SALES DATA ANALYSIS

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 FOR SALES DATA ANALYSIS:

Column Name	Description
Order Id	Order Number
Product	Product Name
Quantity Ordered	Number of Products
Price Each	Cost of each item
Order Date	Date in which product ordered
Purchase Address	Address of the Customer
Month	Month Number
Sales	Sales
City	Place
Hour	Hour

DATA TRANSFORMATION:

- I downloaded the dataset, uploaded it using the 'Get Data' option in Power BI, and then proceeded to transform the data.
- Renamed columns for better understandings.

- I did transformation by checking the data types of the columns and changing it wherever necessary.
- Then splitted Order Date column into Date and Time Separately.
- Extracted Month Name from Month column.
- Extracted Year from Order Date column.
- Extracted Week Day number from Order Date column and after that got Week Day in the form of Text.

KPI FINDINGS:

- Revenue: Sum of Sales
- Sales Quantity: Sum of Quantity Ordered
- Profit Margin: ((Revenue-Total Cost) / (Revenue)*100)
- Count of Product

VISUALIZATION:

- Sales by month using Line Chart
- Top 5 Products by Count of Sales using Tree Map
- Top 5 Products by Ordered Quantity using Stacked Bar Chart
- Top 5 Cities by Sales using Map
- Profit Margin by month using Line Chart
- Quantity by month using Donut Chart

- Revenue by month using Line Chart
- Total Cost by month using Line Chart
- Sales by Week Day using Bar Chart
- Sales by Year using Pie Chart

SLICERS:

Added separate slicers for Product, Year, City, Month and Week Day.

IMAGES:

Inserted images where ever required.

PAGE NAVIGATION BUTTONS:

Inserted buttons for page navigation and Home, set target for navigation and Home by formatting.

- All other formatting are done according to my view and idea.

INFERENCE / CONCLUSION:

KPI's:

1. Revenue – 34.49 Million
2. Sales Quantity – 209 Thousand
3. Profit Margin – 58.83%
4. Count of Product – 185.95 Thousand

VISUALIZATION INFERENCE:

S.No	Heading	Highest	Lowest
1.	Top 5 Products by Ordered Quantity	AAA Batteries	
2.	Total Cost by month - December highest (4.6M)	December (4.6M)	January (1.8M)
3.	Revenue by month	December (4.6M)	January (1.8M)
4.	Profit Margin by month	April (67%)	May (54.25%)
5.	Quantity by month	December (28K)	January (11K)
6.	Profit Margin by Weekday	Sunday (66.68%)	Tuesday (61.78%)

7.	Sales by Year	2019 (99.97%)	2020 (0.03%)
8.	Sales by Weekday	Monday (5.1M)	
9.	Top 5 Cities by Sales	San Francisco	
10.	Top 5 Products by Count of Sales	USB-C Charging Cable	