



USED CAR SALES PREDICTIONS

By: Charlie Mulroy, Jack Gelfer, Charlie McCollough,
Mallika Andukuri, Josh Wright



MEET THE TEAM



Josh Wright



**Mallika
Andukuri**



Jack Gelfer



**Charlie
McCollough**



Charlie Mulroy
Lost in Ireland



PURPOSE OF PROJECT



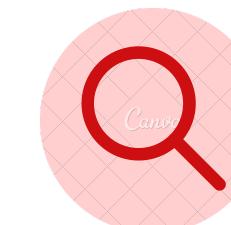
Current Issue

Our current issue at hand focuses on evaluating the key determinants for pricing a used car



Project Scope

The used car market accounts for \$62 Billion dollars annually. The current socioeconomic climate has increased demand for used cars



Research Question

What is the most impactful aspect of the used car market that impacts its overall price





PROJECT STAKEHOLDERS

Automotive Manufacturers

Aspects that are important for a car's resell value also play a role in determining a new car's value

Used Car Dealerships

Important to know what is looked for by customers when buying used cars in order to maximize profits

Potential Used Car Buyers

Potential car buyers are able to know what attributes of a car contribute to car price to aid in buying or selling a used vehicle



MORE ABOUT THE DATA SET

Data Source: Kaggle

Observations: Composed of 46,000 observations of used car sale listings

Variables: A total of 13 Variables, with 4 quantitative and 9 categorical





Variables

Categorial Variables:

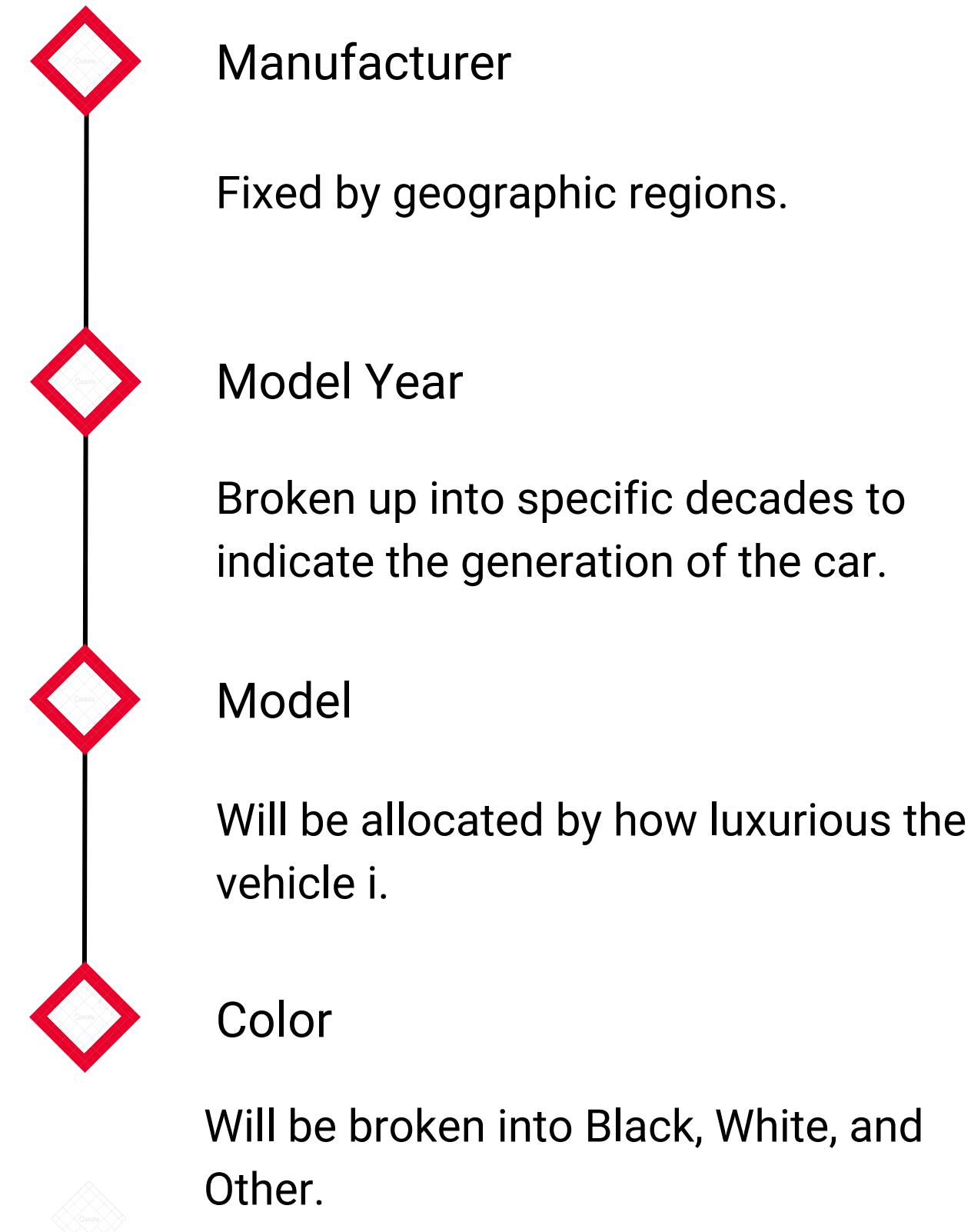
- Manufacturer
- Model Year
- Model
- Location
- Engine Type
- Color
- Assembly
- Body Type
- Transmission Type

Quantitative Variables:

- Price
- Mileage
- Engine Capacity
- Registration Price

Variable Concerns and Solutions

Our categorical variables will be changed into dummy variables, to change them to numerical values to better aid in our regression analysis.



