

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 contributing most significantly to the probability of a lead getting converted, based on the model's coefficient analysis, are:

1. **Total Time Spent on Website:** Leads spending more time on the website are more likely to convert. This indicates high engagement and interest in the content or services offered, making it a strong predictor of conversion.
2. **Lead Origin:** Specifically, leads coming through the 'Lead Add Form' have a higher conversion rate. This source likely represents more engaged or interested individuals, possibly because these leads have taken proactive steps to fill out a form.
3. **Total Visits:** An engineered feature, the total visits variable sums up the count of visits by the lead to the website, which can be a strong and relevant indicator for any model.

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?

Focusing on the categorical variables transformed into dummy variables during the model preparation phase, the top three that significantly impact lead conversion are:

1. **Do Not Email_Yes:** The preference indicated by 'Do Not Email_Yes' suggests that leads opting out of emails might be more decisive and have a clear intent regarding their interest in the services, influencing their conversion probability.
2. **Lead Origin_Lead Add Form:** This dummy variable indicates that leads generated through the 'Lead Add Form' are highly likely to convert. Prioritizing these leads could significantly increase conversion rates.
3. **What is your current occupation_Working Professional:** Working professionals represent a category with a higher likelihood of conversion. This suggests targeting working professionals could be a strategic approach to increasing conversions.

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.

During the period with interns, to maximize lead conversion:

- **Prioritize High-Probability Leads:** Use the model to identify leads with the highest conversion probability. Focus efforts on these individuals first to ensure resources are directed where they're most likely to yield conversions.

- **Segmentation and Personalized Outreach:** Segment the high-probability leads based on key features like lead origin, current occupation, and specialization. Tailor outreach strategies (e.g., personalized phone calls or emails) that resonate with each segment's preferences and needs.
- **Leverage Interns for Engagement:** Assign interns to engage with these high-potential leads through phone calls, emphasizing the personalized benefits and addressing any queries or concerns they might have.

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.**

When minimizing outreach to focus on new work:

- **Increase Threshold for Outreach:** Adjust the model's threshold for predicting a lead as '1' (likely to convert) to a higher level. This means only contacting leads with a very high likelihood of conversion, ensuring that outreach is reserved for the most promising prospects.
- **Focus on Automated Follow-ups:** For leads below the new threshold but still showing some potential, use automated follow-ups like targeted emails or SMS messages. This approach keeps engagement up with minimal resource investment.
- **Utilize Lead Scoring:** Implement a lead scoring system that considers multiple factors (e.g., engagement level, lead source, occupation) to prioritize leads further. Only leads surpassing a certain score threshold should trigger a phone call, ensuring that human intervention is reserved for cases with the highest need and potential impact.