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

- Lead Source_Welingak Website 5.811465
- Lead Source_Reference 3.31
- What is your current occupation_Working Professional 2.608292
- 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 that be focused most in order to increase the probability of lead conversion are:

- Lead Source_Welingak Website: 5.811465
 - More budget/spend can be done on Welingak Website in terms of advertising, etc.
- Lead Source Reference: 3.316598
 - The company should make calls to the leads who are the "working professionals".
- What is your current occupation_Working Professional: 2.608292
- 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 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:

• Focus on leads with high potential: Based on the given coefficients, leads from the following sources have a higher likelihood of conversion:

Welingak Website: 5.811465

o Reference: 3.316598

- Working Professional: 2.608292
- Thus, the sales team should prioritize calling leads from these sources during the intern-hiring period.
- Maximize 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 1.095412. Therefore, the sales team should also prioritize calling leads who have spent a significant amount of time on the website.
- Leverage effective communication channels: 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 Lead Source_Olark Chat are 1.294180 and 1.081908 respectively. Therefore, the sales team should prioritize calling leads who have been sent SMS messages or have opened emails from X Education.

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

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 such as personalized emails, SMS's and targeted newsletters.

- Sending automated SMS to customers that have very good likelihood of getting converted
- Collaborate with the sales team, management, and data scientists to fine-tune the model and gather feedback on what worked and what didn't.
- Make the strategy for providing discounts or incentives to potential customers to encourage them to take action.
- Focus on building relationships with potential customers through other communication channels like email, social media, or chatbots.
- Gather feedback from existing customers to improve the quality of the leads generated and optimize the conversion rate.