DESCRIPTIVE VISUALIZATIONS



Variables Count

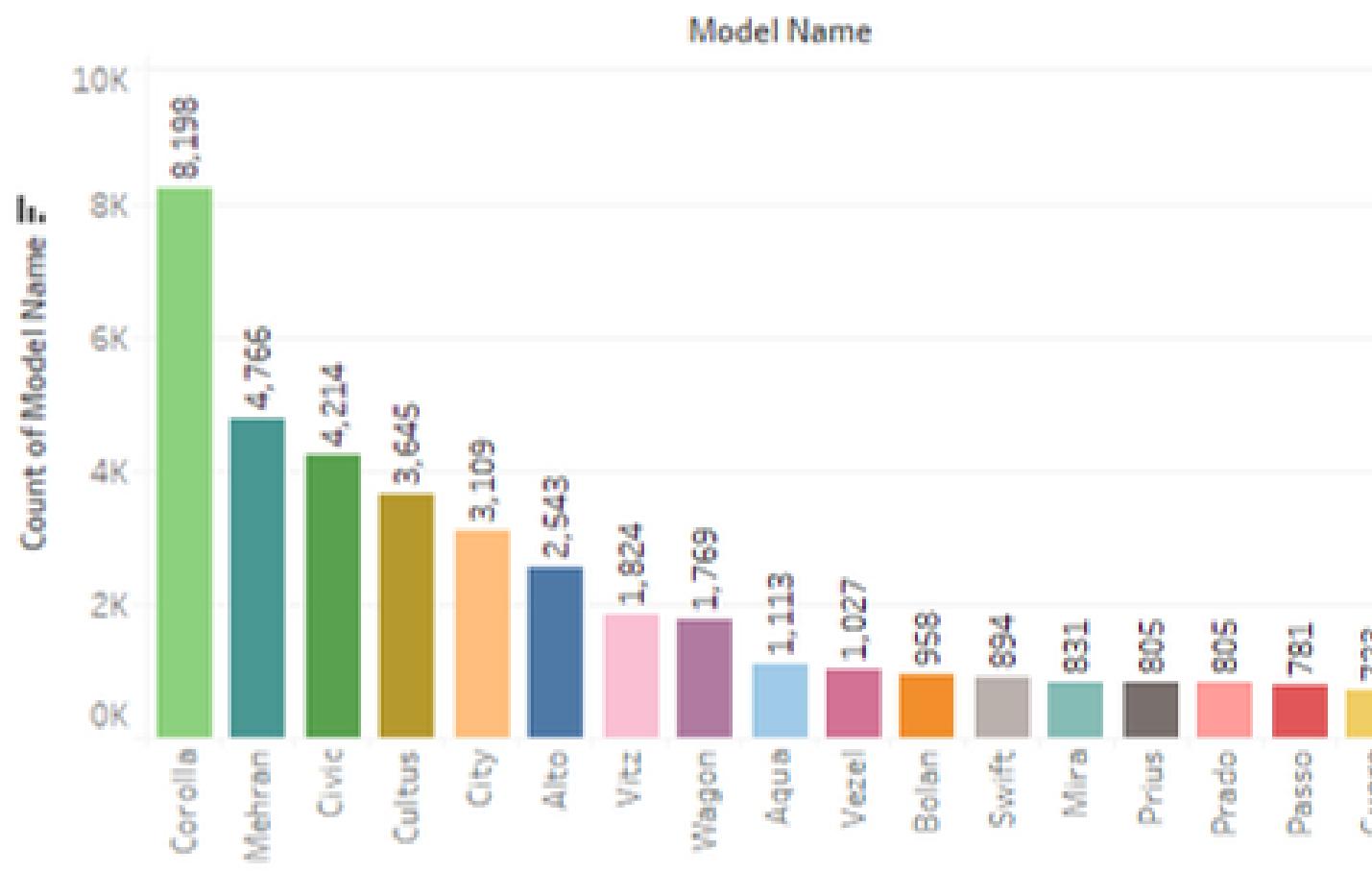


**Look Into Year
On Price**

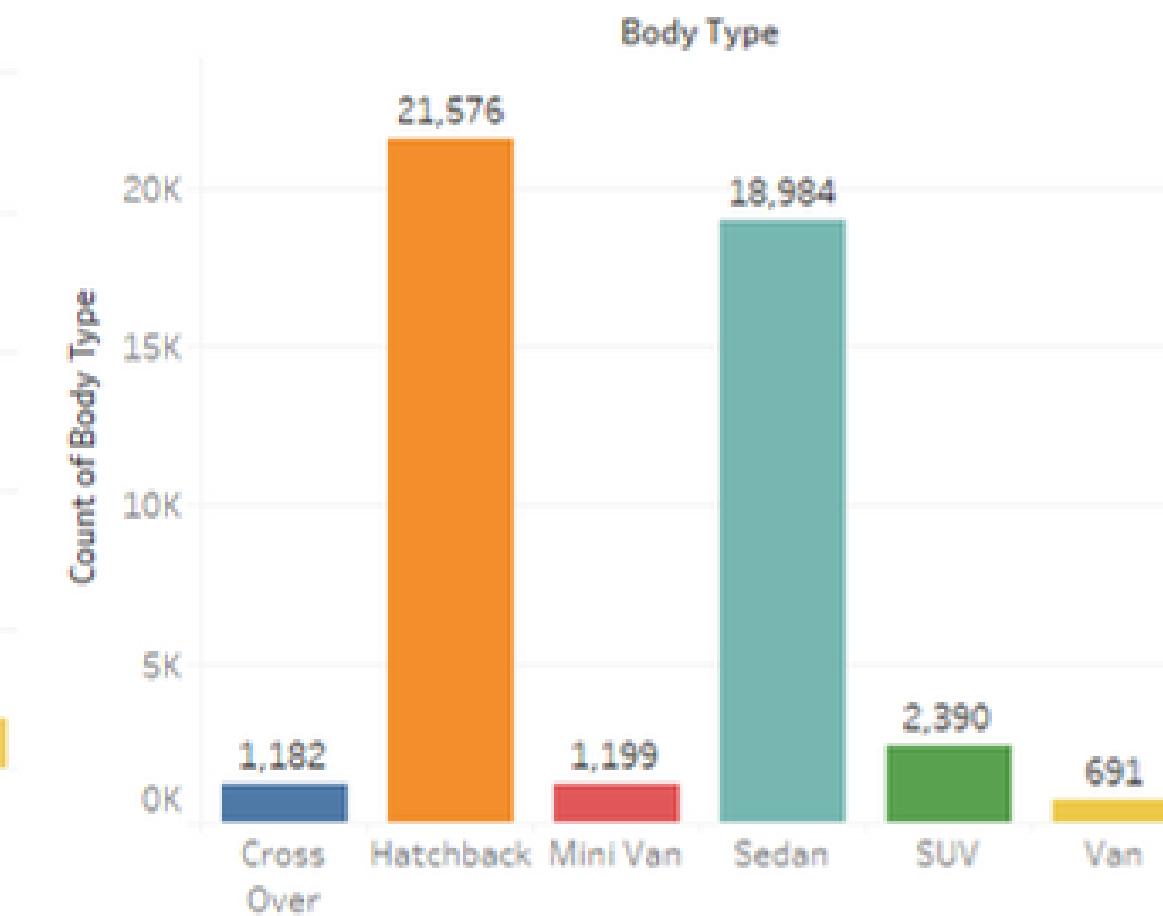


