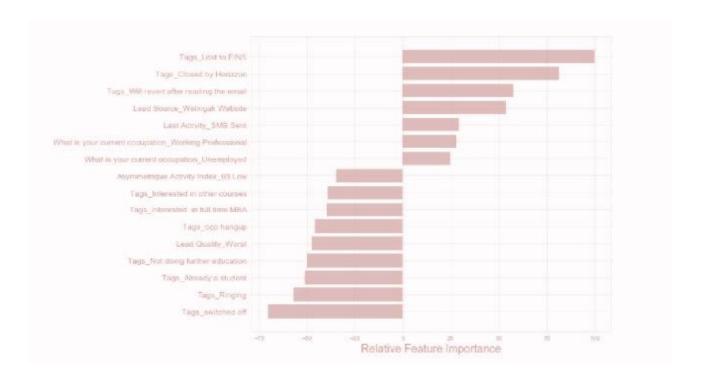
1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

Ans. Based on the coefficients in the model, the three variables that have the highest positive influence on the probability of a lead getting converted are:



- 1. Tags_Lost to EINS
- 2. Tags Closed by Horizzon
- 3. Tags_Will revert after reading the email

These variables contribute significantly to increasing the likelihood of conversion.

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 model highlights three categorical/dummy variables that have the highest impact on increasing the probability of lead conversion:

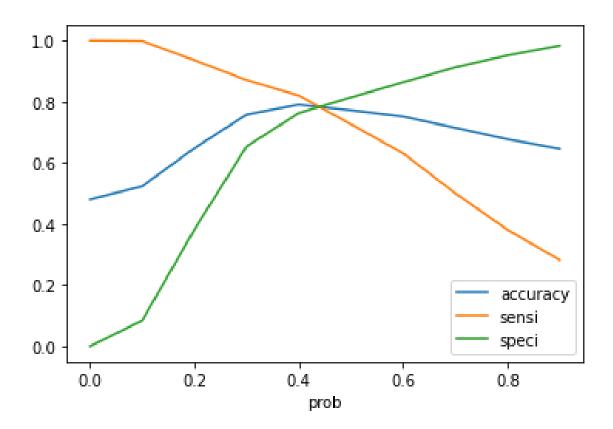
- 1. Tags_Lost to EINS
- 2. Tags_Closed by Horizzon
- 3. Tags_Will revert after reading the email

These variables have been identified as the most influential factors in determining the likelihood of lead conversion. By prioritizing these variables and giving them maximum

attention, there is a greater potential to improve the conversion rate and successfully convert leads into customers.

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. During the period when X Education hires interns and aims to intensify lead conversion efforts, they should prioritize maximizing the sensitivity of the model. Sensitivity refers to the ability of the model to accurately predict actual conversions. By selecting a lower threshold value for the conversion probability, X Education can enhance the sensitivity of the model. This approach ensures that a higher percentage of leads who are likely to convert will be identified, enabling the sales team to focus their phone calls on these prospects.



However, it is important to consider that choosing a lower threshold for the conversion probability may result in a higher number of false positives, where non-converting leads are incorrectly classified as conversions. X Education needs to carefully balance this trade-off and ensure that they have sufficient resources to handle the increased workload of contacting a larger pool of potential leads.

In summary, X Education should adopt a strategy of setting a lower threshold for the conversion probability to maximize the sensitivity of the model during the period of aggressive lead conversion. This approach will enable them to identify and target as many potential leads for conversion as possible while utilizing the available resources of the interns effectively. It is crucial for X Education to evaluate their capacity and ensure they can handle the potential increase in workload and manage false positives effectively.

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. During the period when X Education has already achieved its quarterly target and aims to minimize the rate of useless phone calls, they should prioritize maximizing the specificity of the model. Specificity refers to the model's ability to accurately predict actual non-conversions.

By selecting a higher threshold value for the conversion probability, X Education can increase the specificity of the model. This approach ensures that a higher percentage of leads who are not likely to convert will be correctly identified, reducing the number of unnecessary phone calls.

However, it is important to consider that choosing a higher threshold may also result in a higher number of false negatives, where actual conversions are incorrectly classified as non-conversions. X Education should carefully evaluate this trade-off and have alternative strategies in place to capture potential leads who may still be interested, even if they do not meet the higher conversion probability threshold.

In summary, during the period when X Education has already achieved its quarterly target and wishes to minimize useless phone calls, they should implement a strategy of setting a higher threshold for the conversion probability to maximize the specificity of the model. This approach helps avoid unnecessary phone calls, allowing the sales team to focus on new work or other productive activities. X Education should carefully consider

the trade-off and have alternative strategies to capture potential leads who may fall below the higher threshold but still show interest in their offerings.