

1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
 - Tags_Closed by Horizon
 - Tags_Will revert after reading the email
 - Lead Origin_Lead Add Form
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?
 - Tags
 - Lead Origin
 - Lead Source
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.

Given X Education's goal during the intern period, we should adjust the model to prioritize sensitivity over specificity. Here's how we can approach this:

1. Increase Sensitivity:
 - Adjust the model's threshold to increase sensitivity (true positive rate).
 - This will classify more leads as potential customers (1s), even if it means including some that might not convert.
2. Accept Lower Specificity:
 - As a trade-off, we'll have to accept a lower specificity (true negative rate).
 - This means we might incorrectly classify some non-converting leads as potential customers.
3. Adjust the Decision Threshold:
 - Lower the cutoff point for classifying a lead as a potential customer.
 - This will result in more leads being classified as 1s (potential customers).
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.

1. Increase Specificity:
 - Adjust the model's threshold to increase specificity (true negative rate).
 - This will reduce the number of leads classified as potential customers (1s), focusing only on those most likely to convert.
2. Accept Lower Sensitivity:
 - As a trade-off, we'll have a lower sensitivity (true positive rate).
 - This means we might miss some potential customers, but it aligns with the goal of minimizing unnecessary calls.
3. Raise the Decision Threshold:
 - Increase the cutoff point for classifying a lead as a potential customer.
 - This will result in fewer leads being classified as 1s (potential customers).