**Look Into Mileage On
Price**

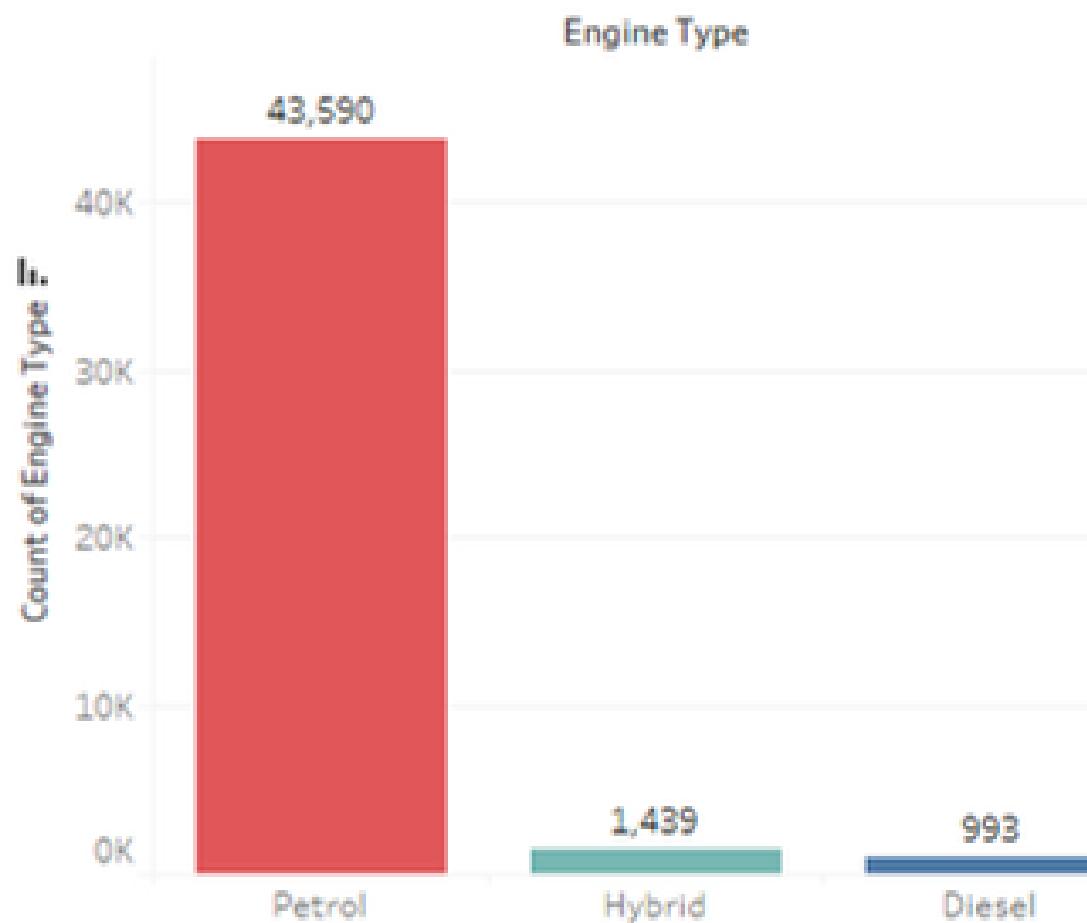
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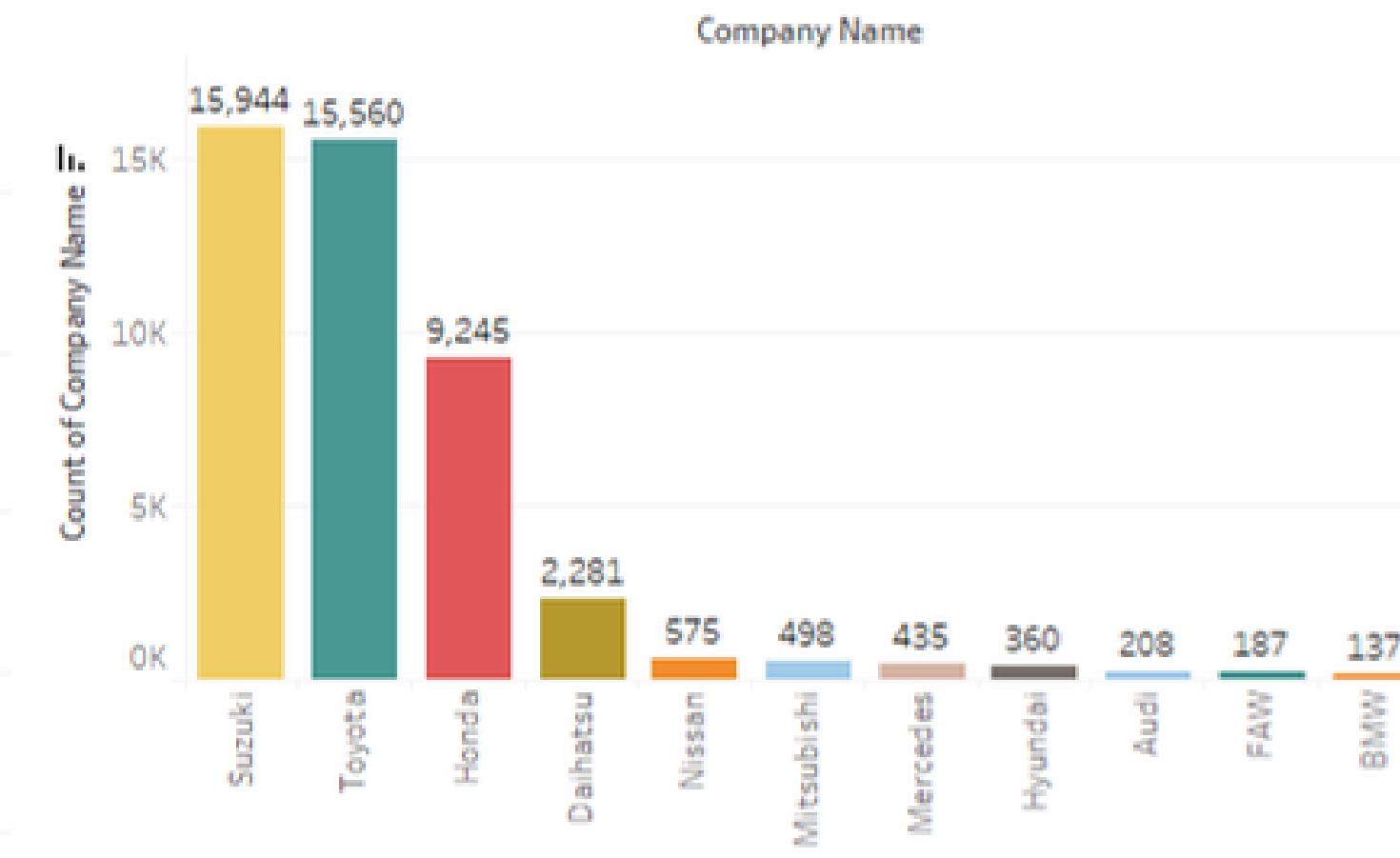
Count Body Types



