

# Analysis Overview

## Problem Statement

### Cars 24 Used Cars Listing Analysis

"Conducting a comprehensive analysis of Cars24's used car pricing data to identify significant patterns and insights, aiming to enhance the understanding of the dynamic used car market and provide valuable information for potential buyers and sellers."

### The analysis includes 10 cities

This analysis is mainly based and focused on the 10 cities that include the following cities: Bengaluru, Mumbai, Chennai, Kolkata, Hyderabad, Ahmedabad, Pune, Jaipur Chandigarh, and Delhi NCR region (which includes cities like New Delhi, Gurugram, Noida, Ghaziabad, and Faridabad)



# What this analysis is about

This pricing analysis of Cars24 used cars aims to investigate and examine various factors that influence the pricing of different car manufacturers and models. The analysis encompasses several key aspects, including segment type, fuel type, transmission type, price variations according to locality, and more. By examining these columns in the dataset, we can gain insights into how different attributes influence the pricing of used cars on the platform. It provides a comprehensive understanding of the relationship between car attributes and their corresponding market values, assisting in making informed decisions related to buying or selling used cars.

## Key metrics of the analysis

### Pricing insights:

- Analyzing the pricing information is essential for understanding the market value and price distribution of used cars.
- Exploring the range, average, and distribution of prices can help identify pricing patterns and variations.
- Studying the relationship between pricing and other variables, such as manufacturer, model, segment, and location, can provide insights into the factors influencing car prices.
- It can also help identify any outliers or unusual pricing patterns that may require further investigation.

### Manufacturer:

- Understanding the distribution of cars across different manufacturers is important as it can provide insights into the popularity and market share of each manufacturer.
- Analyzing the manufacturers can help identify which brands dominate the used car market and their respective contributions to the dataset.
- Identifying the pricing of top manufacturers with the highest number of listings.
- This information can be useful for identifying popular and reliable brands, as well as assessing the demand and pricing trends for cars from different manufacturers.

### Model:

- Analyzing the models of the cars can provide insights into the variety and diversity within the dataset. It can help identify the most common car models and assess their price positioning in the market.
- Exploring the distribution of models can also reveal any trends or patterns, such as specific models that are frequently listed or have higher or lower prices compared to others.
- Examining the pricing variations across different car models. Identifying the most expensive and affordable car models in the market.
- **Variation in prices among different models:** This metric explores the price range and fluctuations across various car models, highlighting potential differences in pricing based on the model.

## **Segment:**

- Segment refers to the categorization of cars into different types, such as budget, mid-size, and premium. Analyzing the distribution of cars across segments can help understand the preferences and choices of buyers in terms of car type and pricing.
- It can provide insights into the market demand for different segments and their respective contributions to the dataset.
- Additionally, examining the relationship between segments and pricing can reveal price ranges and affordability across different car types.
- **Average prices by segment:** This metric calculates the average price of cars within each segment, allowing for comparisons of pricing patterns among different car segments.

## **Location:**

- Location plays a significant role in the used car market as it can impact car availability, demand, and pricing. Analyzing the distribution of cars across different cities can provide insights into regional preferences and market conditions.
- Understanding location-specific trends and variations in pricing can help identify potential market opportunities or differences in market dynamics.
- Identifying the cities with the highest and lowest car prices. It can also assist in identifying locations where specific manufacturers, models, or segments have higher demand or fetch higher prices.