

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

Solution:

Based on the coefficient values in the screenshot below, the top three variables that most significantly impact the likelihood of a lead being converted are:

- a) Total Time Spent on Website
- b) Lead Add Form (from Lead Origin)
- c) Had a Phone Conversation (from Last Notable Activity)

| | coef |
|--|---------|
| const | -2.3134 |
| Do Not Email | -1.1067 |
| TotalVisits | 1.5038 |
| Total Time Spent on Website | 4.5275 |
| LeadOrigin_Landing Page Submission | -0.3253 |
| LeadOrigin_Lead Add Form | 3.7313 |
| LeadSource_Olark Chat | 1.5706 |
| LeadSource_Welingak Website | 2.1406 |
| LastActivity_Email Bounced | -0.9859 |
| LastActivity_Not Sure | -1.5943 |
| LastActivity_Olark Chat Conversation | -1.3427 |
| LastActivity_SMS Sent | 1.3544 |
| CurrentOccupation_No Information | -1.3041 |
| CurrentOccupation_Working Professional | 2.6421 |
| LastNotableActivity_Had a Phone Conversation | 3.2904 |
| LastNotableActivity_Unreachable | 1.7567 |

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?

Solution:

Based on the coefficient values from the screenshot in the question above, the top three categorical/dummy variables to focus on for increasing the probability of lead conversion are:

- a) Lead Add Form (from Lead Origin)
- b) Had a Phone Conversation (from Last Notable Activity)
- c) Working Professional (from What is your current occupation)

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.

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.

To minimize the rate of unproductive phone calls, the company may contact all leads with a conversion probability (value = 1) under the 0.7 cut-off (highlighted in yellow). However, this approach might result in missing out on some leads that were actually converted but incorrectly predicted as not converted (highlighted in red in the image below). This shouldn't be a major concern as the target has already been achieved.

[illegible]