

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

Answer: The top three variables in the final model that most significantly contribute to the probability of a lead converting are

- Lead Source_Welingak Website: **5.48**
- Lead Source_Reference: **3.23**
- Last Activity_SMS Sent: **2.80**

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: The top 3 categorical/dummy variables in the model that should be focused on the most to increase the probability of lead conversion are:

- **Lead Source_Welingak Website: 5.48**

We should allocate more budget/spend on advertising on the Welingak Website to attract more leads.

- **Lead Source_Reference: 3.23**

We can offer discounts for references that convert into leads to encourage more referrals.

- **Current_occupation_Working Professional: 2.64**

We should develop tailored messaging and engage working professionals through communication channels based on their engagement impact."

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: To enhance lead conversion during the intern-hiring period, X Education can employ the following strategy based on the given variables and their coefficients:

- **Focus on High-Potential Leads:** Leads from the following sources have a higher likelihood of conversion based on the coefficients:
 - Welingak Website: 5.48

- Reference: 3.23
- Working Professional: 2.64 Therefore, the sales team should prioritize calling leads from these sources during the intern-hiring period.
- **Leverage Effective Communication Channels:** Leads who have been sent SMS messages and have opened emails are more likely to convert. The coefficients for Last_Activity_Others and Last Activity_Email Opened are 1.91 and 1.65, respectively. Thus, the sales team should prioritize calling leads who have been sent SMS messages or have opened emails from X Education.
- **Maximize Website Engagement:** Total Time Spent on the Website and Lead Source_Facebook are the good indicator of a lead's interest in X Education's services, with a coefficient of 1.047 and 1.14. Hence, the sales team should also prioritize calling leads who have spent significant time on the website.
- **Maintain a Multi-Channel Approach:** Finally, the sales team should follow up with leads who have interacted with X Education through multiple channels. For example, leads who have used the Olark Chat feature on the website may not have spent much time on the website but may still be interested in X Education's services. Therefore, the sales team should ensure they follow up with leads who have used multiple channels to interact with X Education.

In summary, to make lead conversion more aggressive during the intern-hiring period, X Education should focus on high-potential leads, leverage effective communication channels, maximize website engagement, and maintain a multi-channel approach.

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: To minimize the rate of useless phone calls when the company reaches its sales target for a quarter before the deadline, the sales team can employ the following strategy:

- **Focus on Lead Nurturing Activities:** Engage leads through personalized emails, SMS messages, and targeted newsletters.
- **Send Automated SMS:** Target customers with a high likelihood of conversion with automated SMS messages.
- **Collaborate for Improvement:** Work with the sales team, management, and data scientists to fine-tune the model and gather feedback on what strategies were effective.

- **Implement Discounts and Incentives:** Develop a strategy to offer discounts or incentives to potential customers to encourage them to take action.