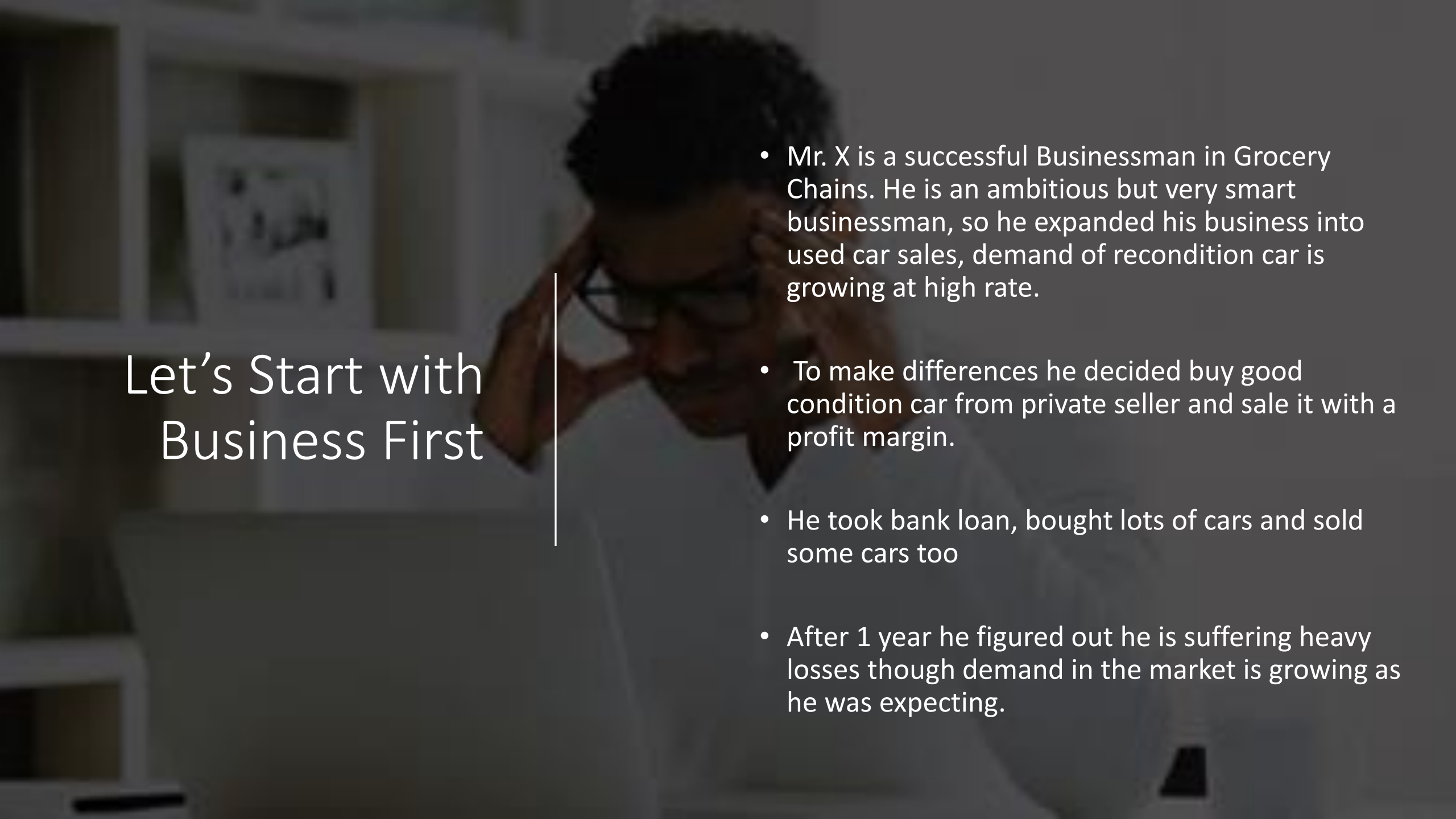
AI Value & Business Case

Lesson 1: Introduction-Decision Making-AI

Topic 1: WHY, When, What, Where and Who



Let’s Start with Business First

- Mr. X is a successful Businessman in Grocery Chains. He is an ambitious but very smart businessman, so he expanded his business into used car sales, demand of recondition car is growing at high rate.
- To make differences he decided buy good condition car from private seller and sale it with a profit margin.
- He took bank loan, bought lots of cars and sold some cars too
- After 1 year he figured out he is suffering heavy losses though demand in the market is growing as he was expecting.

