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

   The three most influential factors in determining the likelihood of a lead converting are:

   - **Total Time Spent on Website:** Leads who spend more time on the website have a significantly higher chance of conversion.
   - **Page Views Per Visit:** Surprisingly, an increase in 'Page Views Per Visit' is associated with a lower probability of conversion. This suggests that users who navigate through multiple pages may be more exploratory and less decisive about converting.
   - **Lead Quality:** A higher lead quality positively impacts conversion rates, whereas lower lead quality reduces the likelihood of conversion.

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 three key categorical or dummy variables that significantly impact lead conversion are:
   - **Lead Origin:** This represents how a lead enters the system, such as through API, Landing Page Submission, Lead Add Form, Lead Import, or Quick Add Form. Some origins are more effective in driving conversions, as indicated by their positive influence.
   - **Lead Source:** This variable identifies where the lead comes from, including platforms like Google, Direct Traffic, and Olark Chat. Certain sources tend to generate higher conversion rates than others.
   - **Tags:** This categorization reflects the status and intent of a lead. Leads associated with specific tags have a higher probability of conversion, as suggested by their positive impact in the model.

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.

Aggressive Lead Conversion Strategy (Intern Period)
To maximize lead conversion during the intern period, X Education should implement a strategy that emphasizes sensitivity. This involves identifying and engaging as many potential converters as possible, even if it means reaching out to some non-converting leads (accepting a higher number of false positives).

- **Reduce the Probability Threshold:** Instead of the standard threshold of 0.4, consider lowering it significantly to 0.2 or even 0.1. This adjustment will expand the pool of leads classified as potential converters, increasing the number of prospects for follow-up.
- **Intern-Led Outbound Calls:** Leverage interns to conduct outbound calls to all leads identified as potential converters under the adjusted threshold, ensuring maximum outreach.
- **Focus on High Volume:** The primary objective during this phase should be maximizing the number of leads contacted. Even if the conversion rate per call decreases slightly, the overall number of conversions is expected to rise due to the increased engagement.

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.

Strategy to Reduce Unnecessary Calls (Target Achieved Period)
Once the company has met its target, the focus should shift to efficiency by prioritizing precision over volume. This approach ensures that only the most promising leads are contacted, reducing false positives and optimizing the sales team's time.

- **Increase the Probability Threshold:** Raise the classification threshold significantly, setting it at 0.6 or even 0.7. This adjustment will narrow the pool of potential converters, ensuring that only the leads with the highest likelihood of conversion are pursued.
- **Experienced Sales Team Handling:** Assign the most skilled sales representatives to engage exclusively with these high-probability leads, maximizing the chances of successful conversions.
- **Limit Outbound Calls, Focus on High-Quality Leads:** Reduce proactive outbound calls except for top-scoring leads. Instead, prioritize responding to inbound inquiries and nurturing only those prospects who have the highest conversion potential based on the model.