LEAD SCORING CASE STUDY

Submitted by-

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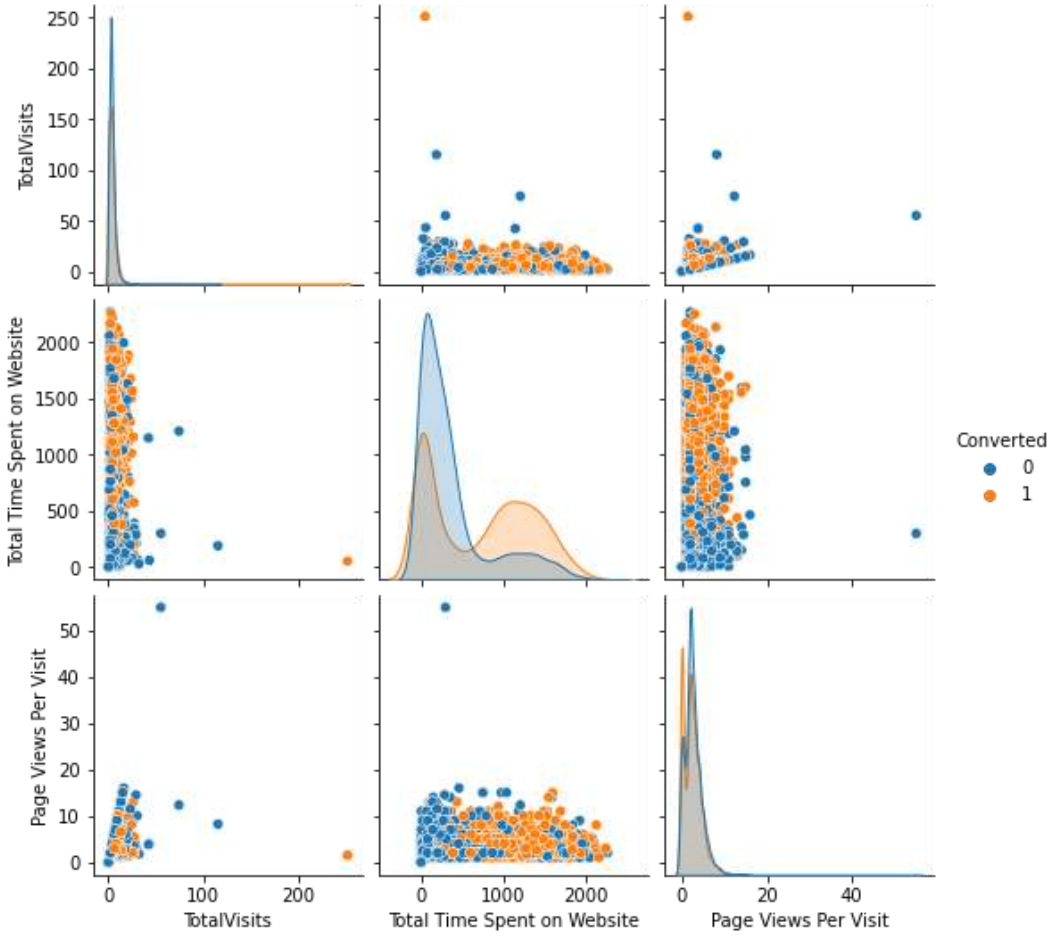
PROBLEM STATEMENT

- X Education in the Ed-Tech Industry sells online courses to industry professionals. They wanted to select most promising leads that can be converted for paying to customers.
- Conversion is very poor. The process of leas generating attributes are not efficient in helping conversations.
- The company wants to assign Lead Score to each lead using Machine Learning Model.

APPROACH FOLLOWED

- Data Cleaning and Data Manipulation
- Exploratory Data Analysis
- Scaling the features
- Model Building - Logistic Regression Model
- Model Evaluation
- Predictions
- Conclusions and Recommendations

DATA MODELING



Three variables TotalVisits, Total time spent on website and page per view visit were plotted in a pairplot to observe the relations.

Among the three variables plotted on the pairplot Total time spent on website has the highest rate of conversion leads.

