

# Lead Scoring Case Study

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# Problem Statement

- Build a model for X Education company, wherein you need to assign a lead score to each of the leads such that the customers with a higher lead score have a higher conversion chance and the customers with a lower lead score have a lower conversion chance
- The education company currently has a conversion rate of 30% and with this model analysis, the company wants to achieve a target conversion rate of around 80%

## Analysis approach

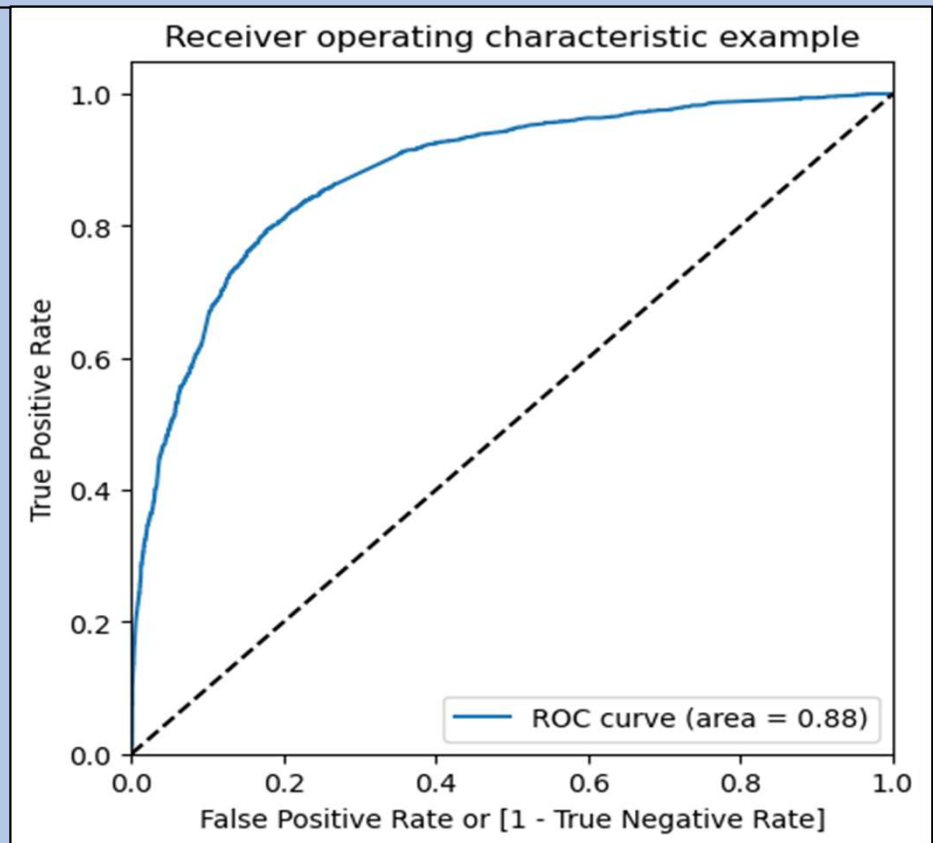
- In this analysis, we have followed the method of Logistic regression, wherein we have converted all the categorical variables to numerical and identified the conversion probability of each lead. This conversion probability will be the conversion score which will help sales team to identify the target customers for higher conversion rate.
- We created a model with 81% train and 80% test sensitivity and 80.4% train and 80.1% test accuracy

# ROC Analysis

Performed the ROC curve analysis to identify the test accuracy.

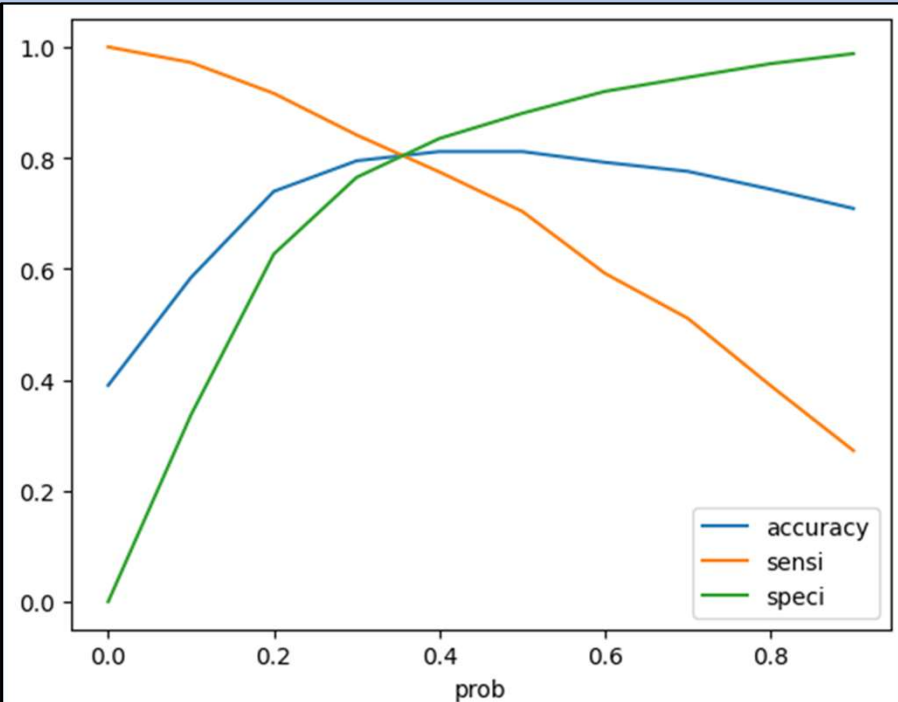
Test is considered more accurate if the curve follows left hand border and then top border of the ROC space.

It is considered less accurate if the curve comes to the 45 degree diagonal of the ROC space



# Additional ROC Based Analysis

Based on the graph drawn for ROC curve for sensitivity, specificity and accuracy, the optimal cutoff point is identified as 0.35



# Feature Evaluation

The model created has the below 4 features that are highly impactful:

- Lead Origin\_Lead Add Form – coefficient = 3.6258
- Last Notable Activity\_Had a Phone Conversation – coefficient = 2.7215
- Last Activity\_Email Bounced – coefficient = -2.2597
- Lead Source\_Welingak Website – coefficient = 2.0682

So, the X Education company has more chances for a lead to be converted based on below criteria:

- if the customer is identified to be filling in the lead form
- if customer had a phone conversion in the last notable activity.
- If he has reached us by Welingak Website

Similarly, lead has higher chances of not getting converted, if his/her email is bounced which explains that the lead has provided a wrong email\_id or not interested in contacting him back.

## Additional Points

In addition to the Lead Score provided to the sales team, the 4 identified features will also help the sales to provide offers to the leads coming through these sources. This will additionally help to increase the conversion rate.

Examples:

- If the lead had a phone conversation previously try reaching them out with the course offers.
- Try providing special offers exclusively for the leads from Welingak Website.
- Do not concentrate on the leads if their email is bounced
- If the lead has already filled a lead form, give them time bound offers like 'Only 2 days offers' to finish the conversion process.