

### Questions :

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

### Answers:

#### **Ans 1.** Top Three Variables With Greatest Contribution to Lead Conversion

According to logistic regression feature importance, the top three variables having the greatest contribution to lead conversion are:

Tags\_Lost to EINS (Coefficient: 7.02)

Tags\_Closed by Horizzon (Coefficient: 5.16)

Tags\_Will revert after reading the email (Coefficient: 4.43)

Insight:

The Tags column gives good leads status indicators, i.e., previous interactions with leads are an important factor to predict conversions.

Leads that are tagged as "Lost to EINS" or "Closed by Horizzon" are adversely affecting conversion rates.

Leads that respond with "Will revert after reading the email" can still be salvaged, so they must be followed up on with caution.

**Ans 2. Top Three Categorical Variables to Target**

The three categorical variables that have the strongest influence on conversion are:

Lead Source – Where the lead came from (e.g., Google, Facebook, Direct Traffic). Some sources are more valuable than others.

Last Activity – The most recent activity associated with the lead (e.g., "Email Opened," "Phone Call Received"). This is used to prioritize follow-ups.

Specialization – The industry sector of the lead. Some specializations convert better than others.

Recommendation:

Invest more in lead sources with high conversion rates and reduce budget on low-performing channels.

Monitor leads who opened an email but didn't reply and take follow-up actions.

Target customers from industries with high interest and conversion rates more effectively

**Ans 3. Strategy for Aggressive Lead Conversion (Intern Hiring Period)**

During the two-month internship period, when aggressive lead conversion is required:

- Reduce False Negatives (Maximize Potential Conversions)
- Call all forecasted 'hot' leads (Leads with high conversion probability)

Recommended Strategy:

Apply a lower probability threshold (e.g., 0.4 rather than 0.5) to mark leads as potential conversions.

Follow up more frequently through both calls and emails.

Target leads labeled "Will revert after reading the email", as they are more likely to convert.

Prioritize calling leads who spent longer on the website and had multiple interactions.

Run A/B tests on various sales scripts to determine which method is most effective.

This guarantees that nearly all high-potential leads are called, maximizing conversions during the internship period.

**Ans 4. Reducing Unnecessary Calls Strategy (Quarter Target Achieved)**

When X Education achieves its quarterly sales target ahead of schedule, the priority is to reduce unnecessary calls while still interacting with promising leads.

- Minimize False Positives (Less Wasted Calls)
- Make a call only to the most likely leads with an extremely high conversion probability

Recommended Strategy:

Set a higher probability threshold (e.g., 0.7 or 0.8 rather than 0.5) for lead qualification as "hot."

Prioritize only those leads with:

High website engagement (longer duration spent).

Strong intent (e.g., asked for course information, clicked on pricing).

Responded to previous emails or initiated contact through chat.

Low-priority communication through email/SMS campaigns rather than phone calls.

Provide fewer leads to each salesperson so that they have more time to devote to quality interactions.

This will lower wasted effort, conserve costs, and enhance efficiency with no diminishment in conversion quality.