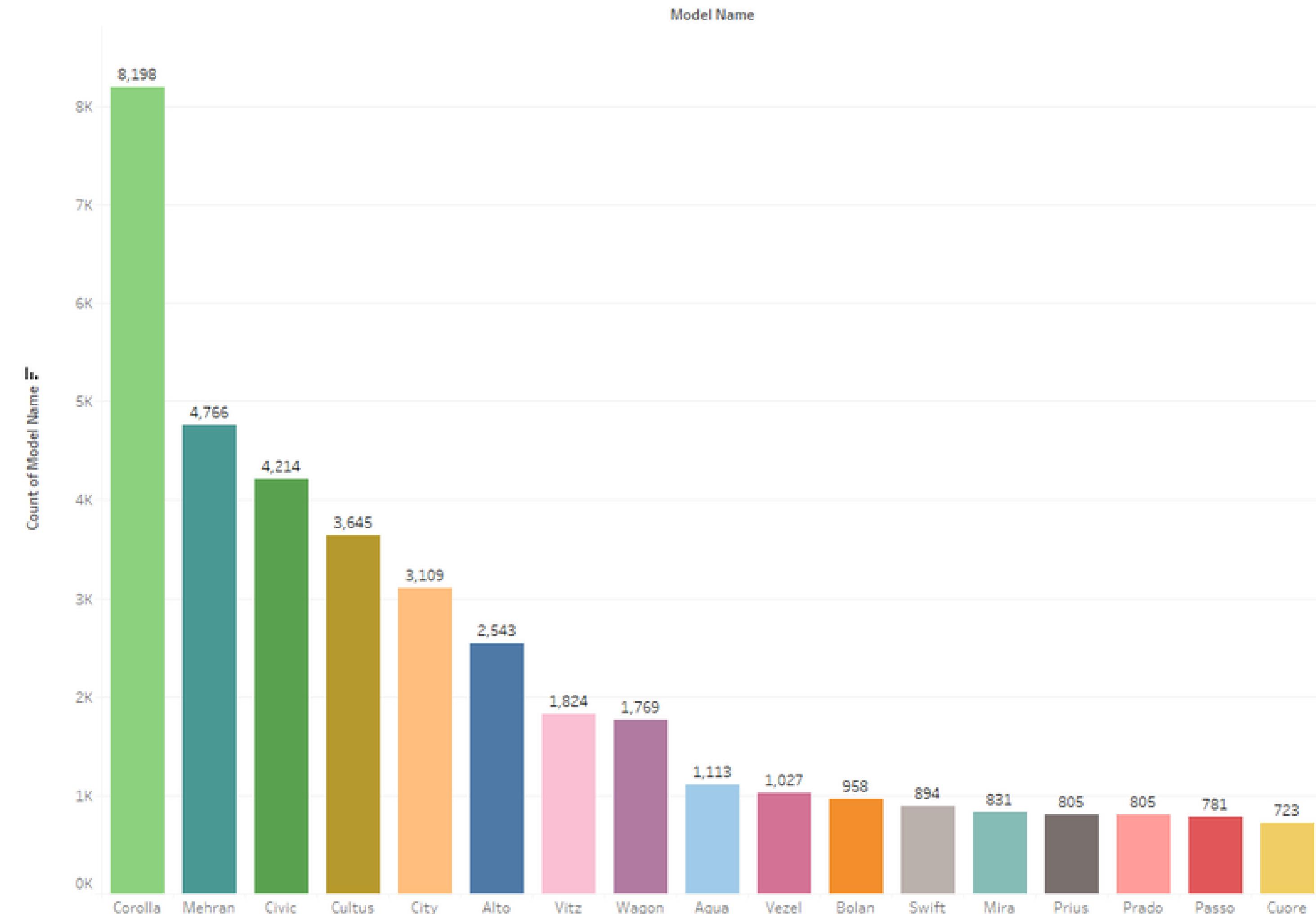
Count Engine Type



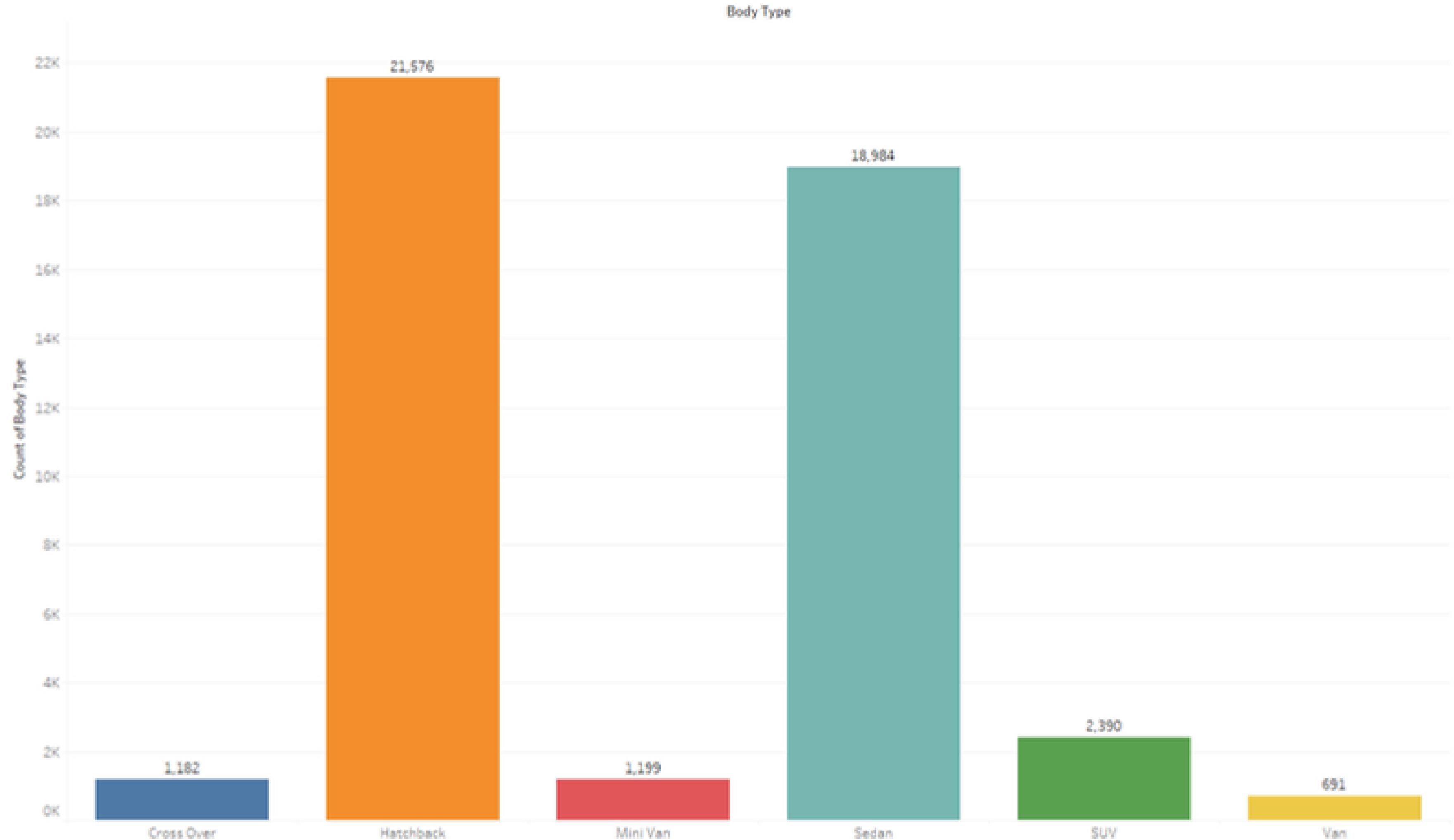
Count Make



