



Lead Scoring Case Study

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Problem Statement

01. Business Name

X Education – An online education company

02. Business Type

Sellers of online education to professionals

03. Business Challenge

Low conversion rate from Hot leads

04. Our Goal

Creating a model to identify the enablers for better conversion rate.

05. Result

Providing strategical advice to the management for Hot Lead conversion.



Solution Methodology

1. Data cleaning and Data manipulation
2. Feature scaling and Dummy variable assignment
3. Model making and Prediction
4. Model validation
5. Model presentation
6. Conclusion and Recommendation





Process





Data Manipulation

- Columns having more than 35% null values are dropped.
- Columns having high number of “select” values are dropped.
- Features not having enough variance are dropped.
- Non business-relevant columns are dropped.



Data Conversion

- Numerical variables are normalized.
- Boolean variables are converted to 0 and 1
- Dummy variables are created for categorical variables.



Model Building

- Performed Train and Test data split in 70:30 ratio.
- Used RFE with 20 variables for identifying significant features.
- Model iteration performed until the VIF values are less than 5.
- Used the final model for performing predictions on the training data set.



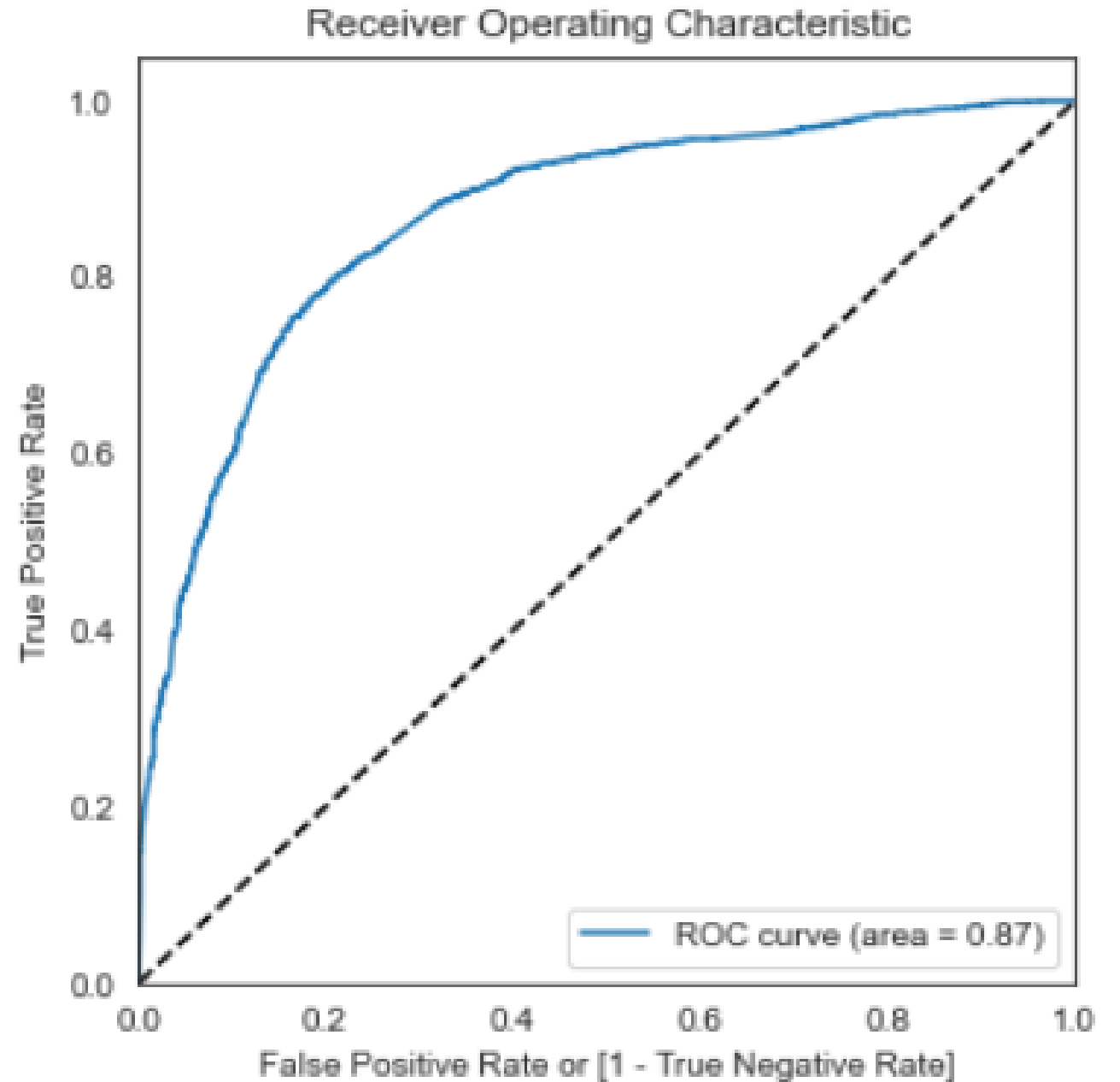
Model Evaluation

- Evaluated the stability of the model using ROC curve.
- The AUC (area under the curve) is 0.87, which is a good score.
- The graph is leaned towards left side, representing good accuracy.

