BUSINESS PROBLEM

According to the data at present
the conversion rate of the professionals taking the course is at 38% and the CEO of the company wants the conversion rate at 80%

Brief steps performed to solve the problem

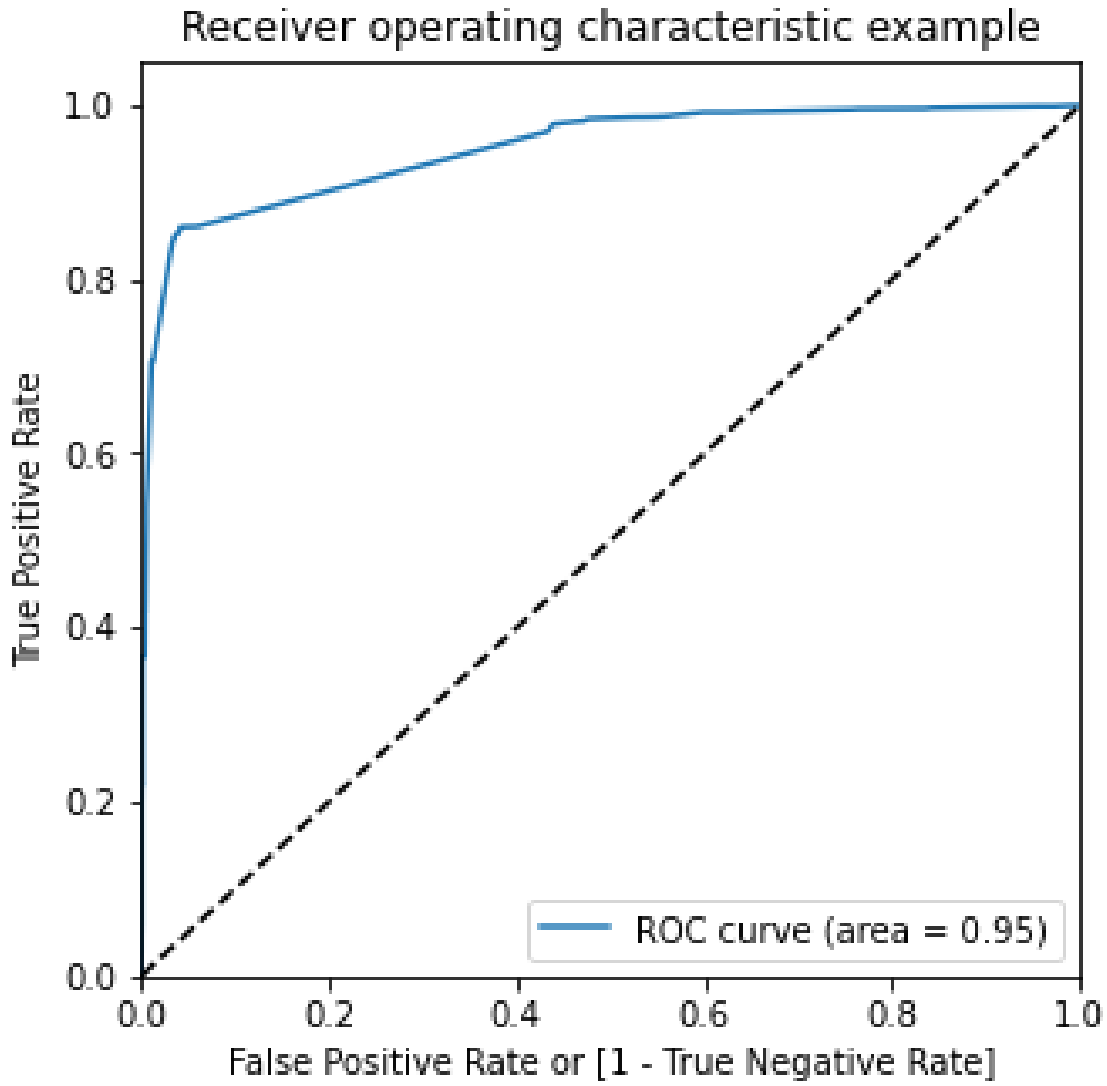
- First of all we checked the data whether there is any null value or any duplicity among the data
- Then checked with the null values column wise and exchange it with the major variables present. Eg : In city major individuals were from Mumbai, so change the null values with Mumbai, did same in Tags, Lead Origin etc
- Then did Exploratory Data Analysis and took inferences from the data and dropped many of the columns which weren't important for the problem solving, also compared columns with converted column
- Further prepared data by converting the categorical variables into 0 and 1 and adding the dummy variables

