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

   Answer:

   Based on the Logistic Regression model, the following three variables have the most significant impact on the probability of a lead converting:

   - **Total Time Spent on Website (coefficient = 4.4997):** Leads that spend more time on the website are more likely to convert.
   - **Last Notable Activity (coefficient = 3.4174):** If the last notable activity shows the lead was not present or unreachable, there's a higher probability of conversion.
   - **Last Activity (coefficient = 2.7627):** Leads whose last recorded activity was a phone call are more likely to convert.

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:

   According to the logistic regression model, the top three dummy variables to focus on for increasing the probability of lead conversion are:

   - **Last Notable Activity_Unreachable (coefficient = 3.4147):** When the lead was unreachable during the last notable activity, there's a higher chance of conversion.
   - **Last Activity_Had a Phone Conversation (coefficient = 2.7627):** Leads who had a phone conversation as their last activity show a higher probability of conversion.
   - **Lead Source_Welingak Website (coefficient = 2.6191):** Leads sourced from the Welingak website have a higher likelihood of converting.

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:

   - Leads with a score of 40 or higher are predicted as potential conversions with around 80% accuracy. For more aggressive lead conversion, consider lowering the cut-off score to 30, allowing the team to target leads with scores between 30 and 40.
   - Assign the 10 interns to contact leads with scores between 30 and 40, as these leads still have a reasonable chance of converting.

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:

    • Identify the remaining potential leads that the model has marked, excluding those already converted.
    • Prioritize contacting leads with the highest scores, focusing on those at the top.
    • To reduce unnecessary calls, increase the cut-off score to 70, targeting only leads with a score above 70, as these are more likely to convert.