BUSINESS ANALYTICS WITH R

GROUP 4 – PROJECT PROPOSAL
Professor: Magesh Tarala

Members:

Sri Vamsi Kota

Parth Rajpara

Pranav Grover

Amruth Pai

INTRODUCTION

The United States is considered to be a **Car dependent economy**, the automobile industry plays an important in country's economic structure, infrastructure and culture. A recent statistic suggests that **more than 70%** of vehicle sales in US are used cars. Used cars segment itself is responsible for 40 million cars sold in the last year. This statistic highlights the interest and demand for pre-owned cars based on various factors like lesser depreciation costs, certified pre-owned cars and mainly the **prices and affordability** of used cars in comparison with brand new cars. In order to develop a trustworthy model for pricing prediction, this project will make use of a dataset that includes numerous factors connected to used cars, including vehicle specifications, condition, and past accidents. The model can assist prospective buyers and sellers in understanding how various aspects affect an automobile's market value by examining these qualities.

Problem Statement

This project aims to address the challenges faced by potential buyers or sellers of a used car in estimating the price of that particular vehicle, with the help of the multiple variables from this dataset we intend to create a model that can accurately estimate prices of used cars which can then be used to support informed decision-making in the used car market.

Data Description:

This Used Cars dataset consists of 54272 observations from 2000-2023 with 12 attributes out of which 9 are categorical and 3 are numerical.

Dataset Description:

The dataset used in this project: "*Used Car Price Prediction*"

Link for the dataset:

https://www.kaggle.com/datasets/mayakaripel/used-car-price-prediction-training-data

Source: KaggleX Skill Assessment Challenge