# Lead Scoring Case Subjective Questions

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

The features used to build the model have been represented below based on their importance in lead conversion as per their coefficient values.

Chart, funnel chart

Description automatically generated

As per the above diagram, the top 3 variables that contribute most towards the probability of a lead getting converted are:

* Tags
* Lead Source
* Lead Activity

1. 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?

The features used to build the model have been represented below based on their importance in lead conversion as per their coefficient values.

Chart, funnel chart

Description automatically generated

As per the above diagram, the top 3 dummy variables that contribute most towards the probability of a lead getting converted are:

* Tags\_Closed by Horizzon
* Tags\_Lost to EINS
* Tags\_will revert after reading the email

1. 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.

If Specificity decreases for any model sensitivity increases and vice versa, by changing Conversion probability cutoff threshold value, different values of the sensitivity and specificity can be achieved.

Graph below shows change in sensitivity and specificity rating changes with change in the threshold value:

Chart, line chart

Description automatically generated

When the probability is low, the sensitivity is high and specificity is low, for larger probability threshold, sensitivity values are low and specificity values are high.

High sensitivity will indicate that our model has capacity to correctly identify all leads which are likely to convert which will be done by estimating the conversion likelihood.

Hence, to be more aggressive and to make use of interns, we could choose a lower probability cut-off which ensures that those leads which have a lower probability of conversion is also picked up by the system as converted hence generating a longer list of leads. This would ensure aggressively targeting those leads, while having low probability, which otherwise would have been missed by the system.

1. 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.

This is similar to concept we used in the previous question; High specificity implies that our model will correctly identify almost all leads who are not likely to convert.

Since X education has already reached its target for a quarter and does not need agents to make unnecessary calls, to help in minimizing rate of useless calls to the clients and agents can focus on some other work, we can choose high probability cut-off ensuring a higher specificity value i.e., those leads which are on the brink of conversion would still be marked not to be selected, and only those leads which have a really high probability of conversion would be marked as to be converted, thereby generating fewer but hotter leads.