

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

Total Visits: Leads with a higher number of visits to the platform have an increased likelihood of converting into customers.

Total Time Spent on Website: The more time a lead spends on the website, the greater their probability of converting into a customer. These leads should be prioritized by the sales team.

Lead Source: This is a significant feature that deserves focused attention, particularly with those lead who used Google.

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?**

Based on the logistic regression model summary, the top 3 categorical/dummy variables that should be focused on in order to increase the probability of lead conversion (according to their significant coefficients and z-values) are:

- a. **Tags_Closed by Horizzon**
 - i. **Coefficient:** 9.9729
 - ii. This variable has the highest positive coefficient, indicating that leads with this tag have a significantly higher probability of converting.
 - b. **Tags_Lost to EINS**
 - i. **Coefficient:** 8.9915
 - ii. This tag also shows a high positive correlation with lead conversion, meaning leads with this tag are more **likely** to convert.
 - c. **Tags_Will revert after reading the email**
 - i. **Coefficient:** 6.9782
 - ii. This variable has a strong positive effect on the likelihood of conversion, suggesting that focusing on leads with this tag could increase conversion rates.
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.**

To make lead conversion more aggressive during the intern period, where the goal is to convert as many predicted leads (those with a prediction of 1) as possible, the sales team should focus on the following strategy:

- a. **Prioritize Leads with High Conversion Probabilities:** Focus on leads predicted as 1, particularly those with higher predicted probabilities of conversion (e.g., those with high values for "Total Time Spent on Website").
 - b. **Target High-Impact Tags:** Give priority to leads with tags like "Closed by Horizzon" (coefficient: 9.97), "Lost to EINS" (coefficient: 8.99), and "Will revert after reading the email" (coefficient: 6.98), as these are strongly associated with higher conversion probabilities.
 - c. **Focus on Key Occupations:** Leads from "Student" (coefficient: 2.10), "Unemployed" (coefficient: 2.61), and "Working Professional" (coefficient: 2.87) categories show a strong likelihood of conversion.
 - d. **Engage Interns for Targeted Outreach:** Interns should focus on these high-priority leads, ensuring personalized and timely follow-ups to maximize conversions.
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 unnecessary phone calls when the company reaches its target early, the sales team should focus on the following strategy:

- a. **Prioritize High-Probability Leads:** Only make calls to leads with predicted probabilities of conversion greater than 0.8. This ensures that resources are focused on leads most likely to convert.
- b. **Engage Lower-Scoring Leads via Automated Channels:** For leads with lower predicted probabilities, engage them through automated channels like email campaigns rather than making phone calls. This reduces the need for unnecessary calls while still maintaining contact.
- c. **Redirect Efforts to New Opportunities:** Shift the sales team's focus to generating new leads, or focus on cross-selling and up-selling to existing customers. This maximizes the team's productivity without relying on phone calls for low-conversion leads.
- d. **Monitor Engagement:** For leads with high engagement, like those spending more time on the website, continue targeted outreach while deprioritizing leads with minimal engagement.

By focusing on high-potential leads, automating outreach for lower-conversion leads, and redirecting sales efforts to new opportunities or existing customers, the sales team can minimize unnecessary calls and optimize their resources.