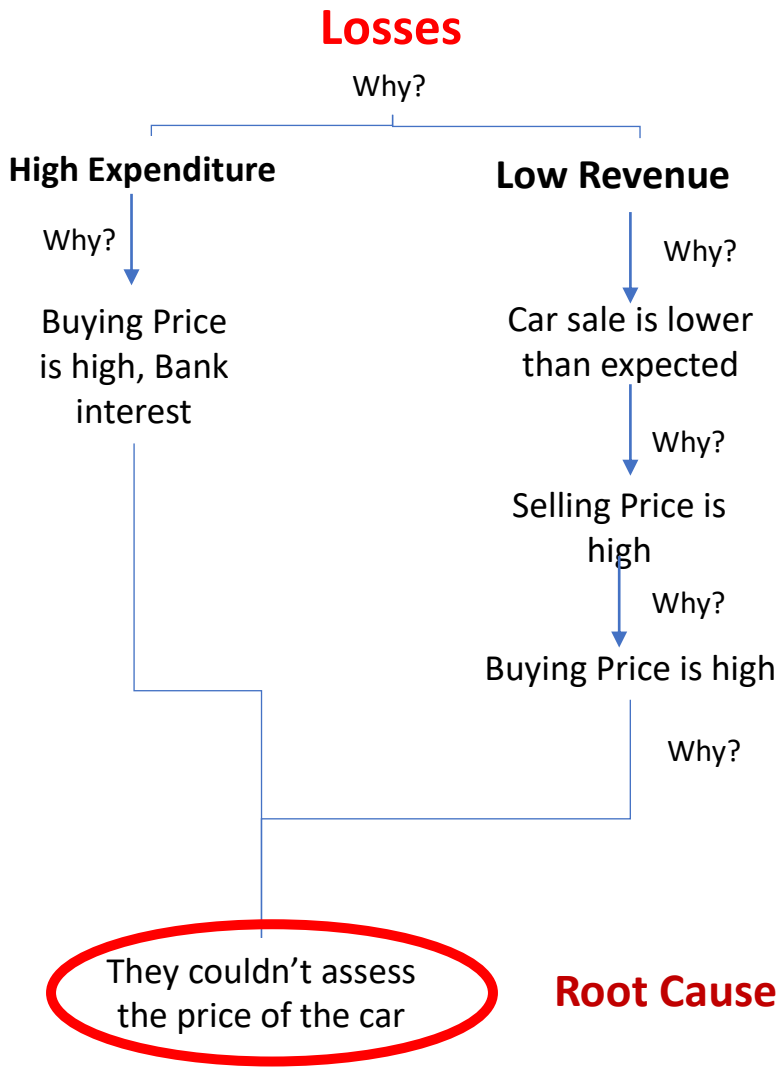
Mr. X sought Help from MIST As MIST is the most Trusted solution provider in Bangladesh

What did MIST Do?

They solved his Problem

How?

MIST started with understanding his problem tried to find root cause of his problem



