

Usecase 4

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So we defined data science as: It's the process of asking interesting questions, and then answering those questions using data.

For any Data project we will go through these steps:

1. Defining the Problem Statement
2. Collecting Data
3. Data Quality Checking and Remediation
4. Exploratory Data Analysis
5. Building Machine Learning Models
6. Model Evaluation
7. Communicating Results
8. Model Deployment
9. Model Performance Maintenance in Production

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Step 1: Defining the Problem Statement

We are eager to learn about the used cars market in Saudi Arabia, We would like to know:

- a. Which region in Saudi Arabia has the largest market for used cars?
- b. During the specified period, which car brand was the most listed for sale?
- c. Which features most significantly influence the price of a used car?
- d. What is the price range for used cars that are approximately four years old?
- e. Initiate your analysis of the used car market, and feel free to incorporate any other pertinent questions that may arise.

Step 2: Collecting Data

Used cars data is collected from scrapping online website called [Sayarah](#) for selling cars in 2023 and posted in [kaggle](#)

Step 3: Data Quality Checking and Remediation

To do in the notebook

Step 4: Exploratory Data Analysis

To do in the notebook

Step 5: Building Machine Learning Models

Not applicable

Step 6: Model Evaluation

Not applicable

Step 7: Communicating Results

To do in the notebook

Step 8: Model Deployment

Not applicable

Step 9 : Model Performance Maintenance in Production

Not applicable