Problem Statement:

The project aims to perform various visualizations and provide various insights from the considered Indian automobile dataset by performing data analysis that utilizing machine learning algorithms in R programming language. The considered dataset is of Indian cars that consists of various features such as model, manufacturer, year, transmission, engine, power etc. The insights that could be estimated from this dataset would be feature such as price of a specific car model that could be estimated using the other attributes of that particular car model using machine learning algorithms like Linear Regression

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Introduction

The automobile industry today is the most profitable industry. Due to increase in the income in both rural and urban sector and availability of easy finance are the main drivers of high volume car segments. The objective of this project is to visualize and provide various insights from the considered Indian automobile dataset by performing data analysis that utilizing machine learning algorithms in R programming language. The considered dataset is of Indian cars that consists of various features such as model, manufacturer, year, transmission, engine, power etc. The insights that could be estimated from this dataset would be feature such as price of a specific car model that could be estimated using the other attributes of that particular car model using machine learning algorithms like Linear Regression. The objective also includes the study of various attributes of the considered Indian automobile dataset and finding the relationship or statistically, finding the correlation between them and visualizing the findings. The result of finding this relationship between various attributes of a vehicle will provide useful insights in building in a prediction model capable of predicting the price of a vehicle based on the other attributes. This kind of an analytics will help the consumers to decide the selling price of a vehicle without rough estimates which sometimes may underestimate the price of vehicles leading to loss of customer automobile value. Thus, this kind of analytics will certainly have a practical industry use case which might be useful to create end products to consumers which are capable of providing insights of various attributes of automobiles and also to look into analytics and knowing the segment of automobiles that are successful in the market.