

## REPORT DOCUMENT

### ANALYSIS OF INDIA'S USED CAR SALES (1996 TO 2019)

#### SUMMARY

This report presents insights from analyzing used car sales data in India over 22 years (1996–2019). The findings provide actionable intelligence for stakeholders in the automotive resale market by identifying key trends, customer preferences, and regional disparities. The analysis utilizes visualization tools to illustrate metrics and trends, offering data-driven strategies to improve decision-making.

#### 1. FINDINGS AND INSIGHTS

##### 1.1 Key Metrics

- **Total Cars Sold:** 7,075 units.
- **Most Expensive Car Sold:** Mercedes-Benz GLE 350d.
- **Most Popular Model Sold:** Maruti Swift Dzire VDi.
- **Fuel Type Preferences:**
  - Diesel: 53.47% (Most preferred).
  - Petrol: 45.67%.
  - CNG: 0.86%.
- **Ownership Distribution:**
  - First-owner vehicles: 82.57%.
  - Second-owner vehicles: 15.68%.
  - Third-owner vehicles: 1.75%.
- **Location Insights:**
  - Coimbatore recorded the highest sales volume and average car price (\$9.9k).

##### 1.2 Patterns or Anomalies

1. **Depreciation Trends:**
  - Average car prices declined from \$506.40 to \$352.64, reflecting depreciation and potential shifts in consumer preferences toward economic models.
2. **Mileage Pricing Relationship:**

- Vehicles with higher mileage (16.01 kmph) commanded premium prices (\$16k), emphasizing the preference for fuel-efficient cars.

### 3. Fuel and Regional Preferences:

- Diesel cars dominated the market, especially in regions like Coimbatore, where demand and pricing were highest.
- Lower sales of CNG cars may indicate limited adoption of alternative fuels.

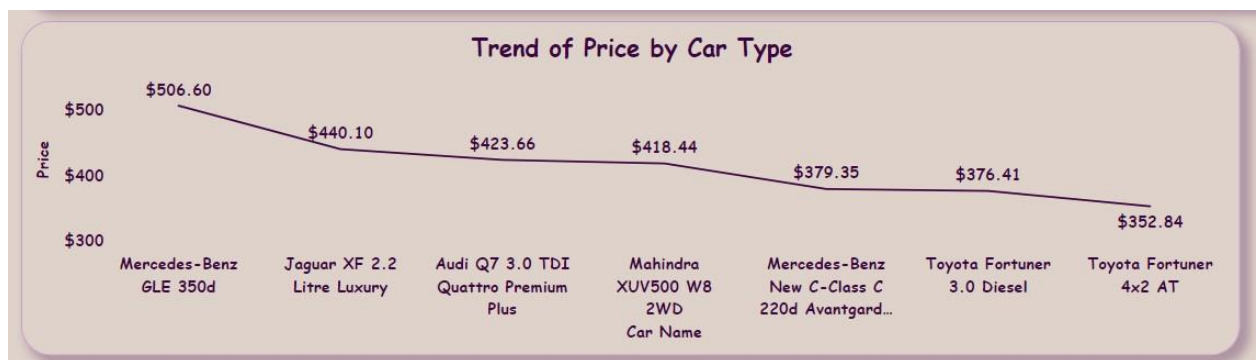
### 4. Ownership Correlation:

- Vehicles with fewer previous owners retained higher market value.

## 1.3 Visual Aids

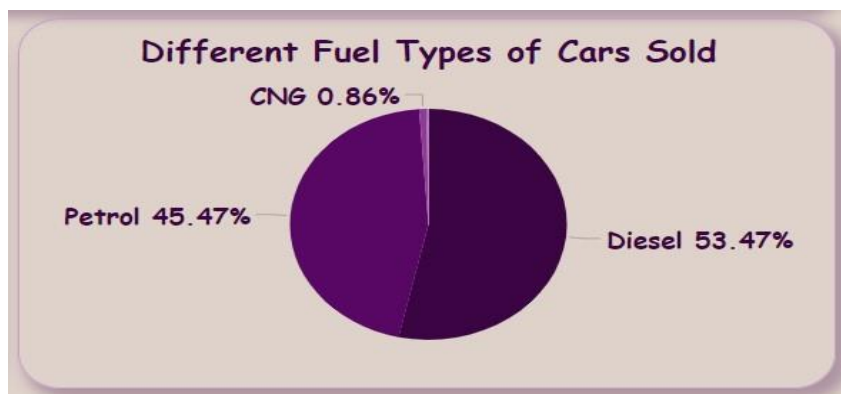
Below are graphical representations of key findings:

### 1. Trend of Price by Car Type:



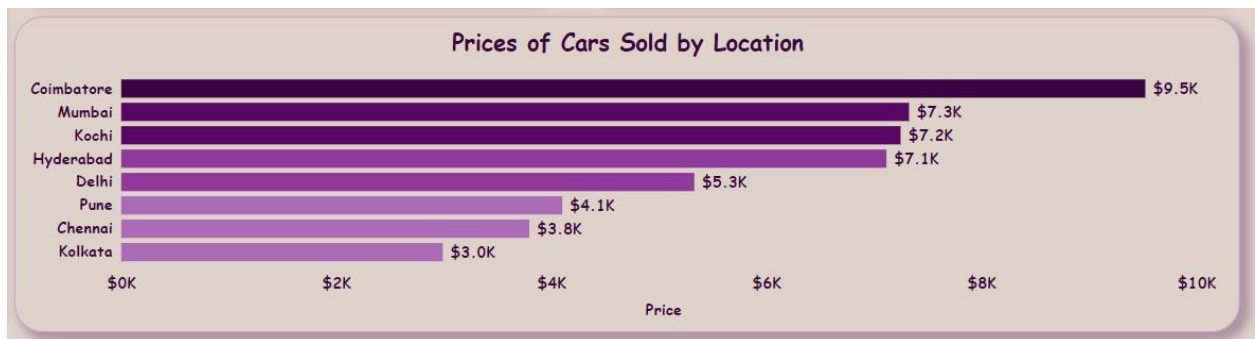
A consistent decline in car prices over time illustrates the depreciation trend.

### 2. Fuel Type Distribution:



Diesel cars constitute over half of total sales, indicating a strong consumer preference for fuel efficiency and cost-effectiveness.

### 3. Regional Price Comparison:



Coimbatore prices surpass other locations, providing insights into localized market dynamics.

## 2. RECOMMENDATIONS FOR DECISION-MAKING

### 2.1 Sales Strategy Optimization

1. **Target Diesel Car Buyers:** Focus sales and marketing efforts on diesel vehicles, especially in high-demand regions like Coimbatore.
2. **Leverage First-Owner Vehicle Market:** Promote the resale of first-owner cars to align with consumer preferences for low-use, high-quality vehicles.

### 2.2 Price and Inventory Management

1. **Highlight Mileage Efficiency:** Showcase high-mileage cars as premium options to capitalize on consumer preferences for efficient vehicles.
2. **Depreciation-Based Pricing Models:** Use the observed price trends to guide pricing strategies, ensuring competitive yet profitable resale rates.

### 2.3 Regional Focus

1. **Expand Operations in Coimbatore:** Given its high sales volume and pricing, Coimbatore should be a focal point for sales campaigns and inventory stock.

## **2.4 Further Investigations**

1. **CNG Adoption Feasibility:** Investigate barriers to adopting CNG vehicles, such as infrastructure limitations or customer awareness.
2. **Mileage Performance Trends:** Study how mileage efficiency impacts long-term demand across varying car types.

## **3. CONCLUSION**

This analysis underscores the importance of tailoring strategies to consumer preferences, regional trends, and market dynamics. Stakeholders can maximize profitability by focusing on high-demand segments such as diesel vehicles, high-mileage cars, and first-owner sales. Regional insights, particularly from Coimbatore, further aid in targeted decision-making. Future investigations into alternative fuel adoption and mileage impact can refine these strategies, ensuring sustained success in India's used car market.