Solution is

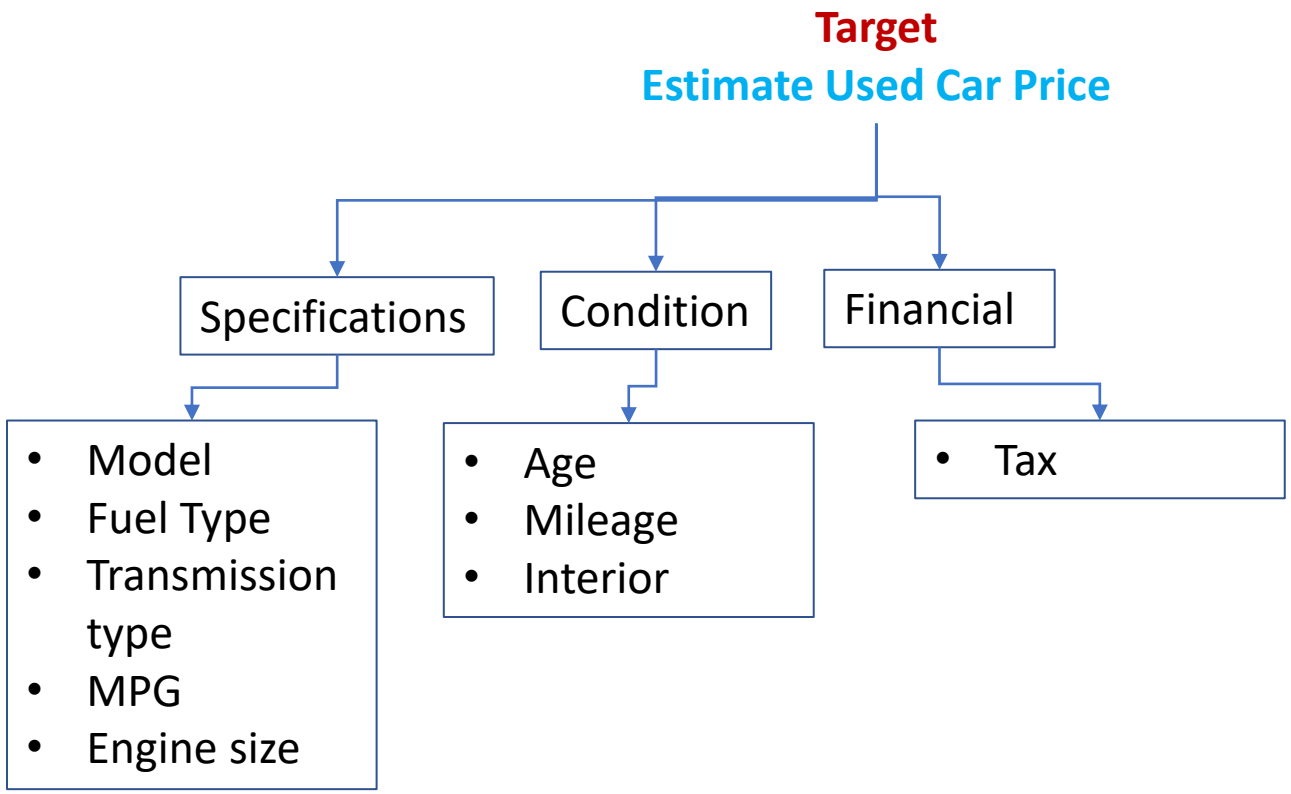
So Mr. X needs to know,

- what could be the approximate price of a car when a private seller offer his car to sell him.
- Based on the asking price he can make decision whether buying this car would help him making profit or not.

