

Lead Scoring Case Study Subjective Questions

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1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?
- A. The following variables have the highest positive or negative coefficients:-

	coef	std err	z	P> z	[0.025	0.975]
const	-0.9912	0.150	-6.623	0.000	-1.285	-0.698
TotalVisits	7.1411	2.214	3.226	0.001	2.802	11.480
Total Time Spent on Website	4.1580	0.155	26.892	0.000	3.855	4.461
Page Views Per Visit	-6.4455	1.250	-5.157	0.000	-8.895	-3.996
Lead Origin_Landing Page Submission	-1.3597	0.123	-11.010	0.000	-1.602	-1.118
Lead Origin_Lead Add Form	2.6807	0.194	13.801	0.000	2.300	3.061
Lead Source_Welingak Website	2.4230	0.746	3.247	0.001	0.960	3.886
Do Not Email_Yes	-1.0369	0.171	-6.067	0.000	-1.372	-0.702
Last Activity_Email Opened	0.5614	0.104	5.396	0.000	0.357	0.765
Last Activity_SMS Sent	1.7383	0.105	16.625	0.000	1.533	1.943
Specialization_Not Specified	-1.1583	0.123	-9.409	0.000	-1.400	-0.917
What is your current occupation_Working Professional	2.6816	0.193	13.919	0.000	2.304	3.059
Last Notable Activity_Had a Phone Conversation	3.6423	1.125	3.238	0.001	1.437	5.847
Last Notable Activity_Modified	-0.7826	0.087	-9.036	0.000	-0.952	-0.613
Last Notable Activity_Unreachable	1.9220	0.522	3.683	0.000	0.899	2.945

1. TotalVisits has a coefficient of 7.14 and positively contributes in getting a lead converted. A greater TotalVisits indicates a greater interest of people in the course.
2. Total Time Spent on Website (coefficient 4.158) has a positive contribution to the probability of a lead getting converted. The team must reach out to people who are spending more time as such people may be more interested in our courses and products.
3. Last Notable Activity_Had a Phone Conversation (coefficient 3.64) has a positive impact. People who have had a past conversation in team must be reached out

again as they have already shown interest in our courses by calling in the past.

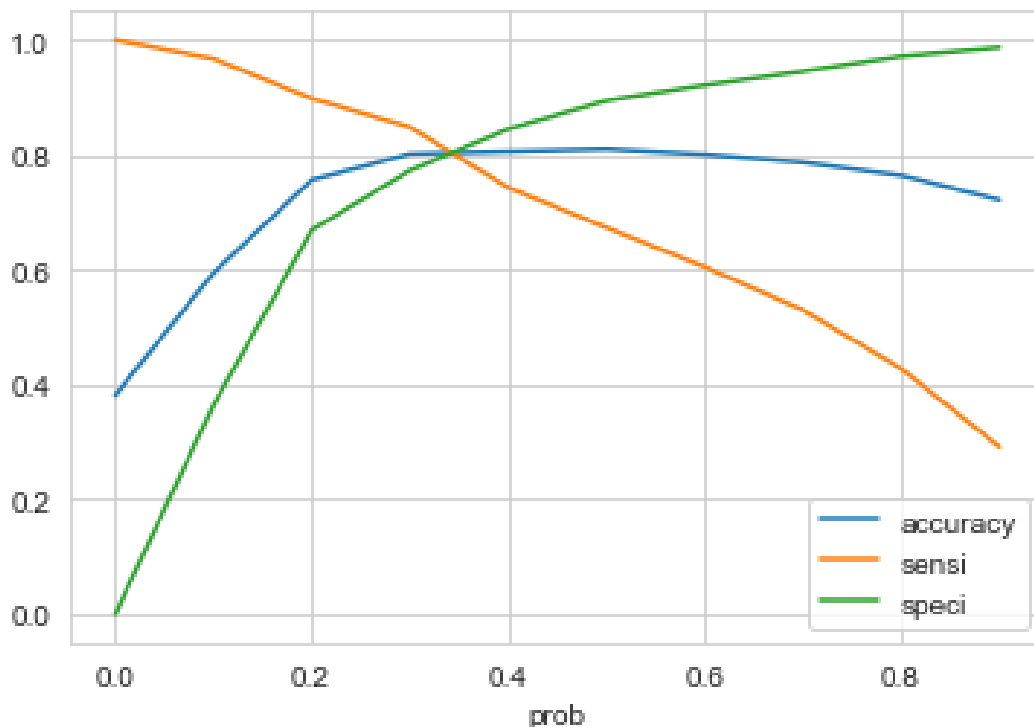
2. What are the top 3 categorical/dummy variables in the model which should be focused the most on in order to increase the probability of lead conversion?

A. The top 3 categorical/ dummy variables to focus on will be the same as the previous question. The variables with the highest positive coefficients must be focused on. They are:

1. **TotalVisits**
2. **Total Time Spent on Website**
3. **Last Notable Activity_Had a Phone Conversation**

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.

A. Let us look at this graph:



This graph shows the sensitivity, specificity and accuracy.

As we know Sensitivity = $\frac{TP}{TP + FN}$. The higher the sensitivity, the greater the probability of accurately predicting the leads that will convert.

The team must focus on the following leads as they contribute to the sensitivity:

1. People with references are more likely to convert. We must approach them.
 2. Target variables spending a lot of time on the website may be interested in our course materials. We must focus on them.
 3. Working professionals may also be targeted as they might be interested in upskilling but we must keep in mind that they might not have the time to study the courses and may end up not converting.
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.
- A. The team must avoid the following target leads:
1. People with a high page views per visit will not be likely to convert. They may be checking courses from other websites. Page Views per Visit has a coefficient of -6.4455 and negatively impacts the probability of conversion.
 2. Unemployed people may not have the money to pay for the courses. They could also be avoided.
 3. People who are unreachable could be avoided. They may not be reachable this time either.