 7: To find the revenue metrics:

- Total profit: Sum up the net profit from all sales transactions.
- Sales quantity: Calculate the total number of units sold.
- Profit margin: Compute the ratio of net profit to total revenue, usually expressed as a percentage.

Revenue =Sum of all Sales.

STEP 5: Weekly sales distribution by weekday using column chart.

STEP 6: Slicer is used to make this kind of visual

VISUALIZATION OF DATA

1. Select the "Card" visualization type, then drag and drop the "Sales" into the designated field. Convert it to the "SUM" aggregation.

2. Additionally, adjust the display units to show values in millions, billions, trillions, or hundreds, and customize the number of decimal places as needed.

VISUALIZATION OF DATA

Sales quantity

- Select the "Card" visual, then drag and drop the "Quantity Ordered" int the designated field.
- Access the "Format" option for the visual, and adjust the callout value to change the display unit of the quantity ordered as desired.

Profit margin

```
PROFIT MARGIN = (( TOTAL SALES -TOTAL COST )/TOTAL SALES)*100;
```

VISUALIZATION OF DATA

- Click on new measure
- Find the total cost by using the new measure
- Find the total sales by using the new measure
- Find the profit margin by using this formula in the measure.
- Choose the measure created and place it in the card visual and design using the “Format visual”.

FINAL VISUALIZATION

Showcasing the final output.

SALES DATA ANALYSIS

By U.V.Sri Harsha

City

All

Month

Month

- January
- February
- March
- April
- May
- June

Days

- 1
- 2
- 3
- 4
- 5
- 6

Products

All

Sales Quality

209.1K

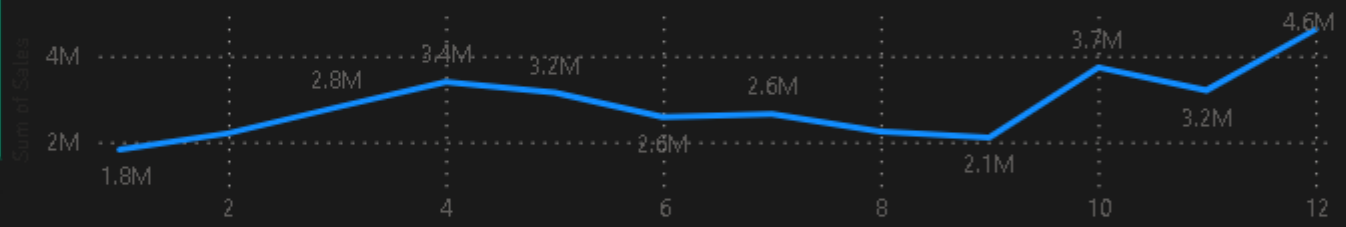
Revenue

34,492.04K

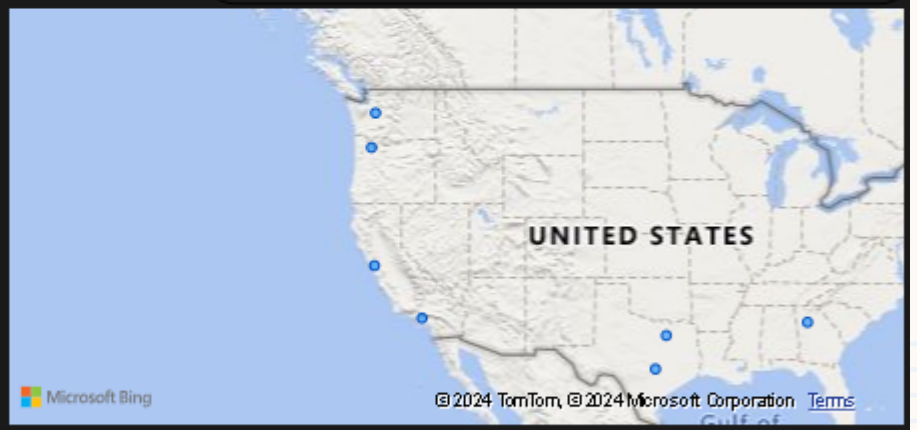
Profit Margin

58.8...

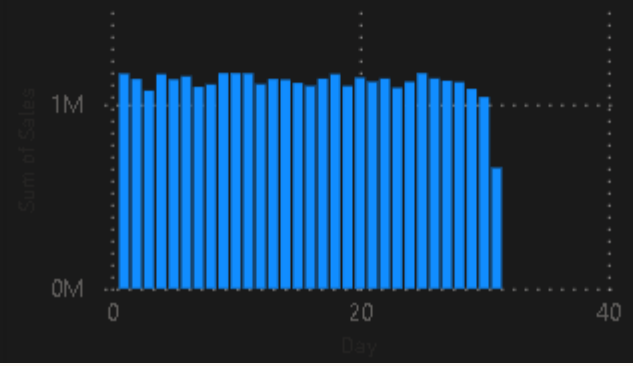
Sum of Sales by Month



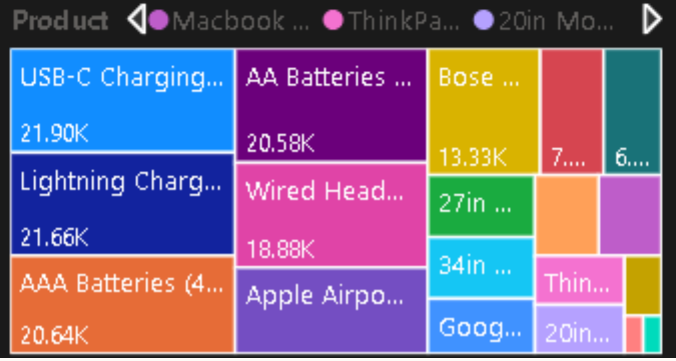
City



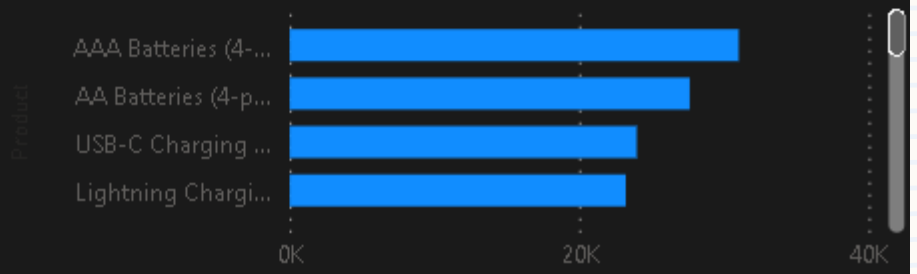
Sum of Sales by Day



Count of Sales by Product



Sum of Quantity Ordered by Product



THANK YOU

U.V. Sri harsha
7993526060
upadrastavenkatasriharsha@gmail.com