An Analytical Study on Car Price Prediction

Pratiksha V Sonde[1] and Dr. Manjunath N[2]

Student, Department of MBA[1]

Assistant Professor, Department of MBA[1]

RNS Institute of Technology, Bengaluru, Karnataka, India

Abstract*: This study on car price prediction explores the important role of accurate price forecasting in the growing automotive market, particularly in India. Precise predictions benefit for stakeholders such as buyers, sellers, and dealerships. The research examines key variables influencing car prices, including brand reputation, vehicle specifications, market trends, and economic factors. Utilizing machine learning techniques like multiple and logistic regression, the study analyses approximately 5,000 car records to determine the impact of various predictors. Incorporating both domestic and global insights, it addresses factors such as fuel type, engine size, and emerging technologies like electric vehicles. The study emphasizes the importance of developing accurate prediction models to support informed decision-making and suggests enhancing model accuracy by integrating regional market trends and advanced hybrid models to capture complex pricing dynamics.*

Keywords: Car price prediction, Automotive market, Market trends, Economic factors, Used cars, new cars, Consumer preference, Multiple and Logistic regression analysis