

Subjective Questions with Answer

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

Answer -

Lead Source_Welingak Website	: 5.43
Lead Source_Reference	: 2.93
Current_occupation_Working Professional	: 2.68

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?

Answer -

The top 3 categorical/dummy variables in the model that should be focused on to increase the probability of lead conversion are:

- I. **Lead Source_Welingak Website: 5.39**
 - Enhance the user experience of the Welingak Website with interactive tools such as live chat support, success stories, or free downloadable resources to capture more leads effectively.
- II. **Lead Source_Reference: 2.93**
 - Launch a referral rewards program offering exclusive benefits, such as early access to courses or gift vouchers, to incentivize existing customers to refer more leads.
- III. **Current Occupation_Working Professional: 2.67**
 - Host targeted webinars or workshops that address the career growth needs of working professionals, showcasing how the offerings can advance their careers.

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.

Answer -

To optimize lead conversion during the 2-month period, X Education can leverage the logistic regression model's predictions to systematically prioritize leads and enhance outreach. The following strategy can be implemented:

- I. **Focus on High-Probability Leads:** Use the model's predicted probabilities to rank leads. Interns should target the leads predicted as **1 (high probability of conversion)** first. These include segments like:
 - **Lead Source_Welingak Website (5.43):** Since this is the top predictor, allocate a specific group of interns to call these leads, offering personalized follow-ups and special course benefits. Prioritize quick outreach within the first few days of the campaign.
 - **Lead Source_Reference (2.93):** Leads obtained via references are warm prospects. Develop a structured calling script emphasizing social proof and referral advantages to nudge them toward conversion.
- II. **Segment-Based Targeting for Working Professionals:** For **Current Occupation_Working Professional (2.68)**, interns should highlight ROI-driven messaging like career advancement, upskilling opportunities, and success stories. Schedule follow-up calls during evening hours or weekends to align with their availability.
- III. **Optimize Calling Efforts with Data:** Use logistic regression probabilities to allocate resources. Interns can prioritize higher-probability leads for more intensive follow-ups while using SMS or email automation for low-probability leads.

By combining the model's predictions with structured intern efforts, X Education can efficiently increase conversion rates within the 2-month period.

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.

Answer -

To ensure the sales team minimizes unnecessary phone calls during times when quarterly targets are already met, the company can use a **data-driven filtering strategy** based on the insights from the logistic regression model and the provided visualizations:

I. **Prioritize High-Value Leads Only:**

- Focus exclusively on leads with a **high probability of conversion** (model-predicted probabilities close to 1) to ensure calls are purposeful.
- Target leads from **top categories** like:
 - **Last Activity:** *Email Opened* (3540) and *Converted to Lead* (973) suggest engaged and warm leads. Ignore inactive leads, such as *Unreachable* or *Email Bounced*.
 - **Current Occupation:** Working Professionals (706) exhibit higher likelihoods of conversion than Students (210) and other occupations.
 - **Lead Source:** Leads from **Welingak Website** and **References** should remain a priority, as they have proven high conversion rates.

II. **Automate Engagement for Low-Priority Leads:**

- Use email, SMS, or chatbots to interact with leads categorized as low priority, such as unemployed individuals or leads with inactive last activities.
- Automated responses will maintain touchpoints without involving the sales team.

III. **Re-engage Leads with Data Insights:**

- Analyze trends from visualizations and historical performance to identify dormant leads who previously showed engagement (e.g., opened emails). These can be revisited through automated nudges.