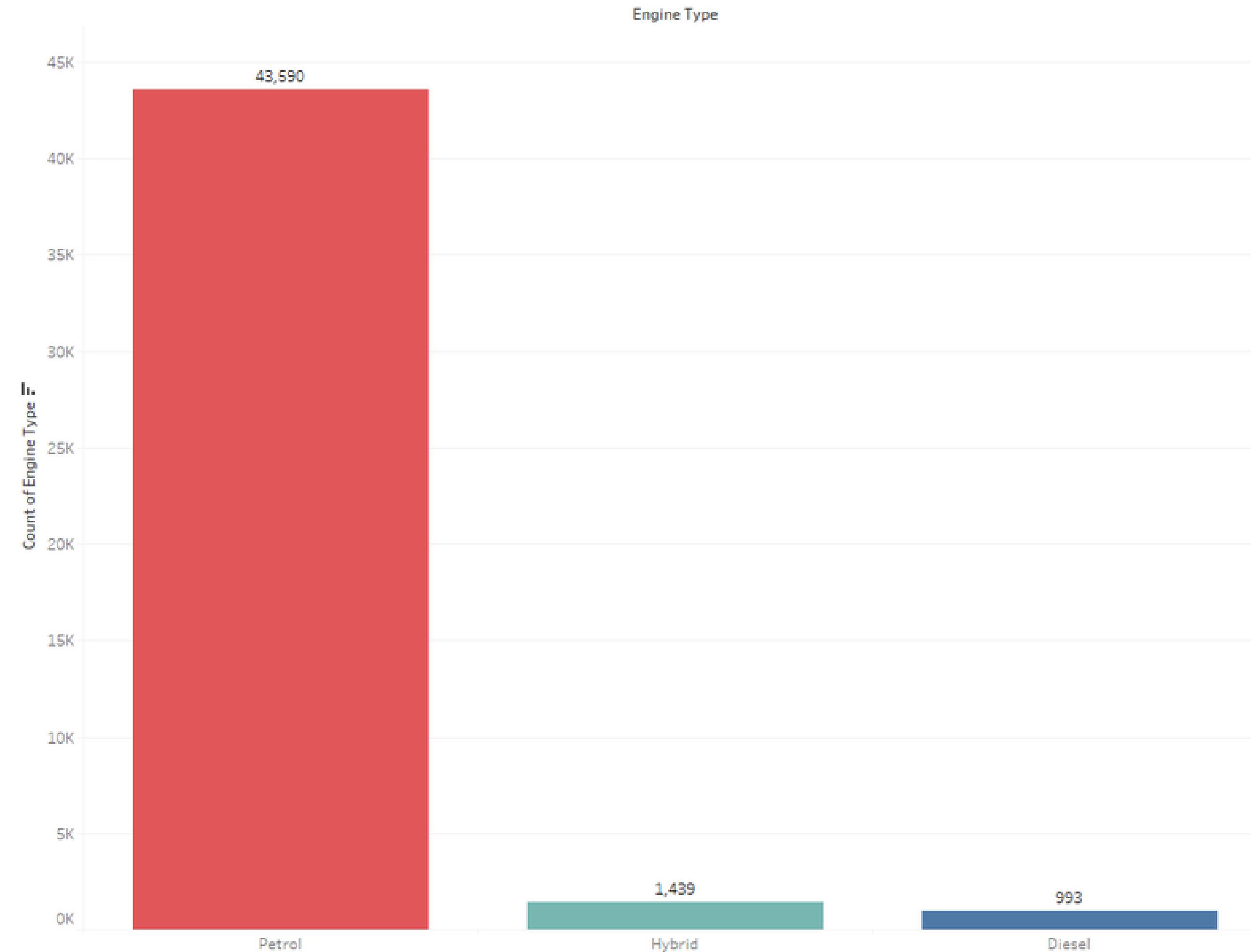
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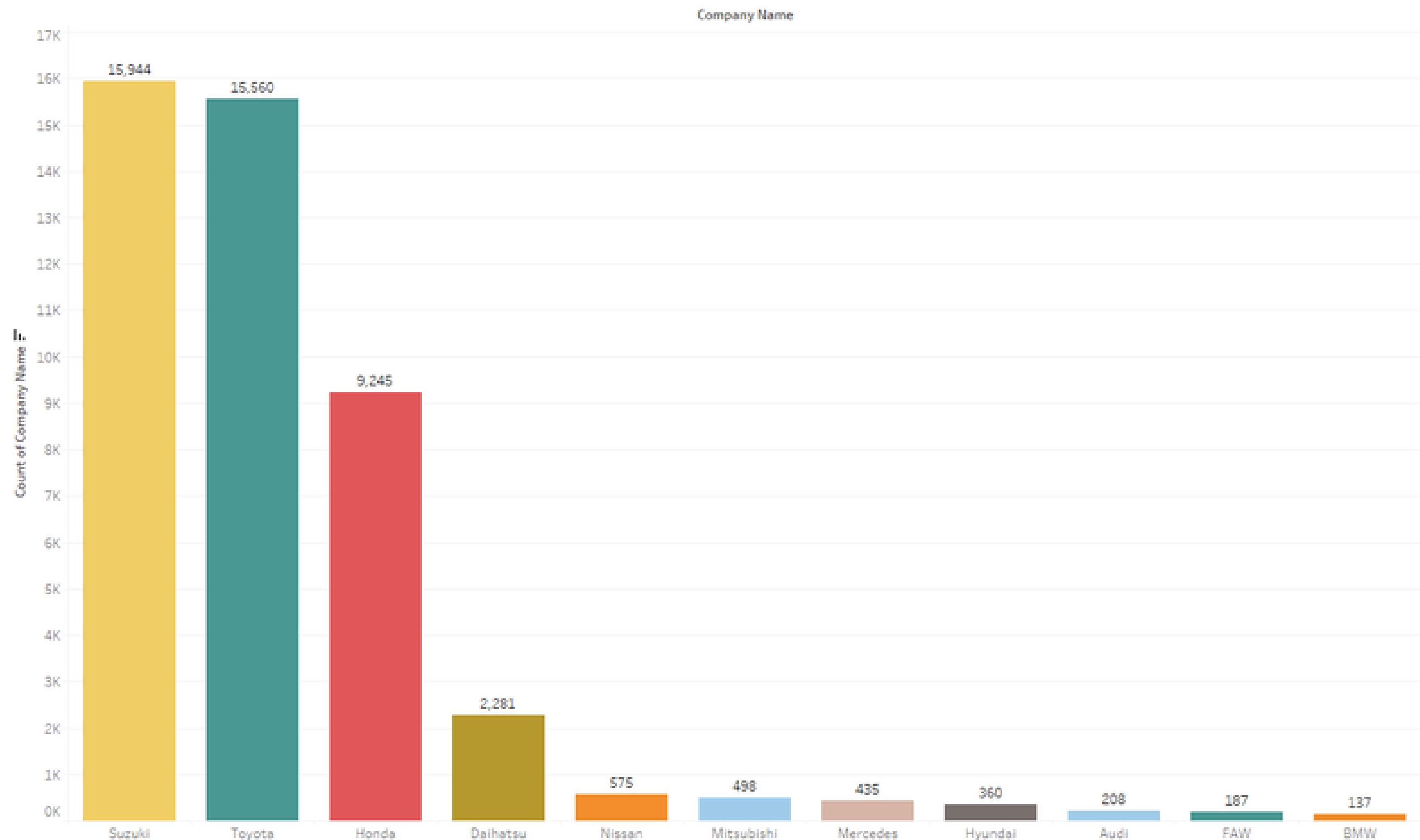
