Lead Scoring Case Study

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Problem Statement

- X Education markets courses on websites and search engines like Google.
- Visitors to the site may browse courses, watch videos, or submit their contact information, becoming leads.
- Leads are also gained from past customer referrals.
- The sales team reaches out to these leads, but only about 30% convert into customers.
- With many leads but a low conversion rate, the company wants to identify 'Hot Leads' to focus efforts and improve conversions.

Objectives

- Build a logistic regression model to assign a lead score (0-100) to each lead.

- **Scoring Interpretation**: A higher score indicates a 'Hot Lead' (likely to convert), while a lower score indicates a 'Cold Lead' (unlikely to convert).

- **Flexibility**: Model should accommodate future changes in the company's requirements.

Data Preparations

1. Imput the raw data, shape-9240-rows,37-columns.
2. After Analysis drop their relevant variables.
3. Select values were replaced by nan.
4. Imput null values.
5. Data imbalance was done and drop the imbalanced columns.
6. Outliers were detected and treated.
7. EDA
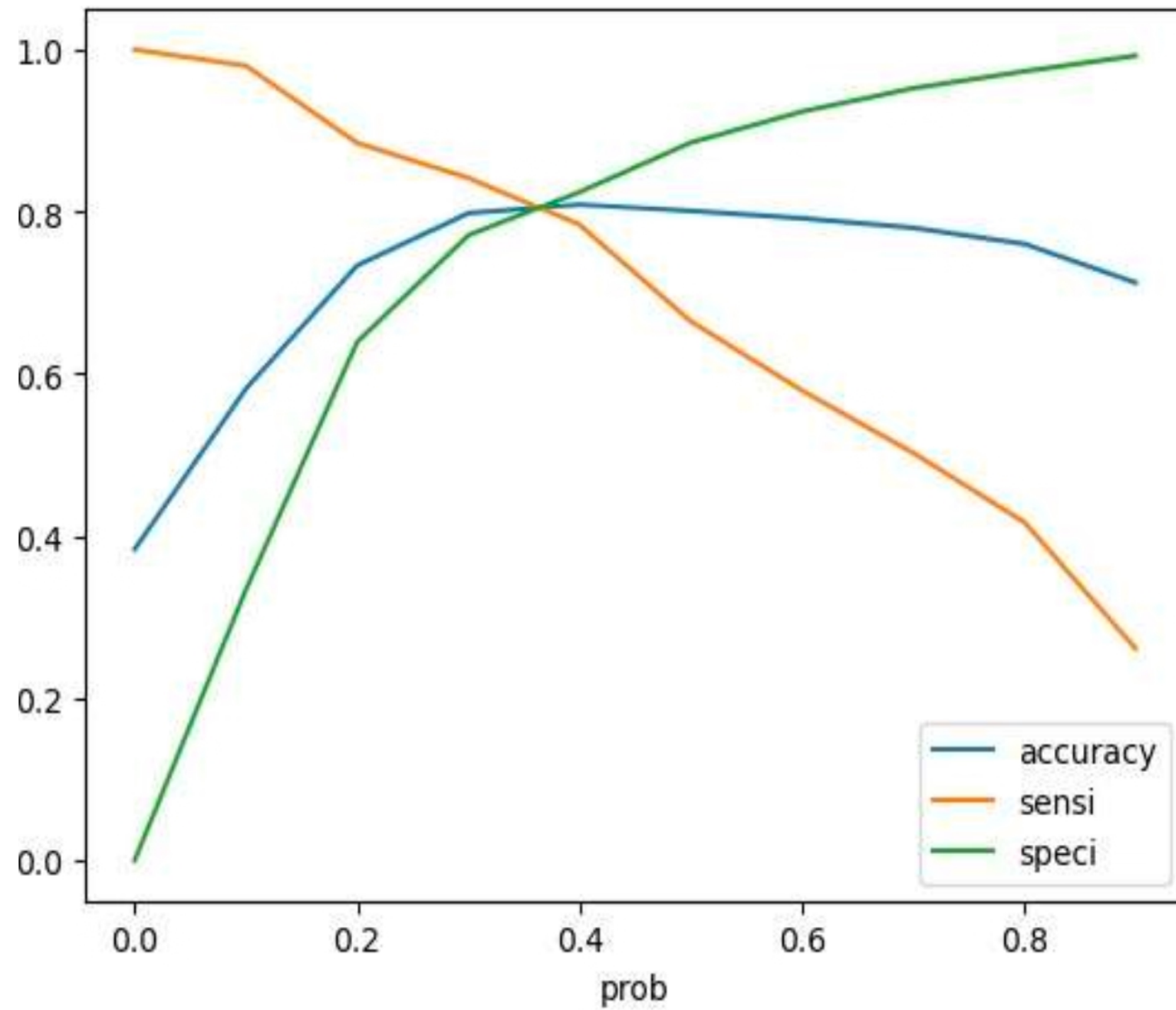8. Dummy Variable creation

