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

   Ans: The top three variables based on the final model(Model 4) which contributes most towards the probability of lead getting converted are:

   a. Lead Source_Welingak Website: 5.39
   b. Lead Source_Reference: 2.93
   c. Current_occupation_Working Professional: 2.67

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?**

   Ans: The top 3 categorical/dummy variables in the model that be focused most in order to increase the probability of lead conversion are:
   Lead Source_Welingak Website: 5.39
   ○ There should be focus on more budget/spend on Welingak Website in terms of advertising, etc. to attract more leads.
   Lead Source_Reference: 2.93
   ○ We can provide discounts for providing references that convert to lead to encourage more references.
   Current_occupation_Working Professional: 2.67
   ○ 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.**

   Ans: To increase the likelihood of converting leads during the intern-hiring period, X Education can utilize the following tactics based on the given coefficients and variables:

   - **Prioritize high-potential leads**: Leads from specific sources have a higher probability of converting. For instance, leads from Welingak Website, Reference, and Working Professional sources have coefficients of 5.388662, 2.925326, and 2.669665, respectively. Therefore, the sales team should prioritize reaching out to leads from these sources.
   - **Utilize effective communication channels**: Leads who have responded positively to SMS messages and opened emails are more likely to convert. The coefficients for Last Activity_SMS Sent and Last Activity_Email Opened are

2.051879 and 0.942099, respectively. Therefore, the sales team should prioritize contacting leads who have interacted with X Education through these channels.

- **Maximize website engagement**: The amount of time a lead spends on X Education's website is an excellent indicator of their interest in their services, with a coefficient of 1.049789. Hence, the sales team should prioritize reaching out to leads who have spent a considerable amount of time on the website.
- **Maintain a multi-channel approach**: Leads who interact with X Education through multiple channels are more likely to convert. For instance, even if a lead has not spent much time on the website, they may still be interested in X Education's services if they have used the Olark Chat feature. Therefore, the sales team should follow up with leads who have engaged with X Education through various channels.

In summary, to make lead conversion more aggressive during the intern-hiring period, X Education should focus on high-potential leads, utilize 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.**

   Ans: To reduce the number of useless phone calls made after reaching the sales target for a quarter before the deadline, the sales team can utilize the following tactics:

   - **Focus on lead nurturing activities**: Instead of cold calling potential customers, the sales team can focus on lead nurturing activities, such as sending personalized emails, SMS messages, and targeted newsletters. These methods will help build a stronger relationship with the customers and increase their likelihood of converting.
   - **Send automated SMS messages:** By using an automated SMS messaging system, the sales team can send targeted messages to customers who have a high probability of converting. This method will allow the sales team to focus on potential customers who are more likely to convert and reduce the number of useless phone calls made.
   - **Collaborate with other teams**: The sales team should work with other teams, such as management and data scientists, to fine-tune their model and gather feedback on what works and what doesn't. This collaboration will help optimize the conversion rate and reduce the number of useless phone calls made.
   - **Provide incentives:** The sales team can offer discounts or incentives to potential customers to encourage them to take action. This method will make potential customers more likely to convert and reduce the number of useless phone calls made.
   - **Utilize other communication channels**: The sales team can build relationships with potential customers through other communication channels, such as email,

social media, or chatbots. This approach will provide an opportunity to interact with potential customers without making useless phone calls.

- **Gather feedback:** The sales team should gather feedback from existing customers to improve the quality of the leads generated and optimize the conversion rate. This approach will help identify areas for improvement and reduce the number of useless phone calls made.

In summary, to minimize the number of useless phone calls made after reaching the sales target for a quarter before the deadline, the sales team should focus on lead nurturing activities, send targeted automated SMS messages, collaborate with other teams, provide incentives, utilize other communication channels, and gather feedback from existing customers.