Laptop Parts Sales Analysis – Power BI Dashboard

Project Overview:

Designed an **interactive Power BI dashboard** to analyse sales trends, product performance, and city-wise distribution. The dashboard helped identify key sales drivers, detect data inconsistencies, and provide actionable business insights for revenue growth.

Key Insights & Business Impact:

City-Wise Sales Distribution

- San Francisco (33.27%) and Los Angeles (21.95%) were the highest revenue-generating cities.
- Boston (14.74%) and Atlanta (11.26%) had lower sales, indicating potential for targeted marketing
 efforts.

Missing Data Detection (2020 Sales Issue)

Identified zero sales in 2020, prompting a data validation check that helped resolve missing records.

Monthly Sales Trends & Seasonality

- May and June had the highest average sales (~190.31), while September showed a decline.
- Suggested seasonal marketing and promotional strategies to boost sales in low-performing months.

Sales Performance by Hour

- Discovered incorrect time formatting (values like **196, 195 hours**), leading to **data cleaning and correction**.
- Identified peak sales hours for better workforce planning and marketing optimization.

Product Sales Analysis & Portfolio Diversification

- One product contributed 59.65% of total revenue, posing a business risk due to over-reliance.
- Recommended diversifying sales strategies to promote underperforming products and reduce dependency.

Advanced Analytics with DAX for Business Insights

- YoY Growth Rate Analysis: Created a Year-over-Year (YoY) comparison to measure business expansion.
- Sales Forecasting: Developed a 3-month moving average to predict future trends.
- Dynamic Product Ranking: Implemented DAX formulas to automatically highlight best and worstselling products.

Tools & Skills Demonstrated

- Power BI (Data Modeling & Dashboarding)
- DAX (Advanced Measures & Calculations)
- Data Cleaning & Transformation
- Business Intelligence & Analytics
- Sales Trend Analysis & Forecasting
- Data Visualization & Storytelling