Model Building

1.Train test split-Define X & y

2. Feature Scaling

3. Model Building (total 4 Models built)

4. Checking ViFs

5. Plotting the ROC Curve

6. Check Overall Accuracy, Specificity, Sensitivity.

7. Making Prediction on test dataset

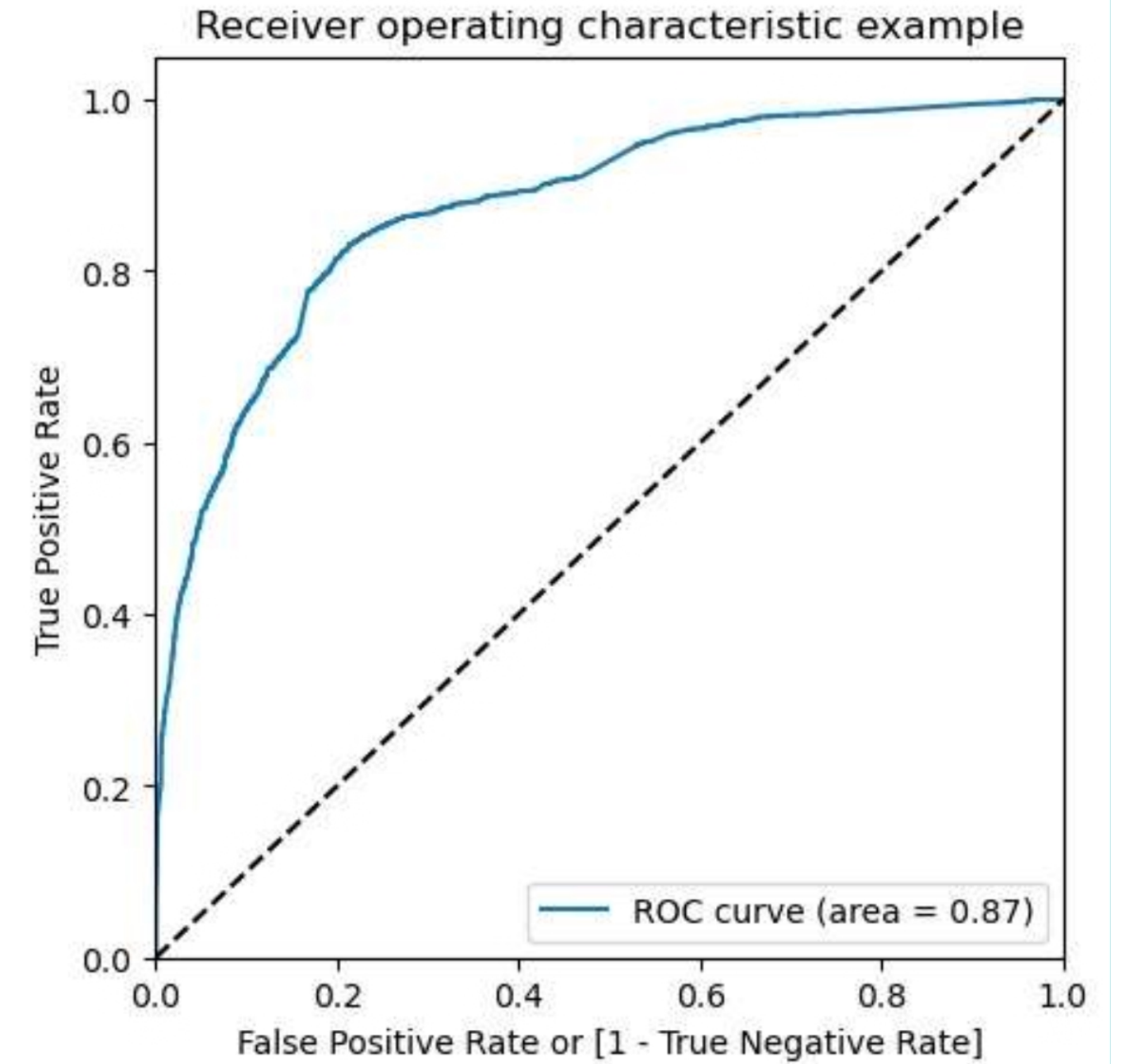# Correlation between selected features
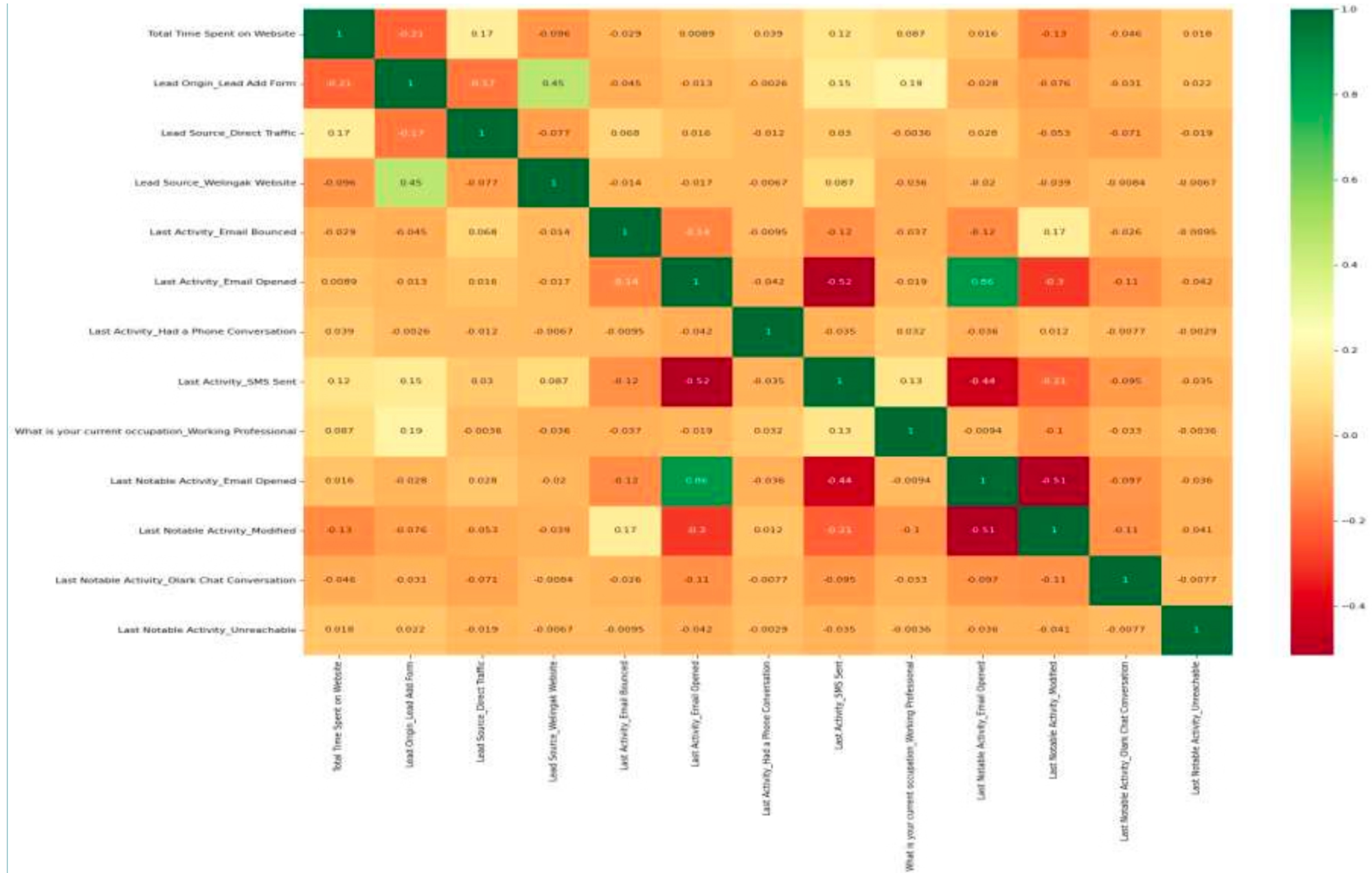
Cutoff Point

ROC Curve

Lead Score

	Prospect ID	Converted	Converted_prob	Lead_Score	final_Predicted
0	7191	0	0.923931	92	1
1	1008	1	0.199180	20	0
2	3494	1	0.737436	74	1
3	3298	1	0.481293	48	1
4	5646	1	0.852627	85	1

Recommendations

1. Concentrate on Lead Origin_Add Form

2. More Focus on Working Professionals.

3. Should Pay more attention to phone conversation and SMS sent.

4. Keep an Eye on the Welingak website visitors for more Leads.

5. Make Engageable website so that the visitors spend more time on the website.

6. Traffic on the online sources should be reduced. 7. Provide correct contact details.