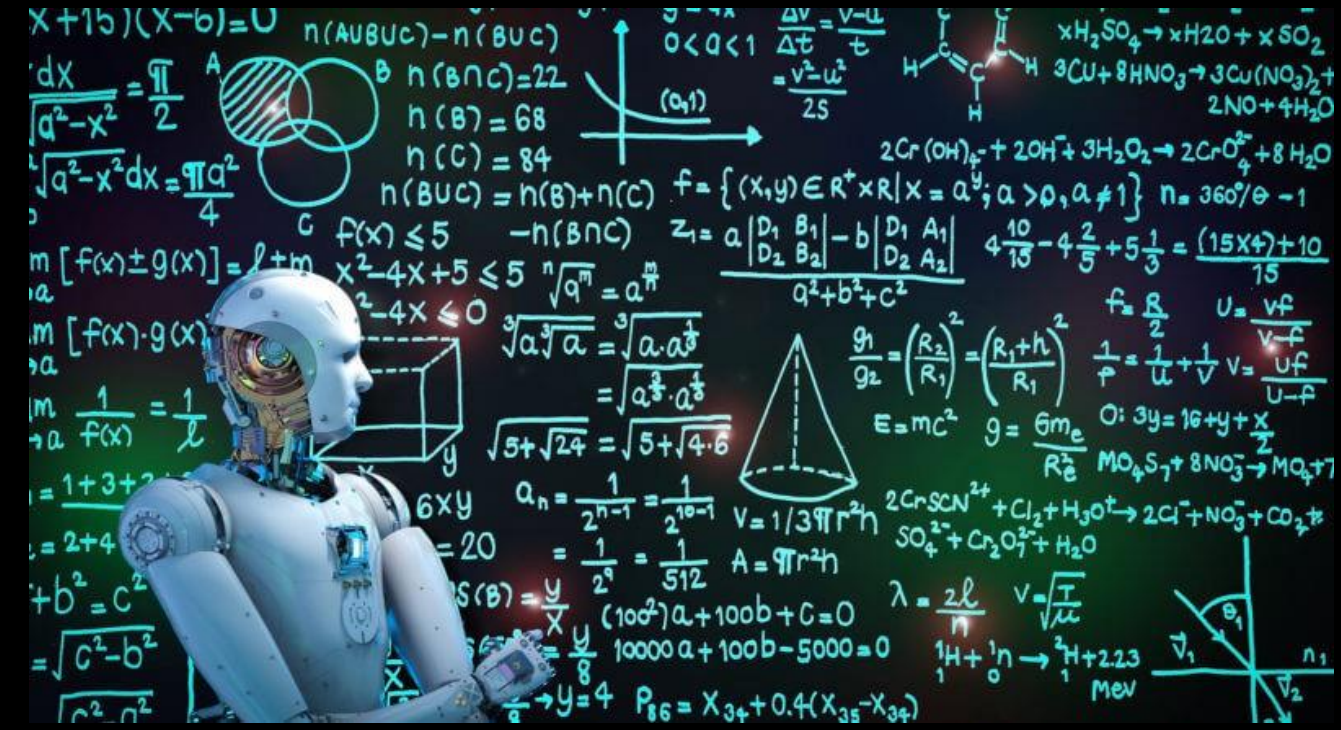
MIST’s target is to assess the price of used cars

Price of used cars can be assessed from the history of used car sales

Identified the data required to address Target:
Do Critical thinking on Target:

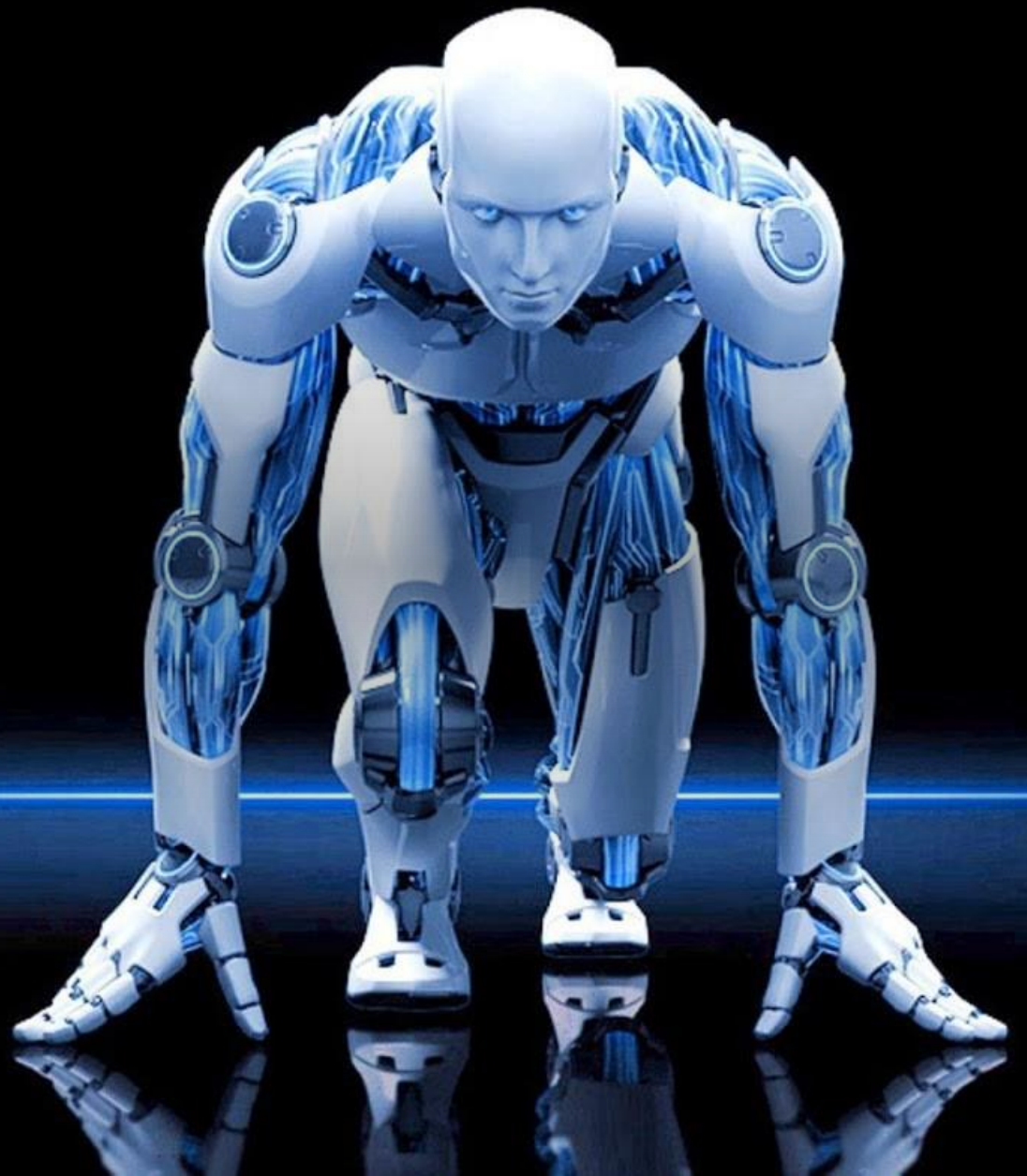


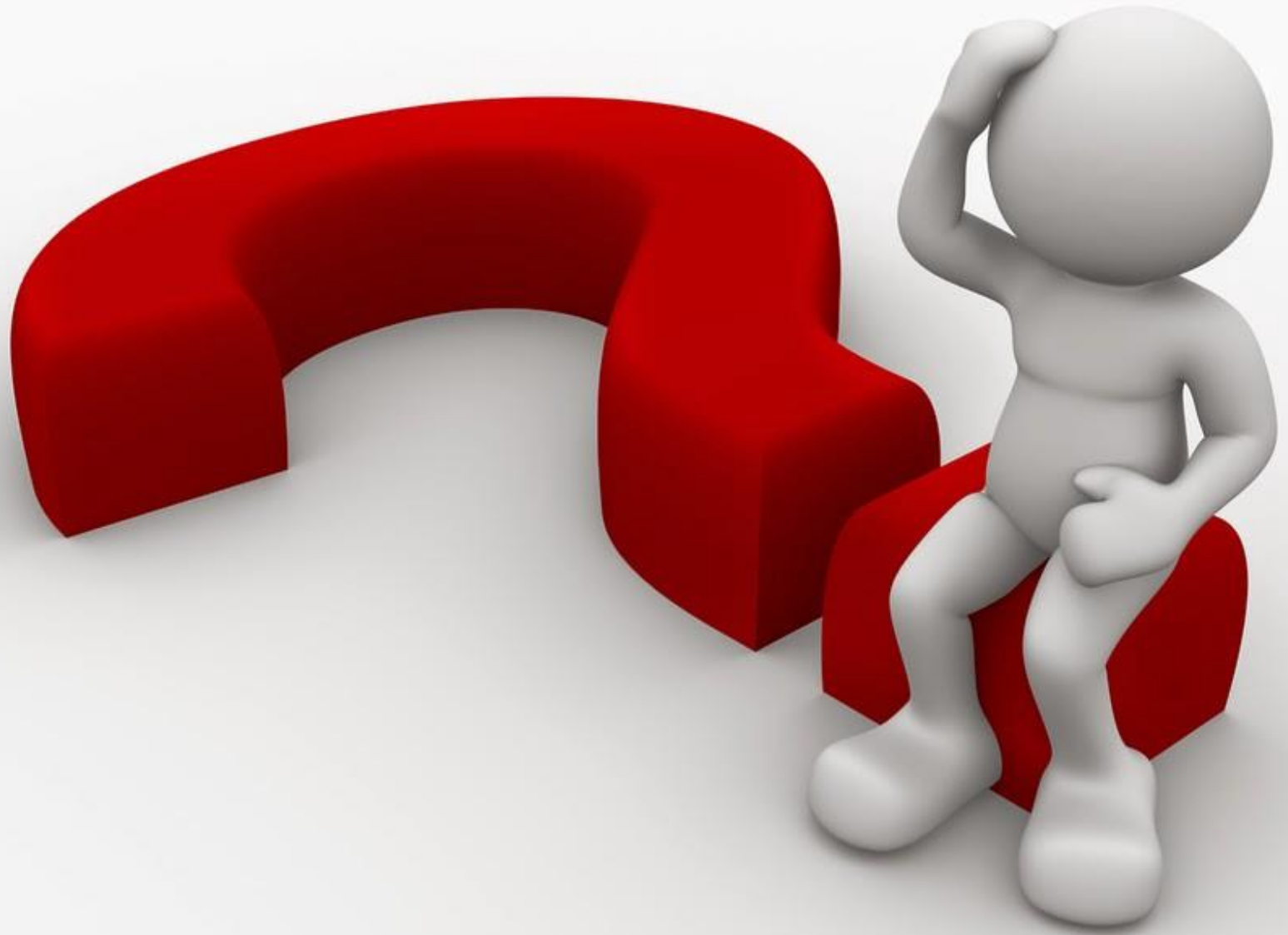
Mr. X has provided the car sales history data from his sources.



