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

Ans: Based on coefficient values in below diagram, top 3 variables are

- **Tags_Lost to EINS**
- **Tags_Closed by Horizzon**
- **Tags_Will revert after reading the email**

	coef	std err	z	P>|z|	[0.025	0.975]
const	-2.2726	0.227	-10.024	0.000	-2.717	-1.828
Do Not Email	-1.4390	0.229	-6.288	0.000	-1.887	-0.990
Total Time Spent on Website	0.9290	0.051	18.387	0.000	0.830	1.028
Lead Origin_Lead Add Form	2.0604	0.362	5.687	0.000	1.350	2.771
Lead Origin_Lead Import	1.3982	0.735	1.902	0.057	-0.042	2.839
Lead Source_Welingak Website	3.2206	0.819	3.930	0.000	1.614	4.827
What is your current occupation_Working Professional	1.3679	0.321	4.260	0.000	0.739	1.997
Tags_Busy	3.3877	0.333	10.174	0.000	2.735	4.040
Tags_Closed by Horizzon	7.7626	0.776	10.005	0.000	6.242	9.283
Tags_Lost to EINS	8.8895	0.760	11.691	0.000	7.399	10.380
Tags_Ringing	-1.6379	0.345	-4.747	0.000	-2.314	-0.962
Tags_Will revert after reading the email	3.8825	0.236	16.471	0.000	3.420	4.344
Tags_switched off	-2.3126	0.606	-3.815	0.000	-3.501	-1.125
Lead Quality_Not Sure	-3.0407	0.134	-22.755	0.000	-3.303	-2.779
Lead Quality_Worst	-3.6803	0.891	-4.129	0.000	-5.427	-1.933
Last Notable Activity_SMS Sent	2.6393	0.128	20.646	0.000	2.389	2.890

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: As per above diagram, top 3 categorical/dummy variables are

- **Tags_Lost to EINS**
- **Tags_Closed by Horizzon**
- **Tags_Will revert after reading the email**

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:

Good strategies like Sensitivity, Specificity can be employed at this stage.

Sensitivity is ratio of True Positive Conversions and total number of actual conversions (True Positive + False Negative)

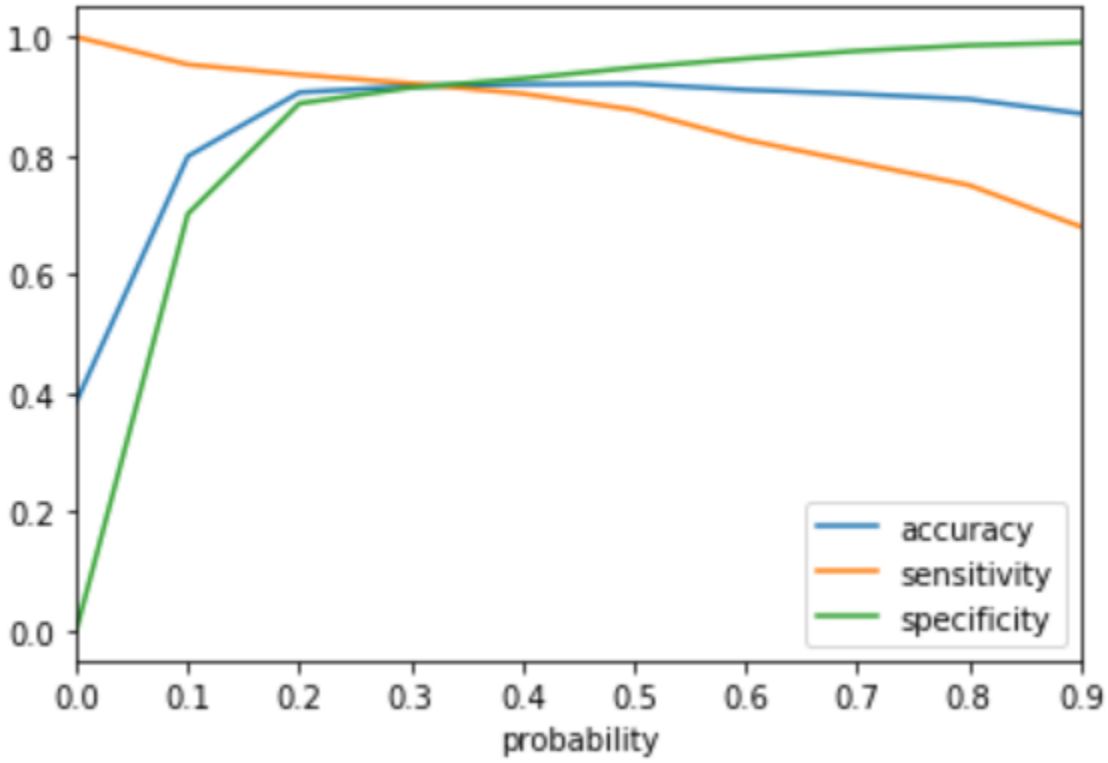
= TP / float(TP+FN)

Specificity is ratio of True Negative Conversions and total number of actual non-conversions (True Negative + False Positive)

= TN / float(TN+FP)

If one of these strategies increases, then other decreases.

Please see below graph for our model where changes in sensitivity and specificity are inversely proportional.



Higher the sensitivity, higher the chance of identifying leads who wants to convert.

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: Good strategy like Specificity can be employed at this stage.
Higher the sensitivity, higher the chance of identifying leads who does not want to convert. Based on that, phone calls can be reduced