

# Sales Data Analysis

## PURPOSE:

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

## DESCRIPTION:

In this project, we will dive into a large sales dataset to extract valuable insights. I 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 me to make data-driven recommendations for optimizing sales strategies.

## COLUMN DESCRIPTION FOR SALES DATA ANALYSIS:

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

## Project Structure:

The tool used is Power Bi. The project description includes the following steps:

1. Importing and preprocessing the Sale dataset i.e • The column headers are identified in the first row and should be kept as headers by following the steps below. • 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. • Split the datetime into date and time stamp • The mentioned process starts with selecting the desired column. Following the selection, the option to split the column becomes visible. • 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.
2. Visualization of Data.
  - Sales trend over time using the line chart
  - Top 5 best-selling products by sales count using tree map
  - Top 5 best-selling product by quantity using stacked bar chart
  - Weekly sales distribution by weekday using column chart
  - Slicer is used for Month, Day, City and Product

**Insights Generated:**

1. Total Sales generated was \$34.49M from a total of 209,000 products sold in 9 cities
2. The bulk of the Total revenue was generated from the Macbook Pro with a total of \$8m however, the iPhone sold the most with about 6800 sold.
3. San Francisco generated the highest revenue of \$8.26m
4. Sales Trends: It is observed that within the year in consideration, sales peaked in December with a total of \$4.61m followed by October with \$3.74m and April with \$3.39m, 72% of the generated revenue was during the week as compared to the weekends