

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

The top three variables based on the final Logistic Regression Model which contribute most towards the probability of a lead getting converted are:

- Tags_Will revert after reading the email
- Total Time Spent on Website
- Last Notable Activity_SMS Sent

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?

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 are:

- **Tags_Will revert after reading the email(from Tags):** As the leads with tags, will revert after reading the email is high, so the company should focus more on email marketing
- **Total Time Spent on Website:** Leads spending more time on the website can be our potential lead. Sales team should focus on such leads
- **Last Notable Activity_SMS Sent(From Last Notable Activity):** Lead whose last activity is sms sent can be potential lead for the company

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.

To make lead conversion more aggressive during the intern hiring period, X Education can employ the following strategy based on the given variables and their coefficients.

- Based on the given coefficients, leads from the below sources have higher likelihood of conversion. Thus, the sales team should prioritise calling leads from these sources during the intern-hiring period.
 - **Tags_Will revert after reading the email(from Tags):** 1.851406
 - **Total Time Spent on Website:** 1.080685

- **Last Notable Activity_SMS Sent(From Last Notable Activity):**
0.978982
 - Target leads that have come through **References** as they have a higher probability of converting
 - Leads that have been **sent SMS and have opened the email** have a high conversion rate. Thus, the sales team should prioritise calling leads who have been sent sms or have opened the email from X Education
 - Target leads that repeatedly visit the site(**Page views Per Visit**) have a higher conversion rate and the sales team should come up with competitive points to help in the conversion
 - **Total time spent on the website** is also a good indicator of lead's interest in X Education's services. Thus, the sales team should also prioritise calling leads who have spent considerable amounts of time on the website
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.

To minimize the rate of useless phone calls when the company reaches the sales target before the deadline, the sales team can employ the following strategy.

- Focus on personalized email, SMS's and targeted newsletter
- Send SMS to customers that have a high probability of conversion
- Do not focus on unemployed leads. They might not have a budget to spend on the course
- Provide discounts or incentives to potential customers, so that they can purchase the course