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

Ans: Top Three variable which contribute most towards the probability of a lead getting converted are:

   a. Tags_Closed by Horizzon
   b. Tags_Lost to EINS
   c. Lead Source_Welingak 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?

Ans: Top 3 categorical/Dummy Variables which should be focused the most in order to increase the probability of lead conversion are:

   a) Tags_Closed by Horizzon
   b) Tags_Lost to EINS
   c) Lead Source_Welingak Website

Answer to both questions is same because top3 variables in the model are all categorical/dummy variables.

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.

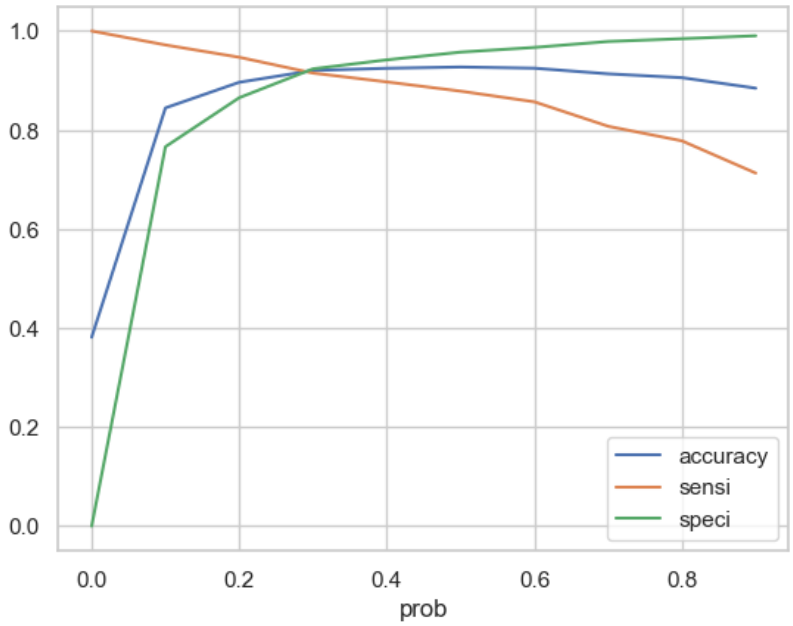
Ans:The approach to this is sensitivity

Sensitivity=TP/(TP+FN)

With respect to our model, sensitivity can be defined as the number of actual conversions predicted correctly out of total number of actual conversions.

Different values of sensitivity can be achieved for the model by changing the cutoff threshold for probability of lead conversion. For our model, below is the graph showing changes in

Sensitivity, Specificity and Accuracy with change in the threshold



Here as one can notice, sensitivity decreases as threshold increases so as to fulfill companies requirement of converting almost all leads, we need to decrease the threshold to complete the company's status quo.But it may result in overestimation as in ,some non-conversions would also be classified as conversions , but for that company has extra manpower to deal with it. We need low threshold and to get high sensitivity.

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:

The answer to this is specificity,
It is defined as Specificity=TN/(TN+FP)
From the above graph we can see specificity increases as threshold increases, so we will require high specificity, because high specificity will correctly predict almost all non-conversions.It may be a scenario where some conversions get classified as non-conversions. But as company has already achieved its target for the quarter and don't want to make phone calls unless its absolutely necessary. To achieve we need high threshold value.