**Dataset Summary**

The dataset contains **2,747 records** of automobile sales data, detailing transaction-level information such as:

* **Order details**: ORDERNUMBER, ORDERDATE, QUANTITYORDERED, and PRICEEACH.
* **Financial metrics**: SALES (target variable), MSRP.
* **Categorical details**: DEALSIZE, STATUS, PRODUCTLINE, and customer information (CITY, COUNTRY, etc.).
* **Date and Time**: ORDERDATE, enabling time-based analysis.

The dataset provides a comprehensive view of sales transactions, allowing analysis of sales patterns, customer behaviors, and other factors impacting performance.

**Intended KPIs**

Key Performance Indicators (KPIs) include:

1. **Total Sales**:
   * Overall revenue across transactions.
   * Aggregated by time periods (e.g., yearly, monthly).
2. **Average Sales per Order**:
   * Mean revenue per transaction to gauge order profitability.
3. **Sales by Deal Size**:
   * Comparing revenue contributions across deal sizes (Small, Medium, Large).
4. **Sales Trends**:
   * Identifying seasonal or yearly variations in sales patterns.
5. **Predictive Accuracy**:
   * Model evaluation metrics like **R-squared** and **Mean Squared Error (MSE)** to assess the quality of the regression model.

**Project Purpose**

The purpose of the project is to:

1. **Analyze Sales Performance**:
   * Uncover patterns and trends in historical sales data.
   * Assess the impact of deal sizes and other factors on sales revenue.
2. **Develop Predictive Insights**:
   * Build a linear regression model to predict future sales based on key features (QUANTITYORDERED, PRICEEACH).
   * Enable data-driven forecasting for inventory management and revenue planning.
3. **Provide Decision Support**:
   * Deliver insights to stakeholders through a predictive dataset exported for Power BI, facilitating visualization and strategic decision-making.