

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

- Total Time spent on Website
- Lead Origin\_Lead Add form
- What is your current occupation\_ Working Professional

	coef
const	-2.6010
Do Not Email	-1.1068
TotalVisits	1.0052
Total Time Spent on Website	4.5843
Lead Origin_Lead Add Form	3.9825
Lead Source_Olark Chat	1.3645
Lead Source_Welingak Website	2.7342
Last Activity_Converted to Lead	-0.9047
Last Activity_Email Bounced	-0.7308
Last Activity_Had a Phone Conversation	2.2689
Last Activity_Olark Chat Conversation	-1.3355
What is your current occupation_Working Professional	2.7924
Last Notable Activity_Email Link Clicked	-0.4823
Last Notable Activity_Page Visited on Website	-0.4066
Last Notable Activity_SMS Sent	1.5431
Last Notable Activity_Unreachable	1.7098

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?

- Lead Origin\_Lead Add Form
- Lead Source\_Welingak Website
- What is your current occupation\_Working Professional

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.

Top3 variables are :

- Total Time spent on Website
- Lead Origin\_Lead Add form
- What is your current occupation\_ Working Professional

In the below image, the final prediction is calculated based on a optimal cut off value of 0.35.

In order to make the sales aggressive, the company may contact all the leads which have a conversion probability (value = 1) under a cut off 0.3

	Converted	Converted_Prob	LeadId	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	final_predicted	lead_score
0	0	0.084359	3894	0	1	0	0	0	0	0	0	0	0	0	0	8
1	1	0.731774	1925	1	1	1	1	1	1	1	1	1	0	0	1	73
2	1	0.952159	6175	1	1	1	1	1	1	1	1	1	1	1	1	95
3	1	0.375769	9094	0	1	1	1	1	0	0	0	0	0	0	1	38
4	0	0.050023	450	0	1	0	0	0	0	0	0	0	0	0	0	5
5	0	0.070965	3890	0	1	0	0	0	0	0	0	0	0	0	0	7
6	0	0.498875	5754	0	1	1	1	1	1	0	0	0	0	0	1	50
7	0	0.225046	6732	0	1	1	1	0	0	0	0	0	0	0	0	23
8	0	0.184510	2810	0	1	1	0	0	0	0	0	0	0	0	0	18
9	0	0.225046	986	0	1	1	1	0	0	0	0	0	0	0	0	23

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 : For this problem we can choose people who has probability between 0.35 and 0.6 because these are the people who has significant chances of conversion but need follow up. So, these people need more follow up to make it convert as compared to people who has high probability. Since we need to make limited calls in order to support the deals, we can call only those people whose probability is wavering close to cut-off.