**HONDA DATASET**

**Key Performance Indicators (KPIs) and Analysis**

**1. Average Consumer Rating Analysis**

Objective: Determine overall customer satisfaction across different Honda models.

Analysis Method: Calculate the average Consumer\_Rating by model, year, and condition (new or used). Grouping by State and Seller\_Type can help understand if certain locations or seller types have consistently higher or lower satisfaction levels.

Insights: This could reveal which Honda models are most favored by customers, potentially highlighting popular models to focus on or areas where customer satisfaction could be improved.

**2. Price Distribution by Model and Condition**

Objective: Understand pricing trends for new vs. used vehicles across different models.

Analysis Method: Plot the distribution of Price by Model, grouped by Condition and Year. Analyzing how new versus used models are priced across different states and by seller type can offer insights into market positioning.

Insights: This will highlight which models are priced higher or lower in specific regions or by certain sellers, helping the company set optimal pricing strategies for each segment and identify any overpricing or underpricing issues.

**3. Mileage vs. Price Analysis (For Used Cars)**

Objective: Assess how mileage impacts the price of used cars.

Analysis Method: For Condition set to used, create a scatter plot or regression analysis between Mileage and Price. Additionally, break down this analysis by model to see if the effect of mileage varies by model.

Insights: This can provide benchmarks for mileage-price relationships. For instance, high-mileage cars might be priced similarly to low-mileage ones, indicating pricing inefficiencies. Alternatively, it may help identify models that retain their value better despite high mileage, appealing to budget-conscious consumers.

**4. Reliability and Performance Ratings**

Objective: Understand how different models perform in terms of reliability, comfort, and overall performance, which are crucial factors influencing purchase decisions.

Analysis Method: Compute average scores for Reliability\_Rating, Performance\_Rating, Comfort\_Rating, etc., by model and year. Additionally, break down by state or seller type to see if performance perceptions vary geographically or by seller.

Insights: This analysis would help highlight the strengths of various Honda models (e.g., high reliability, performance, or comfort) and could guide marketing strategies by promoting models with high ratings in specific attributes. It may also show weaknesses where customer satisfaction can be improved, such as models with lower comfort ratings.

**5. Sales Distribution by State and Seller Type**

Objective: Identify regions and sellers with the highest or lowest sales, focusing on understanding which markets are thriving and which require more targeted strategies.

Analysis Method: Analyze the count of cars listed in each State and by Seller\_Type. Additional analyses could include consumer rating and review count by region and seller type.

Insights: Sales concentration in specific regions can guide resource allocation for marketing or inventory management. For example, if dealerships in California have high sales but lower consumer satisfaction, Honda may wish to improve service quality or customer experience in that state.

**Problem Statement**

Identify the factors that impact Honda vehicle pricing, customer satisfaction, and overall market performance to optimize pricing strategies, enhance customer satisfaction, and improve market share distribution across various states and seller types.