Logistic Regression – Graded Assignment

LEAD SCORING – LOGISTIC REGRESSION - ASSIGNMENT

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Assignment based Subjective Questions

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

Answer 1: Following are the top three variables which are contributing most towards the probability of a lead getting converted:

1. Total Time Spent on Website
    a. Positive contribution
2. Lead Source (Others)
    a. Positive contribution
3. Last Activity (SMS Sent)
    a. Positive contribution

	LogisticRegression
total_time_spent_on_website	4.063576
lead_source_others	2.489891
last_activity_sms_sent	1.271523

Question 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 2: Following are the top 3 categorical/dummy variables in the model which should be focused the most:

1. Lead Source (Others)
2. Last Activity (SMS Sent)
3. What is your current occupation (Working Professional)
4. Lead Source (Olark Chat)

	LogisticRegression
total_time_spent_on_website	4.063576
lead_source_others	2.489891
last_activity_sms_sent	1.271523
what_is_your_current_occupation_working_professional	1.219327
lead_source_olark_chat	0.868007

Question 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 3: Following strategy should be employed by the X Education sales team:

- Target leads which spends a lot of time on X Education website. Make the website more interactive, informative, and engaging.
- Target leads which has come through recommendations. The X Education sales team should make phone calls to these leads and should explain competitive points why X Education is better than others.
- Target leads which has come through various sources like Olark Chat, Organic Search, Google search.
- Target leads which are Working Professionals and explain them specializations and industry readiness offered by the X Education courses.

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lead_source_olark_chat	0.868007
through_recommendations	0.746824
search	0.413143
lead_source_google	0.237392
digital_advertisement	0.158776
specialization_industry_specializations	0.037964

Question 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 4: Following strategies should be employed which doesn't involve phone calls:

- X Education sales team should send SMS alerts to the potential leads explaining in brief about the professional courses offered.
- X Education sales team should respond over Olark Chat whenever an enquiry is presented by potential lead.
- X Education should give digital advertisements to create potential leads and convert them.
- X Education should give advertisements and show banners on search engines like Google, Bing and other search engines to create potential leads and convert them.