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

1. Total Visits
- Positive impact
- A larger number of visits to the platform increases the likelihood of the lead turning into a customer

2. Total time spent on website with positive impact.
- More time spent on the website increases the likelihood of a lead turning into a customer.
- Sales staff should focus on these leads.

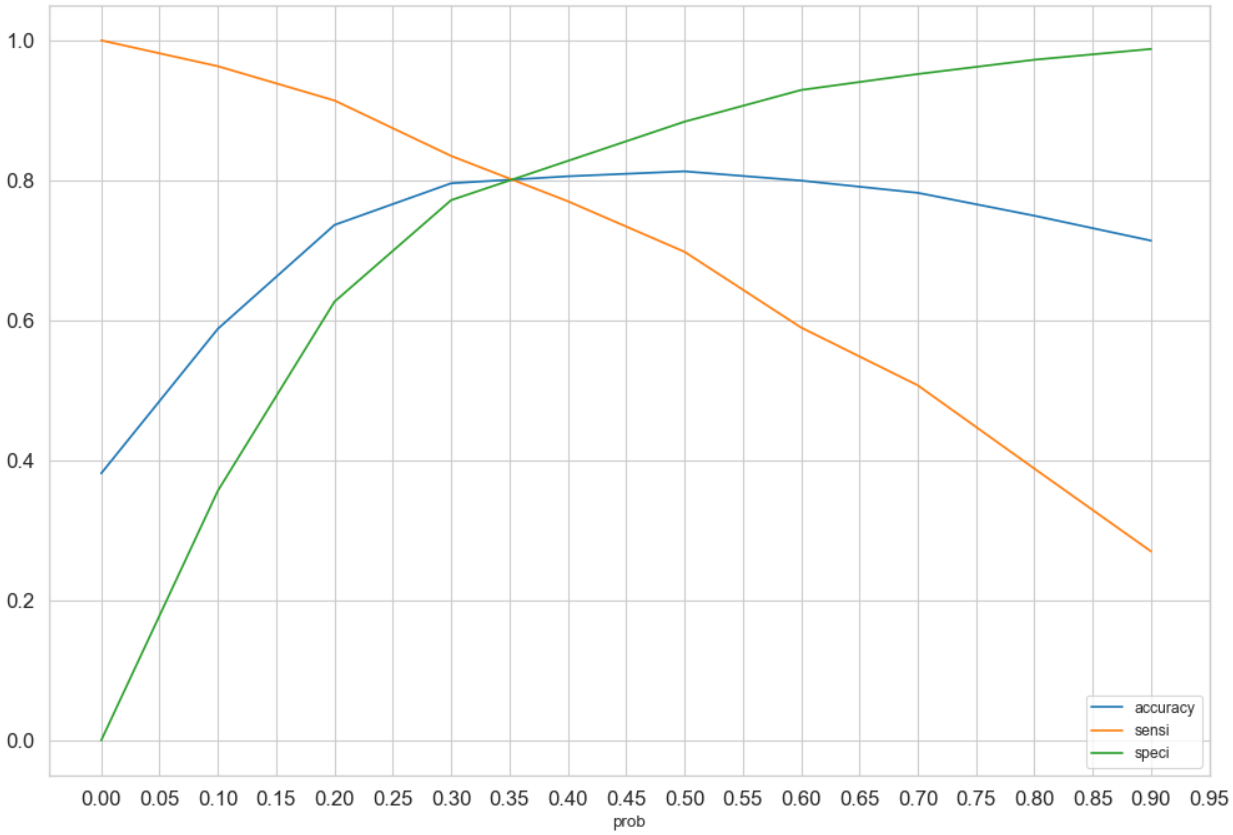
3. Lead Source: Focus on this crucial aspect.

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?**

1. Lead Origin_Lead Add Form
2. Lead Source_Olark Chat
3. Last Activity_Had a Phone Conversation

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.**

Our model's sensitivity is defined as the ratio of accurately predicted conversions to actual conversions. Specificity is the ratio of accurately anticipated non-conversions to actual non-conversions. In a model, when one variable grows, the other decreases and vice versa. Changing the conversion probability cutoff level might result in different sensitivity and specificity results for the same model. The graph below demonstrates how our model's Accuracy, Sensitivity, and Specificity ratings vary when the threshold value varies.



Low probability thresholds increase sensitivity while decreasing specificity. Similarly, with higher probability thresholds, the sensitivity values are considerably

low, while the specificity values are quite high.
Our model has high sensitivity, indicating that it accurately identifies virtually all leads who are likely to convert. The algorithm will overestimate conversion chances, misclassifying non-conversion situations as conversions. To accommodate X Education's increased lead conversion efforts over these two months, we might set a lower threshold number for Conversion Probability. A high sensitivity rating ensures accurate identification of leads who are likely to convert, allowing agents to contact as many as feasible. The company's high volume, low profit approach may result in lower conversion rates, but increased conversions lead to higher revenue.

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.

X Education has met its quarterly objective and prioritises reducing unnecessary phone calls. We can choose a higher threshold for conversion probability. This ensures a high Specificity rating, eliminating leads who are unlikely to convert. This eliminates the need for unwanted phone calls and allows for more attention on new tasks. This approach improves sales team efficiency by increasing conversion rates. The sales cycle will also be decreased.

1. Don't focus on jobless leads. They might not have a budget for the course.
2. Avoid targeting students as they are currently studying and may not be interested in taking a course geared for working people early in their careers.