

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

Ans. The top 3 variables which contribute most towards the probability of a lead getting converted are:

- (i) Lead Source
- (ii) Last activity
- (iii) Total Time Spent on 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. To increase the probability of lead conversion, top 3 categorical/dummy variables are:

- (i) Lead Source - Direct Traffic
- (ii) Lead Source – Organic Search
- (iii) Lead Source - Google

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. Since at this stage, there is abundance of personnel so, the model should be optimized for recall i.e. some false negatives won't hurt much. This allows for as many possible leads to be pursued as possible. Here I will set cutoff to 0.2 which will allow for a recall score of 92%, accuracy of 70% and precision of 56.5%

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. At this time model should be optimized for Precision i.e. false negatives should be absolutely avoided. Here I will set cutoff to 0.6 which will allow for a recall score of 52%, accuracy of 76% and precision of 77%