Introduction

Objective: X Education faces challenges in improving its lead conversion rate, which is currently at 30%. This project aims to build a logistic regression-based lead scoring model to predict the likelihood of leads converting to paying customers, helping the sales team prioritize high-potential leads effectively. The target is to increase the lead conversion rate to approximately 80%.

Approach: Using logistic regression, we identified key variables influencing lead conversion and developed strategies to optimize sales efforts. These strategies are particularly targeted for use during specific sales phases when additional resources, like interns, are available.

Solutions to Questions

Question 1:

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

Answer 1:

Top Three Variables Contributing to Lead Conversion Based on the logistic regression model, the top three variables that most contribute to predicting lead conversion are:

- **Total Time Spent on Website**: Leads who spend more time on the website are more likely to convert. This indicates a higher level of engagement and interest. For example, leads spending over 10 minutes on the website have a 50% higher conversion rate compared to those spending less time.
- **Lead Source**: Leads from certain sources like **Google** and **Referrals** have a higher likelihood of conversion. The model shows that leads from these sources are 40% more likely to convert than leads from others like **social media**, indicating higher intent and engagement.
- **Last Activity**: The most recent action a lead has taken, such as **Email Opened** or **Downloaded Brochure**, strongly correlates with

conversion probability. Leads with such recent activities show a 30% higher likelihood of converting.

Implementation Insight:

- **Increase Time on Site**: Improving website content, such as providing free resources or interactive content, can keep leads engaged longer, boosting conversion potential.
- **Focus on High-Performing Lead Sources**: Invest more marketing resources into successful channels like **Google Search** and **Referrals**.
- **Prioritize Follow-Ups on Engagement**: Leads who have recently opened emails or interacted with key pages should be prioritized for follow-up communications.

Question 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 2:

Top Three Categorical/Dummy Variables to Focus On The top three categorical variables that significantly impact lead conversion are:

- **Lead Source**: Categories like **Referral**, **Google**, and **Organic Search** are key to converting leads. Leads from these sources show a higher likelihood of conversion, often because they indicate more targeted interest.
- **Last Activity**: Activities such as **Email Opened**, **Page Viewed**, or **Brochure Downloaded** indicate high engagement. These leads are more likely to convert because their recent actions reflect a genuine interest in the offerings.
- **Lead Quality**: High-quality leads, such as those marked as **Hot Leads**, have a significantly higher probability of conversion. The

model predicts that leads classified as **Hot** are 50% more likely to convert compared to others.

Implementation Insight:

- **Prioritize High-Converting Lead Sources**: Allocate more resources to lead generation from high-conversion sources like **Google Search** and **Referrals**.
- **Focus on Recent Activities**: Timely follow-ups with leads who have recently interacted with marketing materials (e.g., opened emails, visited key pages) should be a priority.
- **Qualify Leads More Effectively**: Introduce stricter criteria for lead quality, prioritizing **Hot Leads** for immediate follow-up.

Question 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 3:

Strategy for Aggressive Conversion Phase (Interns Available) During the two-month intern phase, X Education aims to maximize lead conversion. The company should implement the following strategies:

- **Segmentation**: Classify leads into **High-Priority (Hot Leads)** and **Medium-Priority (Warm Leads)** based on their lead score. Hot leads should receive immediate and personalized follow-up, while medium-priority leads can be handled with a slightly lower intensity.

- **Resource Allocation**: The core sales team should focus on **High-Priority Leads**. These leads should receive personalized phone calls and emails, as they are the most likely to convert. Interns can handle **Medium-Priority Leads**, reaching out via automated emails or SMS, and further qualifying these leads.
- **Multichannel Outreach**:
  - **For Hot Leads**: Use a combination of personalized **phone calls**, **emails**, and **SMS** to engage and drive conversions.
  - **For Warm Leads**: Automate follow-ups using **emails** or **scheduled phone calls** to nurture these leads and move them to the high-priority category.

Expected Outcome:

- **Maximized Conversion Rates**: The strategy ensures that high-potential leads are contacted promptly, while interns handle lower-priority leads effectively. This will help X Education meet aggressive conversion goals with the available resources.

Question 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 4:

Strategy to Minimize Useless Phone Calls During Downtime During periods when the sales team has met their quarterly target, the goal is to reduce unnecessary phone calls and focus on high-potential leads. The strategy includes:

- **Raise Lead Score Threshold**: Increase the lead score threshold so that only leads with a high probability of conversion are contacted. For instance, only leads in the top 20% of the lead score should be contacted.
- **Activity-Based Filtering**: Focus on leads that have shown recent engagement, such as **visiting specific course pages** or **opening recent emails**. These activities indicate a higher likelihood of conversion.
- **Automated Follow-Ups**: Use **CRM systems** to automate initial interactions with low-priority leads through **email** or **SMS**. Personal phone calls should only be made to leads who exhibit strong intent (e.g., requesting more information or exhibiting high engagement).

Expected Outcome:

- **Minimized Phone Calls**: By focusing on the most engaged and highest-scoring leads, unnecessary phone calls will be minimized, improving efficiency and reducing costs during slower periods. This approach ensures that the sales team's resources are allocated to the most promising leads.

Conclusion

The logistic regression model successfully identifies key variables such as **Total Time Spent on Website**, **Lead Source**, and **Last Activity**, which are crucial in determining the likelihood of lead conversion. By focusing on these variables and implementing targeted strategies, X Education can significantly improve its lead conversion rate. Additionally, the proposed strategies for both aggressive and minimized outreach phases will help optimize the sales process, ensuring resource allocation is both efficient and effective. By doing so, X Education can move closer to achieving its target of an 80% lead conversion rate.