

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

Ans. The top three variables in model which contribute most towards the probability of a lead getting converted

- Total Time Spent on Website
- Lead Origin Lead Add Form
- Last Notable Activity SMS Sent

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?

Ans. 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

- Lead Origin Lead Add Form
- Last Notable Activity SMS Sent
- What is your current occupation Working Profes.

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.

Ans. High sensitivity implies that our model will correctly identify almost all leads who are likely to Convert. It will do that by over-estimating the Conversion likelihood, i.e. it will misclassify some non-Conversion cases as Conversions.

Now, since X Education has more man-power for these 2 months and they wish to make the lead conversion more aggressive by wanting almost all of the potential leads, we can choose a lower threshold value for Conversion Probability.

This will ensure the Sensitivity rating is very high which in turn will make sure almost all leads who are likely to Convert are identified correctly and the agents can make phone calls to as much of such people as possible

Phone calls must be done to people:

- Who spend more time on the website and this can be done by making the website more informative and thus bringing them back to the site?
 - Who are visiting repeatedly on website?
 - The customer whose last activity is through SMS or through Olark chat conversation
 - Customers who are working professionals
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.

Ans. High Specificity implies that our model will correctly identify almost all leads who are not likely to Convert. It will do that at the cost of losing out some low Conversion rate risky leads to the competition, i.e. it will misclassify some Conversion cases as non-Conversions.

Therefore, since X Education has already reached its target for a quarter and doesn't want to make phone calls unless it's extremely necessary, i.e. they want to minimize the rate of useless phone calls, we can choose a higher threshold value for Conversion Probability.

This will ensure the Specificity rating is very high, which in turn will make sure almost all leads who are on the brink of the probability of getting Converted or not are not selected. As a result, the agents won't have to make unnecessary phone calls and can focus on some new work.