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/predictors in our final model which has contributed the most towards the probability of leads are as :-
   - Lead Source_Welingak Website: 5.39
   - Lead Source_Reference: 2.93
   - 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?

   Answer: The top three categorical/dummy variables in our final model which one should focus the most in-order to increase the probability of lead conversion are :-
   - Lead Source_Welingak Website: 5.39
     - We should allocate more budget on Welingak Website for advertisement in-order to attract more leads.
   - Lead Source_Reference: 2.93
     - We should start providing discounts for providing reference that convert to leads in-order to raise more and more reference.
   - Current_occupation_Working Professional: 2.67
     - We should develop the process in-order to increase engagement/involvement of the leads who are working professional as they are easy to convert.

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 make lead conversion more aggressive during the intern-hiring period, we can apply following strategy based on the given predictors/variables and their corresponding coefficients:-

   Focus on leads with high potential: Based on the given coefficients, leads from the following sources have a higher likelihood of conversion:
   - Lead Source_Welingak Website: 5.388662
   - Lead Source_Reference: 2.925326
   - Current_occupation_Working Professional: 2.669665

   Thus, the sales team should prioritize calling leads from these sources during the intern-hiring period.

Using effective communication channels: The sales team should prioritize calling leads who have been sent SMS messages or have opened emails from X Education because it is seen that leads who have been sent SMS messages and have opened the emails are also more likely to convert. The coefficients for Last Activity_SMS Sent and Last Activity_Email Opened are 2.051879 and 0.942099, respectively.

Maximizing website engagement: Total Time Spent on the Website is also a good indicator of the lead's interest in X Education's services, with a coefficient of 1.049789. Therefore, higher the time spent on their website higher is their chance to get converted. Hence, the sales team should also prioritize calling leads who have spent a significant amount of time on the website.

Maintain a multi-channel approach: Finally, the sales team should also make sure to follow up with leads who have interacted with X Education through multiple channels. Therefore, the sales team should make sure to follow up with leads who have used multiple channels to interact with X Education.

As inference we can say that, to make lead conversion more aggressive during the intern-hiring period, X Education should focus on leads from high-potential sources, using 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:
   - Collaborate with the sales team, management, and data scientists to teams to fine-tune the model and gather feedback on what worked and what didn't.
   - Focus on building relationships with potential customers through other communication channels like email, social media, or chatbots.
   - Focus on lead nurturing activities such as personalized emails, SMS's and targeted newsletters.
   - Make the strategy for providing discounts or incentives to potential customers to encourage them to take action.
   - Gather feedback from existing customers to improve the quality of the leads generated and optimize the conversion rate.