

Correlation between Model Year and it Fuel Efficiency (MPG)

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Abstract—The automobile industry is constantly evolving with technology, one of the most important advancements is fuel efficiency. This is tied in with a combined effort to curb the use of fossil fuels and reduce the total amount of emissions. This study will examine the correlation between MPG (fuel efficiency) and Model Year. We are using a data set of 398 automobiles ranging from 1970-1982. This data set was analyzed using several methods such as Simple Linear Regression (1) and Multiple Linear Regression (2). The results of (1) indicated a slight positive correlation between the two, indicating that a higher MPG is slightly associated with a higher Model Year. However the R^2 of this model is 34%, which indicates that our model only explains 34% of the variation in our data. However with the introduction of a third predictor Displacement we were able to make a more robust model (2). This model was much more accurate giving us a 240% increase in our R^2 value. These results indicate that Model Year isn't the strongest indicator for MPG but the correlation does exist.

I. INTRODUCTION

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II. SECTION TITLE

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III. CONCLUSION

Conclusion text goes here.

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