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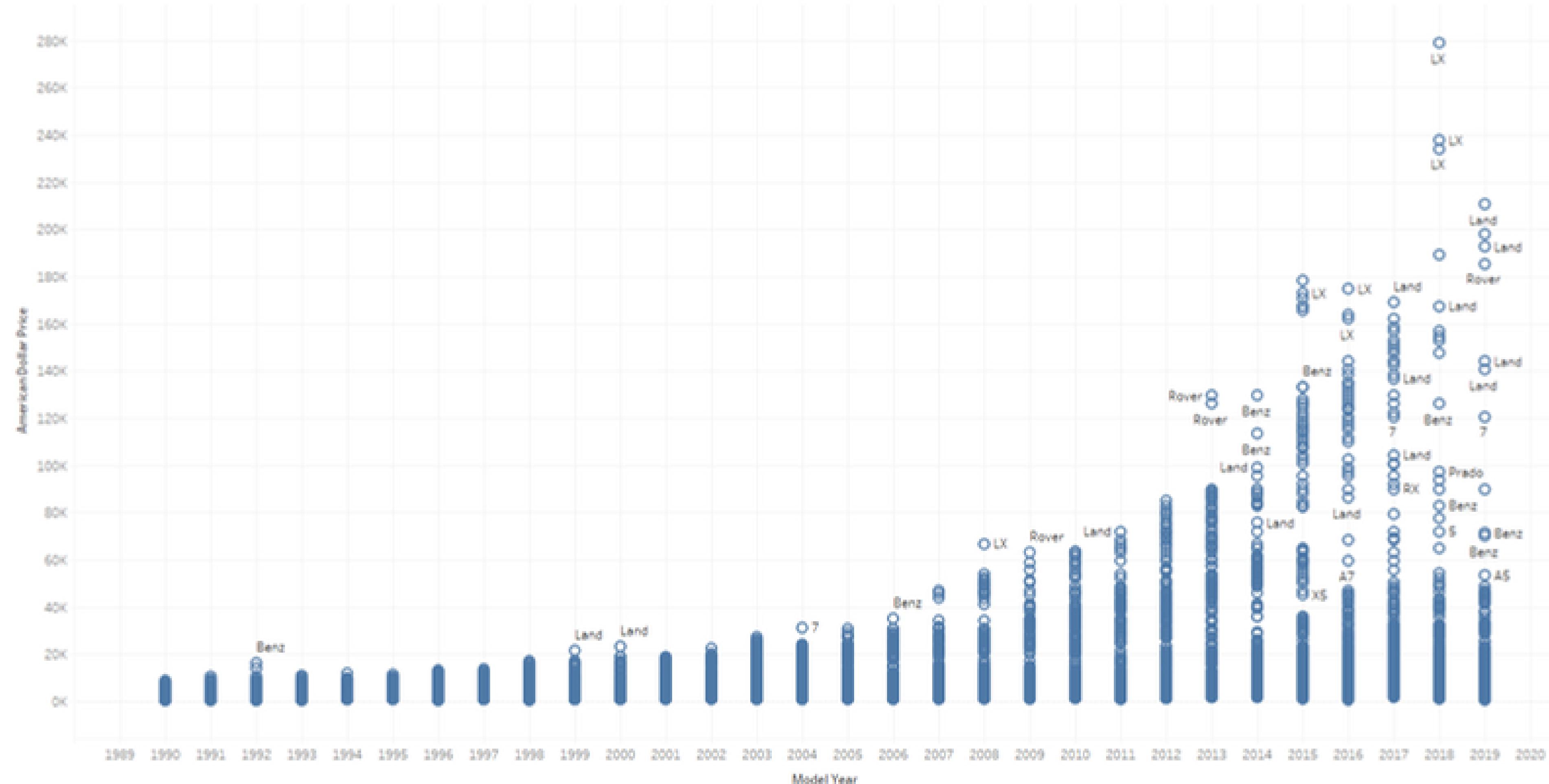
Count Engine Type



