

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

### Top 3 Most Important Variables in the Model

Based on the logistic regression coefficients and statistical significance from the model evaluation, the three most influential variables in predicting lead conversion are:

- 1) Total Time Spent on Website (Coefficient = 4.5480,  $z = 28.098$ ,  $p = 0.000$ )
- 2) What is your current occupation (Working Professional) (Coefficient = 2.7968,  $z = 14.467$ ,  $p = 0.000$ )
  - This could be because they are actively looking for career advancement opportunities.
- 3) Lead Origin (Lead Add Form) (Coefficient = 2.6841,  $z = 11.957$ ,  $p = 0.000$ )
  - Leads coming from the "Lead Add Form" have a higher chance of conversion.
  - This suggests that these leads may be more intentional and serious about their inquiries.

## 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?

### Top 3 Categorical/Dummy Variables to Focus on for Higher Lead Conversion

Based on the logistic regression coefficients and statistical significance, the top three categorical variables that have the highest impact on lead conversion are:

- 1) **Lead Origin (Lead Add Form) (Coefficient = 2.6841,  $z = 11.957$ ,  $p = 0.000$ )**
  - **Actionable Insight:** Focus on optimizing the **Lead Add Form**, making it more accessible and engaging to capture high-intent leads.
- 2) **What is Your Current Occupation (Working Professional) (Coefficient = 2.7968,  $z = 14.467$ ,  $p = 0.000$ )**
  - Working professionals are more likely to convert compared to other occupations.
  - **Actionable Insight:** Tailor marketing campaigns and content specifically for **working professionals**, emphasizing career growth and skill enhancement.
- 3) **Last Activity (SMS Sent) (Coefficient = 1.3072,  $z = 18.070$ ,  $p = 0.000$ )**
  - Leads who received an SMS are more likely to convert
  - **Actionable Insight:** Invest in **SMS follow-ups** as a crucial part of the lead nurturing process to improve engagement and 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.**

Since the goal is to maximize conversions during the **2-month internship period**, the company should focus on an **aggressive follow-up approach** to ensure that as many predicted leads (i.e., those classified as '1' by the model) convert.

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**1) Optimize Probability Cutoff for Maximum Recall**

- The default probability cutoff for logistic regression is **0.5**, but in this case, we want to **capture as many potential leads as possible**.
- Lowering the cutoff (e.g., **0.3 or 0.35**) will **increase recall**, ensuring more leads are classified as '1' (potential converters).

**2) Prioritize High-Impact Leads for Immediate Phone Calls:** Since resources (interns) are limited, the focus should be on leads with the highest probability of conversion. Interns should prioritize:**Leads with High Engagement:**

- Those who spent **significant time on the website** (e.g., top 20% in "Total Time Spent on Website").
- Leads **who have already interacted via SMS or email**.
- **Lead Add Form submissions** (proven high-intent leads).
- **Working professionals**, as they have a higher likelihood of conversion.

**3) Implement an SMS + Call Follow-Up Workflow:** Since SMS follow-ups have been shown to improve conversions, a **structured follow-up sequence** should be implemented:

- **Day 1 (Lead Generated):**
  - Send an **automated SMS/email** within 1 hour of lead submission.
  - If the lead has **opened the email or replied**, prioritize them for an immediate call.
- **Day 2 (No Response to SMS/Email):**
  - Assign an **intern to call the lead** within business hours.
  - If the lead does not pick up, leave a **voicemail** and follow up with another SMS.
- **Day 3-5 (Still No Response):**

- Send a **personalized email** with testimonials or limited-time offers.
- If still no response, schedule another **follow-up call** in 3-4 days.

- **Actionable Step:** Use **CRM software** to automate follow-ups and track engagement (e.g. who opened emails, clicked links, or responded).

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#### 4) Create a Sense of Urgency

- Promote **limited-time offers** during the internship period (e.g., “Exclusive Scholarship Valid for 2 Weeks” or “Limited Spots Available”).
  - Leverage **social proof** (e.g., testimonials from past students) in SMS/email campaigns. - -
- **Actionable Step:** Train interns to use urgency-based persuasion techniques during calls.
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#### 5) Monitor and Optimize Daily Performance

- Track daily conversion rates, call success rates, and response times.
  - Identify **which lead sources and strategies are working best** and reallocate intern efforts accordingly.
- **Actionable Step:** Hold **daily stand-up meetings** with interns to refine the approach based on real-time data.

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 Minimize Unnecessary Calls When Targets Are Met

When X Education reaches its quarterly target early, the focus should be on reducing unnecessary calls while still converting the most promising leads. Here’s the plan:

- 1) **Increase Probability Cutoff:** Raise the cutoff (e.g., 0.7 or 0.75) to classify only the highest-confidence leads as '1'. This reduces false positives, ensuring calls are made only when necessary.

- 2) Prioritize Only High-Intent Leads :** Focus only on leads with high website engagement (e.g., top 10% in “Total Time Spent on Website”). Give priority to leads from the Lead Add Form and Working Professionals, as they convert better.
- 3) Shift to Automated Follow-Ups:** Instead of calls, use personalized emails and SMS as the first touchpoint. Call only those who respond or show high engagement (e.g., open emails, click links).
- 4) Utilize Interns for Other Tasks:** Reallocate interns to data analysis, lead nurturing, or campaign optimization instead of cold calls.
- 5) Monitor and Adjust:** Track lead response rates and adjust the strategy if conversion rates drop too much