PROJECT 1

REGRESSION ANALYSIS on Fuel Economy

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OBJECTIVE

The aim of this project is to identify the dependency of different variables with respect to Fuel economy of a Car. In the attached excel (in Github) I have done the regression Analysis considering a best suitable variable as an independent variable against the dependent variable FE.

PROCESSES & STEPS CARRIED OUT IN THE PROJECT

* Used Excel “ Data Analytics” to carry out the entire process
* To identify the best suitable variable, performed “correlation” in Excel and concluded that Engine Displacement is the best one
* Post this, carried out regression Analysis using Excel function
* Also, plotted a scatter plot against this to represent the trend line
* Based on the P value of regression analysis, the hypothesis was accepted /rejected
* Divided the entire data set into 3 parts by random sampling method
* Considered the 3rd set of data as the Test dataset and the first 2 as the Training data set
* Calculated MAPE value based on the predicted value and actual value.

CONCLUSION

We could understand that the FE is related to Engine Displacement. From the Scatter plot we could identify that the best Fuel Efficient car has got a very less Engine Displacement.