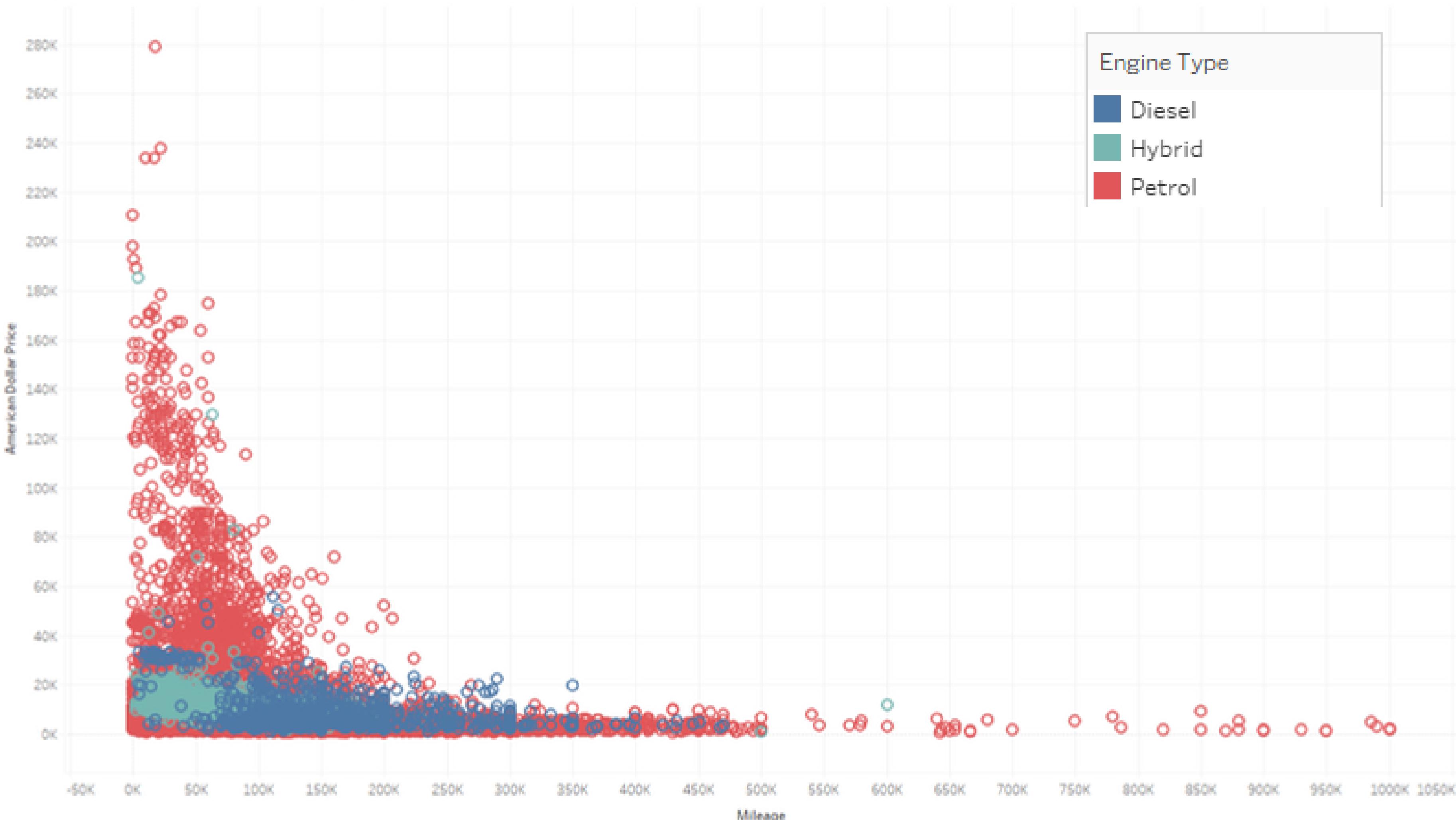
Count Make



Year Effect On Price

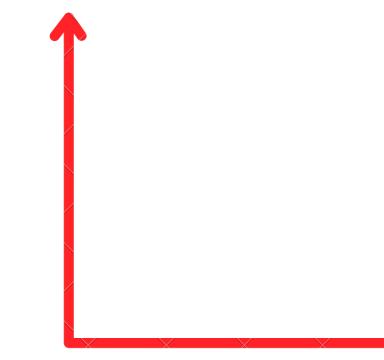


Mileage Effect On Price by Engine Type