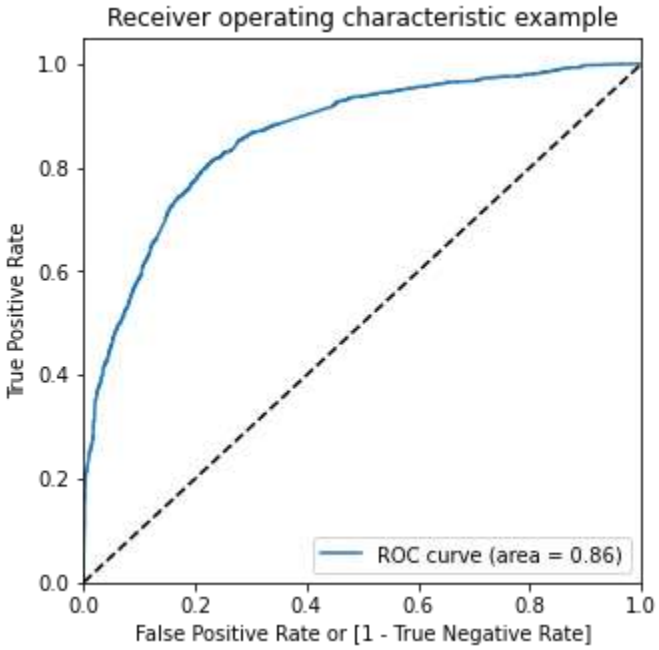
CORRELATIONS

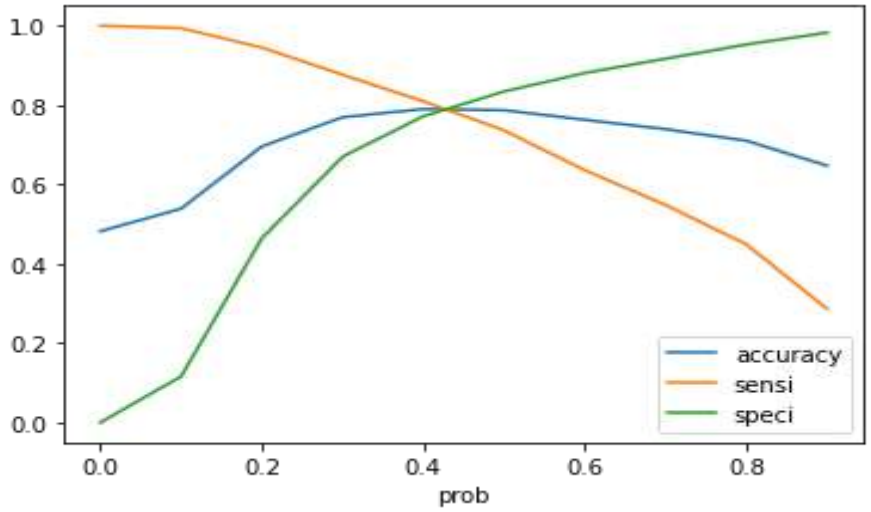
A heatmap was plotted to check the correlations among all the variables

PROCESS FOR MODEL BUILDING

- Splitting into train and test set.
- Scale variables in train set
- Build the first model
- Using RFE to eliminate less relevant variables
- Check VIF values for all existing columns
- Predicting using Train set
- Evaluation and predicting using Test set
- Precision and recall analysis on test predictions

EVALUATING MODEL



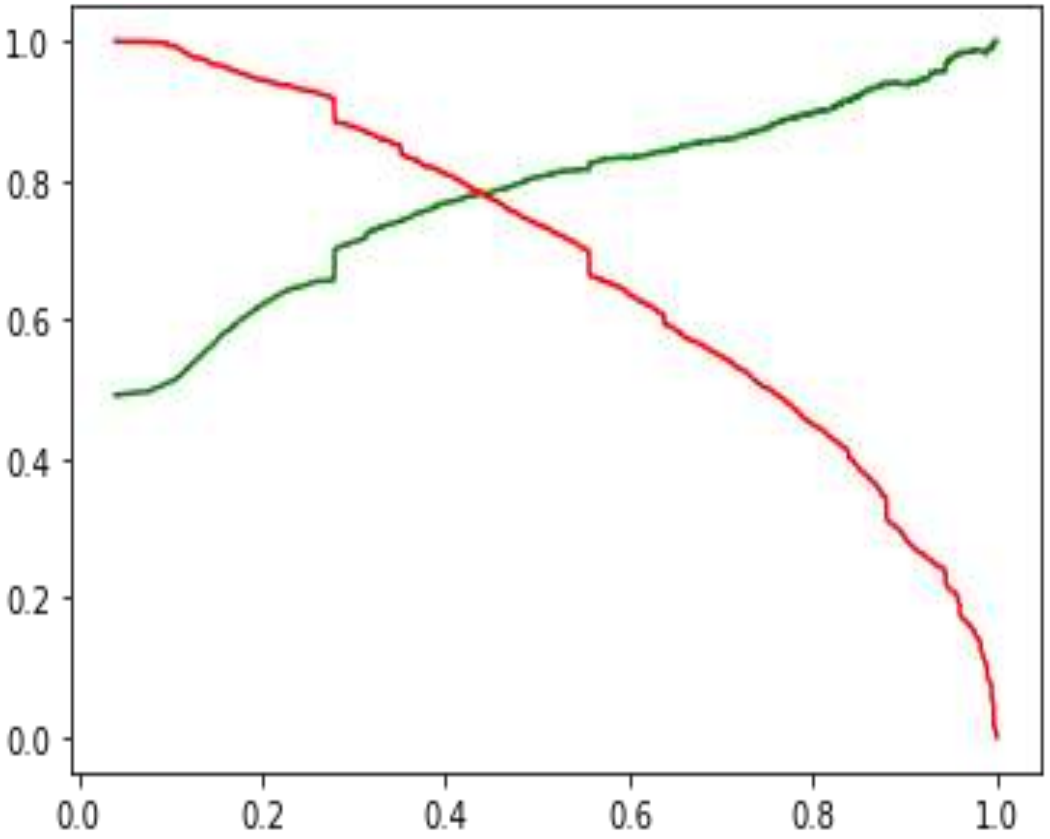


Accuracy : 0.83 sensitivity : 0.73

Accuracy : 0.78 sensitivity : 0.73

TESTING MODEL EVALUATION

- Sensitivity : 0.88
- Specificity : 0.55
- Precision score : 0.64
- Recall score : 0.88



RESULTS

- People spending higher than average time are promising leads, So targeting them and approaching them can be helpful in conversions.
- An alert message or information has seen to have high conversation rate .
- Marketing management and Human resources has high conversation rates. People from these specializations can be promising leads.
- References and offers for referring a lead can be a good source for higher conversions.

THANK YOU