

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

Answer: Based on the coefficient values calculated as shown in the figure below. The following 3 top variables contribute most towards the probability of a lead getting converted.

1. Tags Closed by Horizon.
2. Tags Will revert after reading the email.
3. Tags Busy.

	coef	std err	z	P> z	[0.025	0.975]
const	-4.9920	0.200	-24.936	0.000	-5.384	-4.600
Do Not Email	-1.3879	0.209	-6.639	0.000	-1.798	-0.978
Total Time Spent on Website	1.0734	0.055	19.669	0.000	0.966	1.180
Lead Origin_Lead Add Form	2.6055	0.357	7.301	0.000	1.906	3.305
Lead Source_Olark Chat	1.3852	0.139	9.986	0.000	1.113	1.657
Lead Source_Welingak Website	3.3547	0.809	4.147	0.000	1.769	4.940
Last Activity_Olark Chat Conversation	-1.5047	0.205	-7.337	0.000	-1.907	-1.103
Tags_Busy	3.7787	0.287	13.174	0.000	3.217	4.341
Tags_Closed by Horizzon	8.9982	0.747	12.039	0.000	7.533	10.463
Tags_Other_Tags	3.3770	0.217	15.564	0.000	2.952	3.802
Tags_Will revert after reading the email	7.5060	0.254	29.539	0.000	7.008	8.004
Tags_not mentioned	3.1523	0.195	16.187	0.000	2.771	3.534
Last Notable Activity_SMS Sent	2.0024	0.117	17.115	0.000	1.773	2.232

Figure 1: showing the variables coefficient

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?

Answer: Based on the coefficient values calculated as shown in the figure shown above. The following top 3 categorical/dummy variables contribute most towards the probability of a lead getting converted.

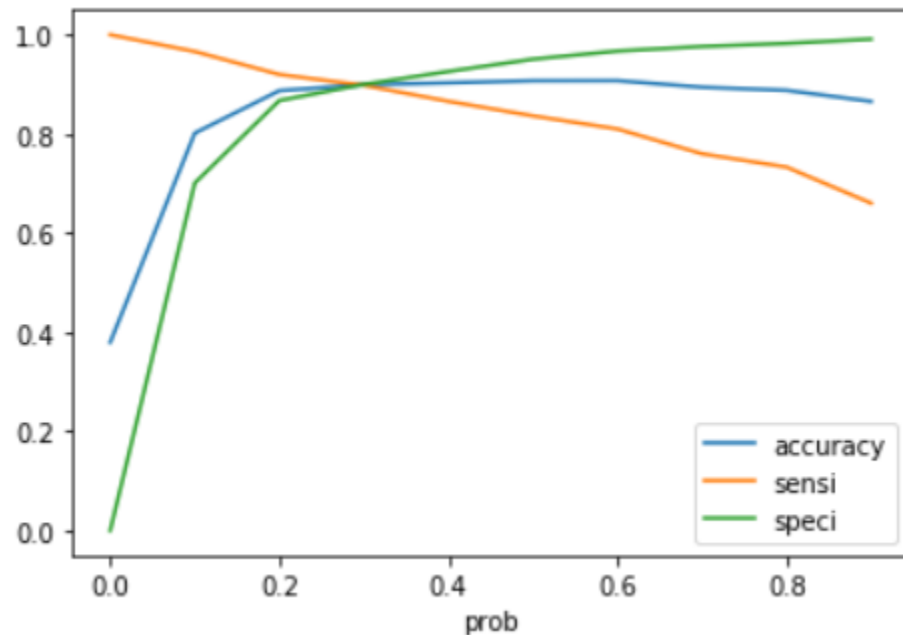
1. Tags Closed by Horizon.
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3. Tags Busy.

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.

Answer: Sensitivity can be defined as the ratio of total number of actual Conversions correctly predicted to the total no of actual Conversions.

Similarly, Specificity can be defined as the ratio of total no of actual non-Conversions correctly predicted to the total number of actual non-Conversions.

From the below figure it is very clear that sensitivity and specificity changes for different threshold



So, for a low threshold value it is clear that sensitivity is high and specificity is low. Similarly, for higher threshold values sensitivity is low and specificity is high.

High sensitivity means the chance of predicting the leads getting actually getting converted is high, it will misclassify some of the non-conversion as converted which is not a problem for our business model.

Hence, we should choose low threshold and high sensitivity as our sales team, in particular, has around 10 interns allotted to them. So during this phase, they will be able to make the lead conversion more aggressive.

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.

Answer: In order to minimize the rate of useless phone calls, the company should start sending automated emails and connect with customers via SMS chat. Also, the company should target sending emails or SMS chat to working professionals who have higher chance of conversion. Also target customers who visit the wellingak website as they have conversion rate. Try to target hot lead score for higher conversion rate and avoid useless calls to customer who are not getting converted.