

Car resale value prediction

Proposed solution

1. Problem Statement(Problem to be solved)

To build a prediction system which can predict the price of the second-hand used cars.

2. Idea/Solution description

To foresee the resale worth of the vehicle, we proposed a keen, adaptable, and powerful framework that depends on utilizing relapse calculations. Leading organizations are collecting tons of data every day to derive business decisions and solutions from it. With this huge amount of data, demand for data scientists and data analysts is massively increasing. Nowadays, Machine Learning and Artificial Intelligence are applicable in almost every sector. Companies are adopting smart AI solutions in their product to eliminate manual interventions.

3. Novelty/Uniqueness

The dealers of used cars have instructive benefits over statistical surveying organizations, which empower them to gauge resale costs all the more precisely. This suggests that merchants have a motivating force to put resources into in-house determining arrangements. Rather than putting together their evaluating choices with respect to remotely created lingering esteem gauges.

4. Social Impact/Customer Satisfaction

This is a supervised learning problem and can be solved using regression techniques. We need to predict the selling price of a car based on the given car's features. Supervised Regression problems require labeled data where our target or dependent variable is the selling price of a car. All other features are independent variables. Car resale value prediction helps the user to predict the resale value of the car depending upon various features like kilometers driven, fuel type, etc. This resale value prediction system is made for general purpose to just predict the amount that can be roughly acquired by the user.

5. Business Model (Financial Benefit)

The rate of insurance is generally based on the age of the car. Newer the vehicle, higher is the cost towards insurance and vice versa. The rate of insurance for pre-owned vehicles is therefore lower. Besides insurance, you also have to pay a lower amount towards registration fees. As the cost of registration is based on the transaction price of the car, buying a used car reduces the cost of registration.

As used cars come with a lower price tag, the amount you may have to borrow will be lower. Many financial institutes offer used car loans with higher borrowing amount and attractive interest rates. Competitive interest rates indicate that lower amount has to be repaid towards Equated Monthly Installments (EMIs). You may choose to borrow a used car loan and buy a pre-owned car without any financial difficulties. Given that cars are now needed for everyday travel, investing in a pre-owned car is a wise decision.

6. Scalability of Solution

The pre-owned car market is witnessing a growth trajectory like never before. It is acutely seizing the opportunity to capitalize on the revelations happening in the automobile sector to turn the wind in their favor. Given the efforts made to promote the sector, in the recent years, consumers have been showing great interest for the pre-owned cars which is invariably responsible for the rising demand of the market. Currently where India calibrates a pre-owned car market size 1.5 times more than the new car sales, it is estimated that in near future it will outpace the new car market.