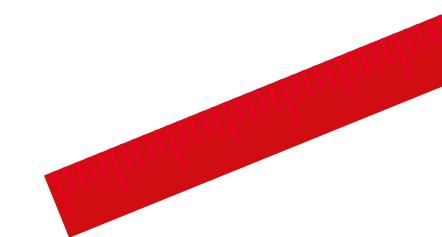
MODEL SELECTION/MEASUREMENT



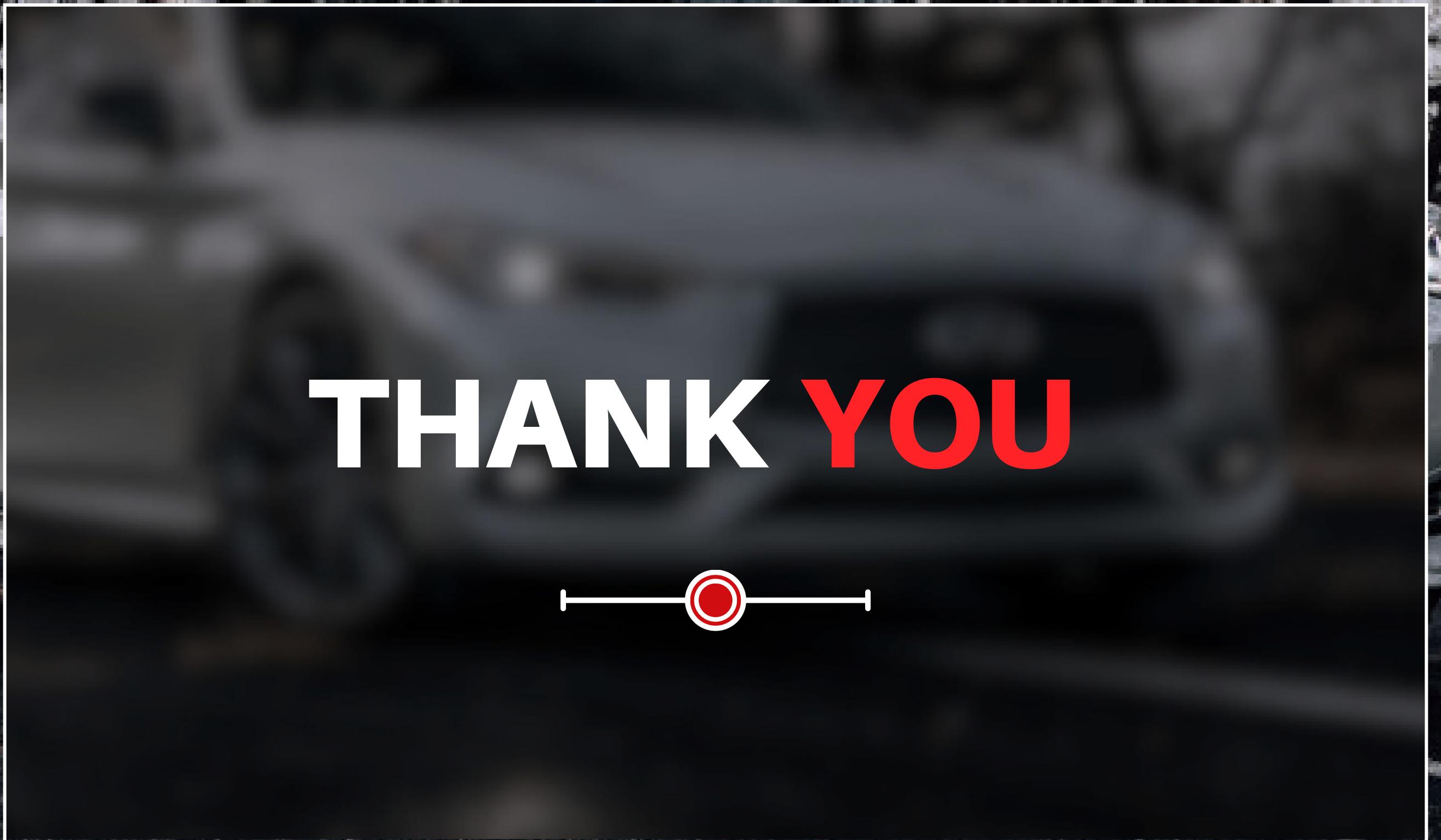
**Simple Linear
Regression**



Multiple Regression



Measurement



THANK YOU