Prediction Score

- Checked Specificity(0.96), Sensitivity(0.85), Accuracy and Probability and plotted the Roc Curve(Roc curve area = 0.95),
  also deployed the Optimal Cuttoff point and found all four variables intersecting at 0.9
- Then made predictions on test set and used data of 10 individuals and found that the prediction score was 90%+ and sensitivity and specificty of the data was 0.86 and 0.93 which was getting matched with that of Train set

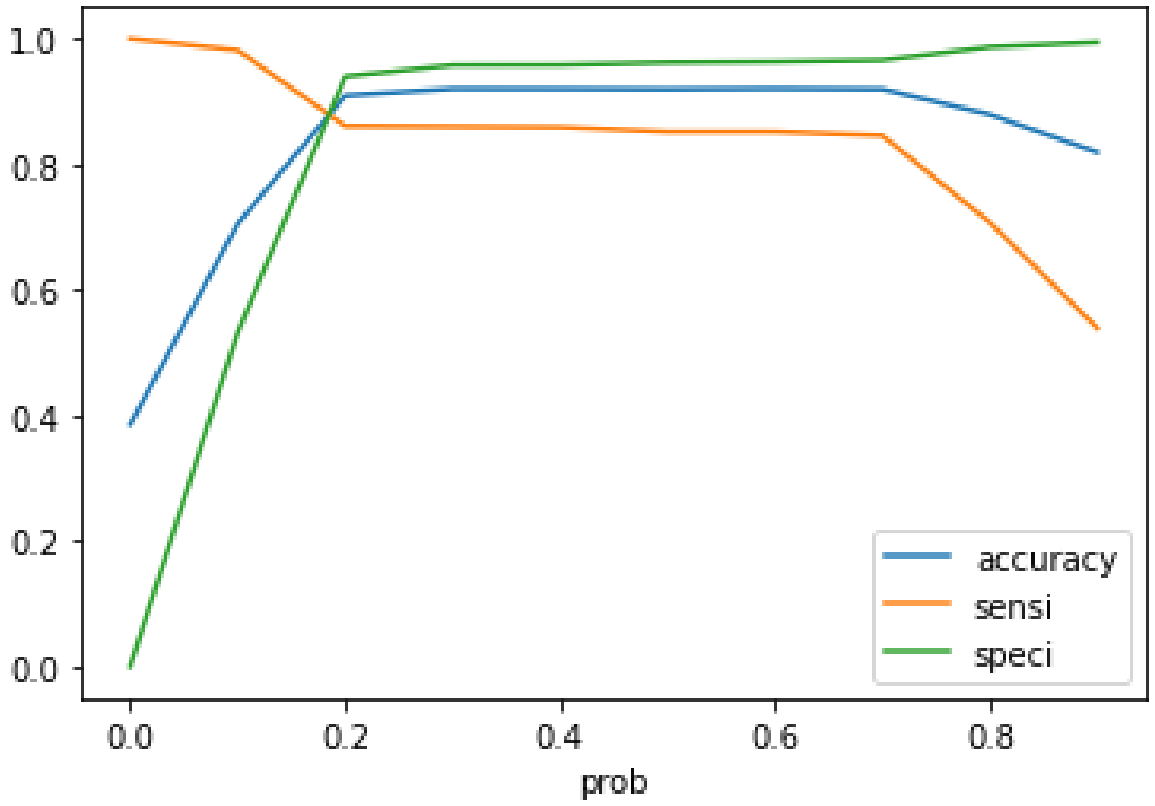
Important Results

- On the train set before analysis the conversion rate was 38% which got converted to 90% + afterwards
- Roc curve area was at 0.95



Sensitivity, Accuracy and Specificity

- Sensitivity, Accuracy and Specificity cutt off was found at 0.9



Precision and Recall Curve

- Whereas the Precision and Recall curve also got intersected at 0.9