model	price	transmis	mileage	fuelType	tax	mpg	engineSi
5 Series	11200	Automatic	67068	Diesel	125	57.6	2
5 Series	16000	Automatic	62794	Diesel	160	51.4	3
5 Series	14900	Automatic	35309	Diesel	125	60.1	2
5 Series	16000	Automatic	38538	Diesel	125	60.1	2
5 Series	14250	Automatic	36099	Diesel	20	68.9	2
5 Series	23500	Automatic	25034	Diesel	200	47.9	3
5 Series	11000	Automatic	84816	Diesel	30	62.8	2

So lets Run with a Robot AI.....





Get the Mr. X's decision with 4 steps

1. Login
2. Name Project "Project 1"and Solution Name "Car Sales Decision"→ Version 1.0→ Click create project

Data

1. You will land inside Data tab click on "Add Data"
2. Name your data "Car Sales" → Click on source→ select CSV → A data upload panel will pop up
3. Browse your computer to upload example_0_car_price_train_data.csv file
4. A variable list will show up→ click on skip
5. Select target. Choose "price" as your target
6. A window will pop up asking you run the preliminary analysis or not. Press Yes Button
7. Preliminary analysis will run-→see result in Predicted Price chart and Prediction KPI for error
8. Press Next→ land in "build Model page

Build Model

1. Select Variables
    1. Uncheck variable 1,2,3
2. Select Algorithm
    1. Linear Regression
    2. Random Forest
    3. XGBoost
3. Click on Train
4. Click on Finalize
5. You will land on Deploy page

Get the Mr. X's decision with 4 steps

Deploy

1. Click on Add data→
2. upload new data from CSV source from you computer example_0_car_price_pred_data.csv file
3. A variable list will show up→ click on skip
4. Go to Data Post Process
5. Create 3 equation by clicking pn create custom variable
    1. Equation 1 Apply
    2. Equation 2 Apply
    3. Equation 3
6. Go to Result Configuration
    1. Check download as CSV
7. Select Algorithm
    1. Linear regression
    2. XGBoost
8. Press "Predict", prediction will running
9. Press Next→ you will land in Decision Page

Decision

1. Select Decision Scenario Tab
    1. Change slider value for different variables
    2. Press Apply
2. Do the step until Target or Target desired value is higher or lower or middle