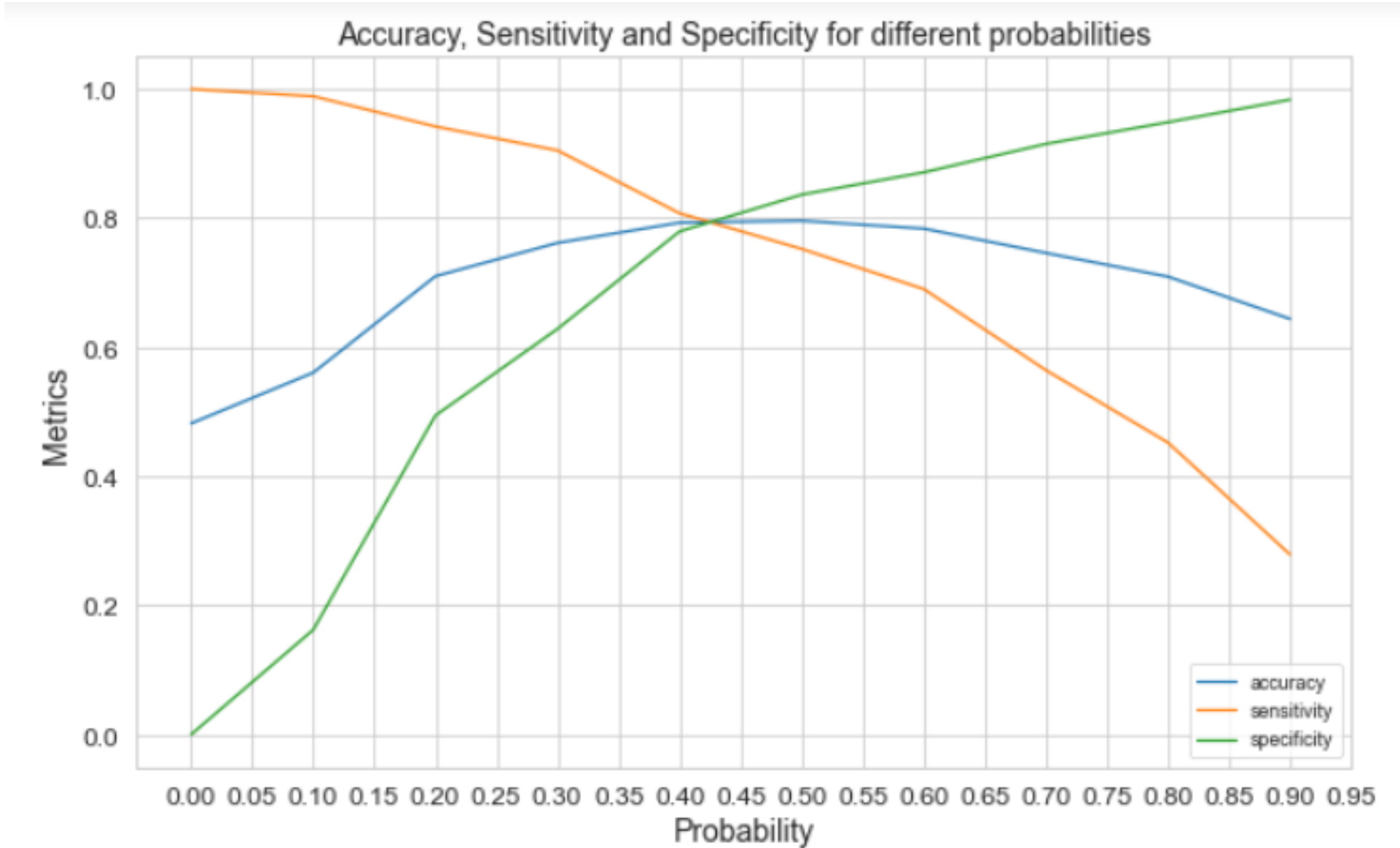
ROC Curve

Stability :- Area Under the Curve is 0.87%

Accuracy :- Graph is leaned towards left

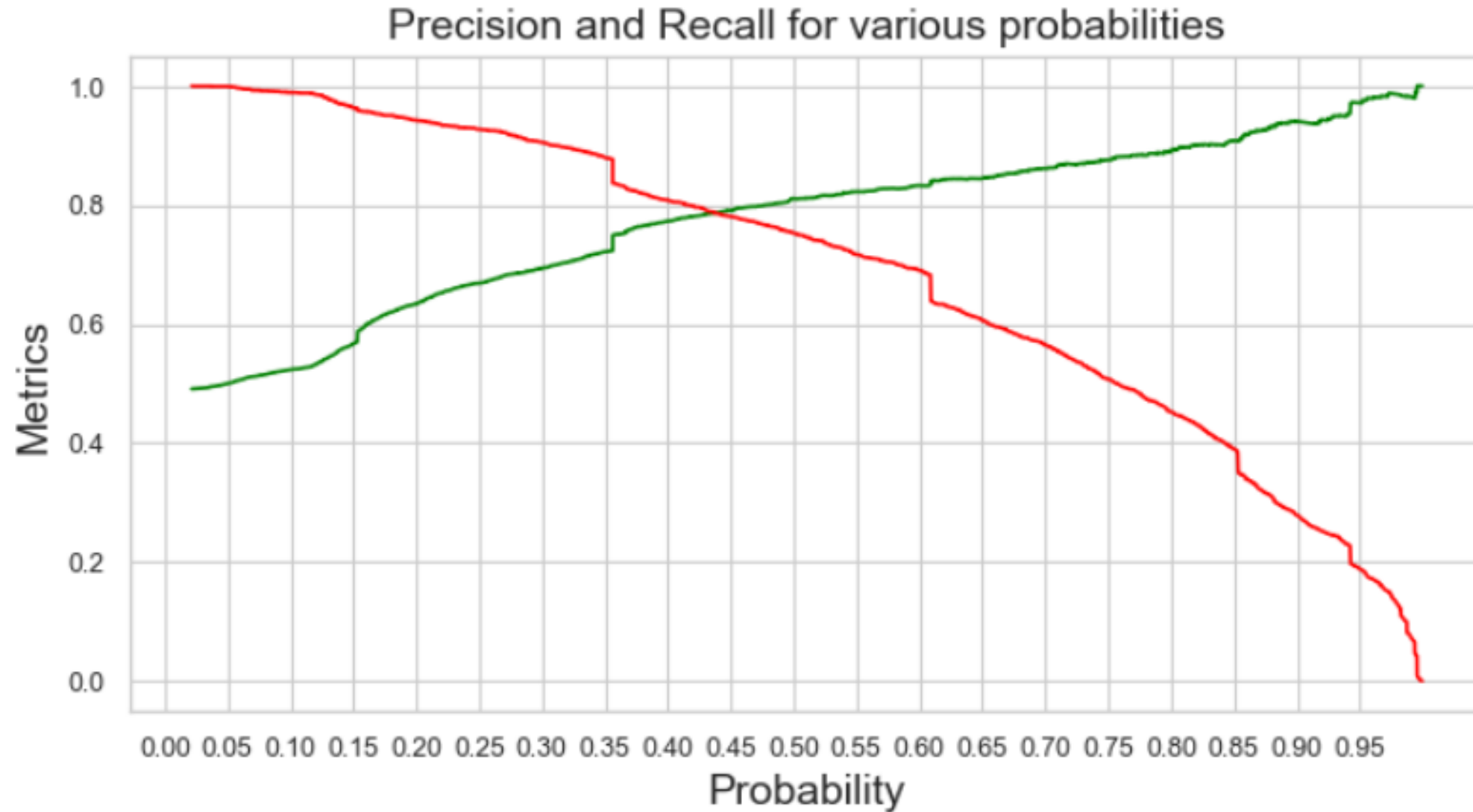


Accuracy, Sensitivity & Specificity



Optimal Cut Off: 0.43

Precision and Recall Trade off



Trade Off: 0.44

Conclusion

Top Significant Features

- Total visits on the website
- The total time spent on the website
- Lead Origin_Lead Add Form

Recommendation

Business opportunities

- Follow up and follow through Hot Leads if :-
- They are working professionals
- The lead originated from lead add form
- The lead spends a lot of time in the website and
- The total number of visit is very high



Thank you

