Subjective Questions

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

ANSWER:

- Lead Origin: Lead add Form & Landing Page Submission
- ➤ Lead Source: Welingak Website & Olark Chat.
- ➤ Last Activity: SMS Sent, Email Opened, Email Bounced
- 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?

ANSWER:

Based on the coefficient values, the following are the top three categorical/dummy variables that should be focused on the most in order to increase the probability of lead conversion:

- ➤ Lead Origin_Lead Add From
- ➤ What is your current occupation_Working Professional
- ➤ 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.

ANSWER:

Here, the concept of sensitivity is at play.

- ➤ In the given situation, we will need a tweak the model to increase its sensitivity because high sensitivity will mean that our model will correctly predict almost all leads who are likely to convert.
- > To achieve high sensitivity, we need to choose a low probability threshold value.

Sensitivity = True Positives/(True Positives + False Negatives)

With respect to our model, sensitivity can be defined as "of all the leads that converted, how many were correctly predicted as converted by our model. > Different values of sensitivity can be achieved for the model by changing the probability cutoff threshold for lead conversion.

In our case it would lead to our model misclassifying some of the non-converted leads as converted.

But as the company has extra man-power for two months and wants to make the lead conversion more aggressive by making phone calls to as much potential leads

as possible, it is a good strategy to go for 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

ANSWER:

Here, the concept of specificity is at play.

In the given situation, will need a high specificity because high specificity will mean that our model will correctly predict almost all leads who are not likely to convert. To achieve high specificity, we need to choose a high threshold value.

Specificity = True Negatives/(True Negatives + False Positives)

With respect to our model, specificity can be defined as "of all the people who did not convert, how many did our model correctly predict".