

## Lead Scoring Case Study

SUBJECTIVE ANSWERS

BY

BIJI KRISHNA , BAPPI BANIK, SANTANU BISWAS 1. Which are the top three variables in your model which contribute most towards the probability of a lead getting converted?

a. Last Notable Activity\_Unreachable 2.346566
b. Last Activity\_Had a Phone Conversation 2.312539

c. What is your current occupation\_Working Professional 1.258886

```
reacure importance
sorted params = res.params.sort_values(ascending=False)
print(sorted params)
Features used in Final Model : Index(['Total Time Spent on Website', 'Last Activity_Converted to Lead',
      'Last Activity Email Bounced', 'Last Activity Had a Phone Conversation',
      'Last Activity SMS Sent', 'What is your current occupation Student',
      'What is your current occupation Unemployed',
      'What is your current occupation Working Professional',
      'Last Notable Activity Modified', 'Last Notable Activity Unreachable'],
     dtype='object')
Last Notable Activity_Unreachable
                                                    2.346566
Last Activity Had a Phone Conversation
                                                    2.312539
What is your current occupation Working Professional 1.258886
Total Time Spent on Website
                                                    1.166035
const
                                                    1.015663
Last Activity SMS Sent
                                                    0.795343
Last Notable Activity Modified
                                                   -0.556772
Last Activity Converted to Lead
                                                   -0.865305
Last Activity Email Bounced
                                                   -1.508343
What is your current occupation Unemployed
                                                   -1.559398
What is your current occupation Student
                                                   -1.680094
dtype: float64
```

- 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. Last Activity SMS Sent
  - b. What is your current occupation Unemployed
  - c. Total Time Spent on Website
- 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.

In the below image, the final prediction is calculated based on an optimal cut-off value of 0.38. 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 0.38

	Convert	Convert_Prob	Pros_ID	Predicted	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	8.0	0.9	Final_Predicted	Lead_Score
0	0	0.707539	7442	1	1	1	1	1	1	1	1	1	0	0	1	71
1	0	0.176305	6273	0	1	1	0	0	0	0	0	0	0	0	0	18
2	0	0.272823	6160	0	1	1	1	0	0	0	0	0	0	0	0	27
3	0	0.123619	609	0	1	1	0	0	0	0	0	0	0	0	0	12
4	1	0.927240	4543	1	1	1	1	1	1	1	1	1	1	1	1	93
5	0	0.237776	6886	0	1	1	1	0	0	0	0	0	0	0	0	24
6	1	0.205021	4635	0	1	1	1	0	0	0	0	0	0	0	0	21
7	0	0.147359	4475	0	1	1	0	0	0	0	0	0	0	0	0	15
8	0	0.206344	5305	0	1	1	1	0	0	0	0	0	0	0	0	21

Target leads that spend more time on the X Education portal (Total Time Spent on Website), Last Notable Activity\_Unreachable can be approached again however will have have lower probability of conversion due to course being offered price competitiveness and industry domain specific. Or can give some discount on these cases as per the budget allocation. To increase lead conversion rates during the 2-month intern period, X Education can implement a strategy that prioritizes high-probability leads, customizes phone calls, and follows up promptly. Automated outreach and A/B testing communication strategies can be used to maintain communication with potential leads. Regular training sessions and feedback sessions can enhance sales and communication skills. A CRM system can help track leads, schedule follow-ups, and provide insights into lead behavior and preferences. Continuous monitoring, feedback, and optimization will help refine the approach and achieve even better results over time. Overall, X Education's aggressive approach, focus on high-probability leads, and personalized communication and automation will help maximize the intern period's impact.

- 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) SMS and Email or Whatsapp option can be used to communicate with a client who has a high probability of subscribing course, rather than call. To optimize sales team efforts after reaching a sales target, the company can implement strategies such as lead scoring, automated lead nurturing, relationship building, qualification and prioritization, market research and analysis, upselling and cross-selling, customer surveys and feedback, training and skill development, building referral networks, and strategic planning. These strategies help the sales team focus on building relationships, nurturing leads, and preparing for future growth opportunities while minimizing useless phone calls. By implementing these strategies, the company can optimize its sales team's efforts and maximize their potential for success.

Thank You