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

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Top Three Variables Contributing Most to Lead Conversion:

Based on the coefficients from the generalized linear model (GLM) and statistical significance, the top three variables contributing most to the probability of a lead converting are:

- **Total Time Spent on Website**: Coefficient = 4.4905, which indicates a strong positive impact on conversion.
- **Lead Source_Welingak Website**: Coefficient = 5.9935, a highly significant feature showing that leads from this source are more likely to convert.
- **Lead Source_Reference**: Coefficient = 2.7794, showing that referrals significantly increase conversion chances.

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?

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Top Three Categorical/Dummy Variables to Focus On:

The most important categorical variables to focus on are:

- **Lead Source_Welingak Website**: This lead source has the highest positive impact on conversions (Coefficient = 5.9935), so it should be emphasized in marketing.
- **Lead Profile_Potential Lead**: This profile strongly influences conversion with a positive coefficient of 1.9358, meaning that these leads are more likely to convert.
- **Lead Source_Reference**: Leads that come from references (Coefficient = 2.7794) are much more likely 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.

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Strategy for Aggressive Conversion (Interns Handling Potential Leads):

When the sales team has additional interns and wishes to maximize lead conversion:

- **Focus on Leads with High Scores (80-100)**: Assign interns to handle leads with conversion probabilities between 80-100. Since these leads are identified as hot leads, they should receive immediate attention.

- **Emphasize Key Lead Sources and Profiles**: Interns should prioritize contacting leads from high-converting sources like Welingak Website, Reference, and Potential Lead profiles.
- **Leverage SMS Campaigns**: The model shows that sending SMS significantly increases conversion rates (Last Notable Activity_SMS Sent has a coefficient of 0.8061). Interns should be tasked with sending targeted SMS follow-ups to potential leads.

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.

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Strategy for Minimizing Unnecessary Calls (After Target is Met):

When the company wants to minimize unnecessary calls:

- **Focus on Leads with Very High Conversion Likelihood**: The sales team should only focus on leads with a very high score, e.g., those with scores over 90, to minimize the number of calls made.
- **Avoid Low-Probability Leads**: Leads from sources with a lower likelihood of conversion, such as Lead Origin_Landing Page Submission (which has a negative coefficient of -0.5156), should be deprioritized during this period.
- **Use Email and Automated Messaging**: Instead of making calls, the sales team could use email follow-ups or automated messages for lower-priority leads. Features like "Last Notable Activity_Modified" have a negative coefficient (-0.6952), indicating these leads may not need immediate follow-up.

These strategies will optimize efforts during both aggressive conversion phases and periods where minimizing call volume is necessary.
