## Lead Scoring Case Study

- 1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
  - 1.1 Lead Origin
  - 1.2 Total Time Spent on Website
  - 1.3 What is your current occupation
- 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?
  - 2.1Lead Origin Lead Add Form
  - 2.2What is your current occupation\_Working Professional
  - 2.3Last Activity Other Activity
- 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.

The optimum point is at 0.39. In order to make the sales aggressive, the company may contact all the leads which have a conversion probabilty (value = 1) under a cut off 0.3 (column 0.3 highlighted in red)

	Prospect ID	Converted	Converted_prob	final_predicted	Lead Score	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7
0	3009	0	0.192382	0	19.238151	1	1	0	0	0	0	0	(
1	1012	0	0.123282	0	12.328209	1	1	0	0	0	0	0	(
2	9226	0	0.305681	0	30.568120	1	1	1	1	0	0	0	(
3	4750	1	0.865195	1	86.519474	1	1	1	1	1	1	1	1
4	7987	1	0.792849	1	79.284884	1	1	1	1	1	1	1	1

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 useless phone calls, the company may contact all the leads which have a conversion probability (blue color) under column 0.7. But company may miss out red circles, which actually convert but model predict wrongly. This is not problem as target has already be achieved

	Prospect ID	Converted	Converted_prob	$final\_predicted$	Lead Score	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	3009	0	0.192382	0	19.238151	1	1	0	0	0	0	0	0	0	0
1	1012	0	0.123282	0	12.328209	1	1	0	0	0	0	0	0	0	0
2	9226	0	0.305681	0	30.568120	1	1	1	1	0	0	0	0	0	0
3	4750	1	0.865195	1	86.519474	1	1	1	1	1	1	1	1	1	0
4	7987	1	0.792849	1	79.284884	1	1	1	1	1	1	1	1	0	0
5	1281	1	0.744566	1	74.456620	1	1	1	1	1	1	1	1	0	0
6	2880	0	0.098153	0	9.815323	1	0	0	0	0	0	0	0	0	0
7	4971	1	0.962820	1	96.281965	1	1	1	1	1	1	1	1	1	1
8	7536	1	0.847684	1	84.768402	1	1	1	1	1	1	1	1	1	0
9	1248	0	0.762924	1	76.292448	1	1	1	1	1	1	1	1	0	0
10	1429	0	0.584502	1	58.450181	1	1	1	1	1	1	0	0	0	0
11	2178	0	0.061909	0	6.190884	1	0	0	0	0	0	0	0	0	0
12	8554	0	0.053738	0	5.373821	1	0	0	0	0	0	0	0	0	0
13	5044	1	0.525765	1	52.576525	1	1	1	1	1	1	0	0	0	0
14	3475	1	0.898304	1	89.830368	1	1	1	1	1	1	1	1	1	0