

1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
 - What is your current occupation
 - Lead Origin
 - Lead Source

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?
 - What is your current occupation_Working Professional
 - Lead Origin_Lead Add Form
 - 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.

For this scenario we should have higher recall/sensitivity and lower false-negative. So based on our model, we will consider optimal cutoff as "0.3". This will provide 79.8% Accuracy and 86.45% recall/sensitivity.

These strategies should also be considered:

1. The company **should make calls** to the leads coming from the lead sources "Welingak Websites" as these are more likely to get converted.
2. The company **should make calls** to the leads who are the "working professionals" as they are more likely to get converted.
3. The company **should make calls** to the leads who are the "Unemployed" as they are more likely to get converted.
4. The company **should make calls** to the leads who spent "more time on the websites" as these are more likely to get converted.
5. The company **should make calls** to the leads whose last activity was SMS Sent as they are more likely to get converted.
6. The company **should not make calls** to the leads whose lead origin was "Organic Search" as they are not likely to get converted.
7. The company **should not make calls** to the leads whose lead origin was "Direct Traffic" as they are not likely to get converted.
8. The company **should not make calls** to the leads who chose the option of "Do not Email" as "yes" as they are not likely to get converted.

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.

In this case we would need higher precision and lower false-positive case. So based on the model we should consider optimal cutoff as 0.6. This will ensure 80.85% accuracy and 82.85% Precision.