Summary:

This project involved creating a Power BI-based car sales dashboard that provides real-time insights into automotive sales performance from 02-01-2020 to 31-12-2021. The dashboard offers comprehensive analysis of sales trends, regional performance, and vehicle specifications to support data-driven decision-making in the automotive retail sector.

Client Requirements:

The client required a Car Sales Dashboard with the following objectives:

1. Sales Overview: Display YTD and MTD sales metrics

2. Price Analysis: Track average vehicle prices and trends

3. Volume Tracking: Monitor number of cars sold

4. Weekly Trends: Visualize sales patterns over weeks

5. Vehicle Categories: Analyze sales by body style and color

6. Geographic Analysis: Map dealer performance by region

7. Company Performance: Compare sales across car manufacturers

8. Filtering Capabilities: Enable detailed analysis through multiple filters

Stakeholders:

1. Car Dealership Owners

2. Sales Managers

3. Regional Directors

4. Marketing Teams

5. Inventory Managers

6. Financial Analysts

7. Automotive Manufacturers

8. Business Development Teams

Steps in Project:

1. Data Collection from Dealership Systems

2. Data Cleaning and Transformation

3. Power BI Model Development

4. Dashboard Design and Layout

5. Visualization Creation

6. Filter Implementation

7. Performance Testing

8. Deployment and Documentation

Insights and Final Outcome:

1. Sales Performance: YTD total sales of $371.2M with 23.59% growth ($70.8M increase)

2. Price Metrics: YTD average price of $28.0K showing slight decline (-0.79%, -$0.22K)

3. Volume Success: 13.3K cars sold with significant growth of 24.57%

4. Weekly Pattern: Peak sales reaching $15.5M with consistent growth trend

5. Vehicle Preferences: Strong representation of SUV and Hatchback body styles

6. Color Distribution: Dominated by Pale White and Black, with Red as third choice

7. Brand Performance: Volkswagen leads with $18.2M (4.91% of total sales), followed by Toyota ($17.5M)

8. Geographic Reach: Strong presence in regions like Janesville, Aurora, Austin, and Greenville