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 which contributes most towards the probability of lead getting converted are:

- Lead Source Welingak Website
- Lead Source Reference
- Current occupation Working Professional
- 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 three categorical/dummy variables in the model to prioritize for boosting lead conversion probability are:

- Lead Source_Welingak Website: Allocate more budget/resources to the Welingak Website for advertising to draw in more leads.
- Lead Source_Reference: Offer discounts for referrals that result in conversions to incentivize more references.
- Current_occupation_Working Professional: Create tailored messages and engage working professionals through targeted communication channels to enhance their engagement.
 - 3. X Education has a period of 2 months every year during which they hire some interns. The sales team 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 many of such people as possible. Suggest a good strategy they should employ at this stage.

Ans: The sales team should prioritize contacting leads from these sources during the intern-hiring period.

- Utilize effective communication channels: Leads who have received SMS messages and have 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. Hence, the sales team should prioritize calling leads who have received SMS messages or have opened emails from X Education.
- Optimize website engagement: The Total Time Spent on the Website is also a strong indicator of a lead's interest in X Education's offerings, with a coefficient of 1.049789. Therefore, the sales team should prioritize contacting leads who have spent considerable time on the website.
- Maintain a multi-channel strategy: Lastly, the sales team should ensure they follow up with leads who have interacted with X Education through various channels. For instance, leads who have used the Olark Chat feature on the website may not have spent extensive time on the site but could still be interested in X Education's services. Thus, the sales team should follow up with leads who have engaged through multiple channels with X Education.

In summary, to enhance lead conversion efforts during the intern-hiring period, X Education should concentrate on leads from these sources.

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 minimize the frequency of unproductive phone calls when the company reaches its sales target for a quarter ahead of schedule, the sales team can implement the following strategy:

- Concentrate on lead nurturing activities such as personalized emails, SMS messages, and targeted newsletters.
- Send automated SMS messages to customers who have a high probability of converting.
- Collaborate with the sales team, management, and data scientists to refine the model and collect feedback on what was effective and what was not.
- Develop strategies for offering discounts or incentives to potential customers to motivate them to act.
- Focus on building relationships with potential customers through alternative communication channels like email, social media, or chatbots.
- Collect feedback from existing customers to enhance the quality of the leads generated and optimize the conversion rate.