



Geely Autos

Problem Overview

A Chinese automobile company Geely Auto aspires to enter the Nigerian market by setting up its manufacturing unit and producing cars locally to compete with their Nigerian, US and European counterparts.

They have contacted you, a Data Scientist to understand the factors on which the pricing of cars depends. Specifically, they want to understand the factors affecting the pricing of cars in the Nigerian market, since those may be very different from the Chinese market.

The company wants to know:

- Which variables are significant in predicting the price of a car.
- How well do those variables describe the price of a car.

Based on various market surveys, you have gathered a large data set of different types of cars across the Nigerian market.



Business Goal (Objective)

You are required to explore the Dataset, and come up with insights that will aid the management to understand how exactly the prices vary with the independent variables. They can accordingly manipulate the design of the cars, the business strategy etc. to meet certain price levels. This Exploration will be a good way for management to understand the pricing dynamics of a new market.

Best Practices for EDA:

The final notebook should be well-documented, with inline comments explaining the functionality of code and markdown cells containing comments on the observations and insights.



Here you are required to apply data visualization techniques to carry out an exploration of the data set. You are expected to carry out Univariate, Bivariate and Multivariate Analysis to explore, figure out relationships and identify insights from the Data set.

- Kindly go through the Data dictionary to see the variables involved, further details and a case study template has been provided to guide your analysis

DATA DICTIONARY

1	Car_ID	Unique id of each observation (Interger)
2	Symboling	Its assigned insurance risk rating. A value of +3 indicates that the auto is risky, -3 that it is probably pretty safe.(Categorical)
3	carCompany	Name of car company (Categorical)
4	fueltype	Car fuel type i.e gas or diesel (Categorical)
5	aspiration	Aspiration used in a car (Categorical)
6	doornumber	Number of doors in a car (Categorical)
7	carbody	body of car (Categorical)
8	drivewheel	type of drive wheel (Categorical)
9	engineLocation	Location of car engine (Categorical)
10	wheelbase	Weelbase of car (Numeric)
11	carlength	Length of car (Numeric)
12	carwidth	Width of car (Numeric)
13	carheight	height of car (Numeric)
14	curbweight	The weight of a car without occupants or baggage. (Numeric)
15	enginetype	Type of engine. (Categorical)
16	cylindernumber	cylinder placed in the car (Categorical)
17	enginesize	Size of car (Numeric)
18	fuelsystem	Fuel system of car (Categorical)
19	boreratio	Boreratio of car (Numeric)
20	stroke	Stroke or volume inside the engine (Numeric)
21	compressionratio	compression ratio of car (Numeric)
22	horsepower	Horsepower (Numeric)
23	peakrpm	car peak rpm (Numeric)
24	citympg	Mileage in city (Numeric)
25	highwaympg	Mileage on highway (Numeric)
26	price(Dependent variable)	Price of car (Numeric)



**Create a detailed
analysis and upload
on your Github.**

(Tag @10Alytics)