

CASE STUDY: CAR SALES PREDICTION - REGRESSION



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BUSINESS CONTEXT:

Business problem definition - One of major automobile company would like to design new product which gives high sales. In order to define the product, they want to understand and identify important drivers for the sales (what are the factors driving sales) and Predict the new car sales for given car model with defined factors.

Expectations from the Trainees:

1. Understand the data & perform the data preparation before the model building
2. Perform all the modeling steps including pre & post modeling steps like data preparation and implementation of the model
3. Understand output and explain the model fit
4. Determine what is the "best" linear model?
5. Apply transformations to the given variables and find out the possible best model after transformations.
6. Generate the final equation
7. Validate the model and present the results in Excel or PPT.

DATA AVAILABLE:

➤ Car_sales.csv

Data Dictionary:

Description of the Variables:

1. Manufacturer - Car Manufacturer Name
2. Model - Car Model Name
3. Sales_in_thousands - Car Sales in Thousands
4. __year_resale_value - Resale value after 4 years
5. Vehicle_type - Type of car
6. Price_in_thousands - Price of the car
7. Engine_size - Car Engine Size
8. Horsepower - Car Horse power
9. Wheelbase - Car wheel base
10. Width - Car Width
11. Length - Car Length
12. Curb_weight - Car Curb Weight
13. Fuel_capacity - Fuel Capacity in liters
14. Fuel_efficiency - Fuel efficiency (kms/per liter)
15. Latest_Launch - Car Model Launch Date
16. Power_perf_factor - Power performance factor