

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

Ans :

The top three variables in my model which will contribute the most towards the probability of a lead getting converted are :

	Feature	Importance
3	Total Time Spent on Website	0.111711
63	Lead Quality_Not Sure	0.066754
137	Tags_Will revert after reading the email	0.055386

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?

Ans :

Top 3 Categorical/Dummy Variables :

	Feature	Importance
63	Lead Quality_Not Sure	0.066754
137	Tags_Will revert after reading the email	0.055386
57	Tags_Will revert after reading the email	0.054265

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.

Ans :

1. Lower the Classification Threshold

Goal: Capture as many potential leads as possible (maximize recall for the positive class).

Reduce the default probability threshold (usually 0.5) in the logistic regression model to a lower value, such as 0.3 or 0.4. This ensures more leads are classified as potential conversions (1).

Reason: A lower threshold prioritizes identifying as many potential converters as possible, even at the risk of increasing false positives.

2. Rank and Prioritize Leads

Use the lead score (predicted probability) to rank potential leads. Focus on:

High-Probability Leads (e.g., scores > 0.7): Assign these leads to the most skilled interns or senior team members for immediate follow-up.

Medium-Probability Leads (e.g., scores between 0.3 and 0.7): Allocate these leads to interns for personalized outreach.

3. Tailored Communication

Focus on Top Features: Use insights from the top features (e.g. Lead Source, Last Activity) to customize communication:

Leads from referral sources or webinars might respond better to personal calls.

Leads with activities like "Downloaded Brochure" may benefit from detailed product discussions.

4. Monitor and Optimize Intern Efforts

Track intern performance daily or weekly to ensure effective lead engagement:

Measure metrics like calls made, successful conversations, and conversions.

Reallocate leads dynamically based on intern success rates.

5. Post-Campaign Analysis

After the two-month period, evaluate the strategy's effectiveness:

Analyze metrics like lead conversion rate, intern efficiency, and missed opportunities.

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.

Ans :

1. Increase the Classification Threshold

Goal: Only call leads with the highest probability of conversion (minimize false positives).

Raise the probability threshold for classifying leads as 1 (e.g., from 0.5 to 0.7 or higher).

Reason: A higher threshold reduces the number of leads classified as potential converters, prioritizing only those most likely to convert.

2. Target High-Probability Leads

Focus exclusively on leads with a conversion probability > 0.8 or a similarly high score.

Use the lead scoring model to identify these "hot" leads and prioritize them for communication.

Avoid engaging with low- or medium-probability leads during this phase.

3. Rely on Lead Behavior Insights

Leverage insights from key features (e.g., Last Activity, Total Time Spent on Website):

Focus on leads exhibiting strong intent signals like recent engagement with high-value activities

Ignore leads with minimal engagement or lower activity levels, as they are less likely to convert.

4. Automate Low-Priority Follow-Ups

Instead of phone calls, use automated email campaigns or messages for lower-probability leads:

Send follow-up emails with helpful information or promotions.

This keeps leads engaged without consuming the sales team's time.

5. Monitor Key Metrics

Track the precision and number of phone calls to ensure the strategy aligns with minimizing unnecessary effort.