

1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

1. **TotalVisits**
2. **Tags_Closed by Horizzon**
3. **Total Time Spent on Website**

2. What are the top 3 categorical/dummy variables in the model which should be focused the most on in order to increase the probability of lead conversion?

1. **Tags_Closed by Horizzon**
2. **Tags_Will revert after reading the email**
3. **Lead Source_Welingak Website**

3. X Education has a period of 2 months every year during which they hire some interns. The sales team, in particular, has around 10 interns allotted to them. So during this phase, they wish to make the lead conversion more aggressive. So they want almost all of the potential leads (i.e. the customers who have been predicted as 1 by the model) to be converted and hence, want to make phone calls to as much of such people as possible. Suggest a good strategy they should employ at this stage.

X Education should concentrate on **Sensitivity, should adopt High Sensitivity strategy**
With respect to our model, Sensitivity can be defined as the number of actual conversions predicted correctly out of total no of actual conversions

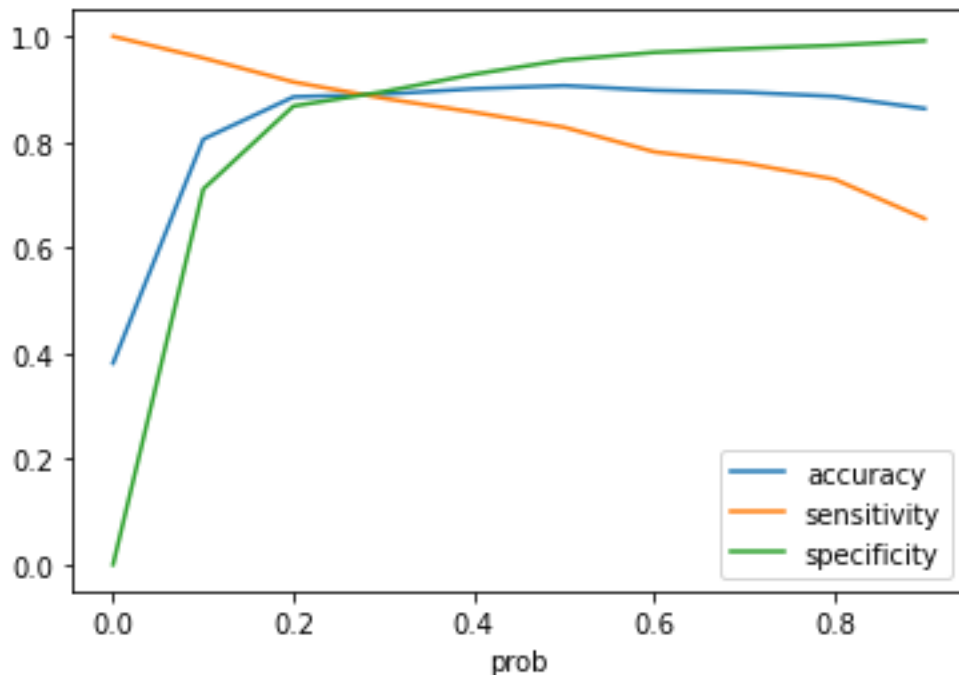
Sensitivity changes with threshold for probability in the final prediction

We can observe in our model as the sensitivity decreases when the threshold value increase. So we need to **choose Lower Threshold value** for probability cutoff , in other words contact customers with low lead scores from the final model

Please refer to graph in next answer, suggested **threshold value in this case is 0.1 or lead scores more than 10** should be contacted using interns.

4. Similarly, at times, the company reaches its target for a quarter before the deadline. During this time, the company wants the sales team to focus on some new work as well. So during this time, the company's aim is to not make phone calls unless it's extremely necessary, i.e. they want to minimize the rate of useless phone calls. Suggest a strategy they should employ at this stage.

X Education should concentrate on **Specificity** in this scenario



should adopt High Specificity strategy

With respect to our model, Specificity can be defined as the number of failed conversions predicted correctly out of total no of actual failed conversions

Sensitivity changes with threshold for probability in the final prediction

We can observe in our model as the sensitivity increases when the threshold value increase. So we need to **choose Higher Threshold value** for probability cutoff, in other words contact customers with extremely high lead scores from the final model

Suggested **threshold value in this case is 0.8 or lead scores more than 80** should be contacted