

## **Lead Scoring Case Study**

This is a case study of the online learning platform X Education, which provides industry-aligned courses. One such challenge faced by the company was that its lead conversion rate was low at 30%. Further, the sales team had many potential leads to work with, meaning there were wasted resources and lost opportunities as there was inefficiency in targeting high-quality leads. The company aimed to develop a good lead-scoring model that can help identify high-potential leads that the sales team can focus on and improve the conversion rate beyond 80%.

## **Dataset and Solution Approach**

The dataset had 9,000 records with numeric and categorical attributes with lead origin, lead source, user engagement, and website activities. A well-structured approach to a case study, including data analysis, feature selection, model building, key insights, and strategic recommendations, was followed. Google and Direct Traffic were the best primary sources for leads, which gave a very high number of leads but may also have the poorest conversion rate. Referral leads and leads from the Welingak website had very high conversion rates and were valuable.

Leads who spent more time on the website had a higher probability of conversion. The easiest way to increase conversion rates is to improve website features to increase engagement from your users. Based on the behavior of users, the leads with the last recorded activity as 'Email Opened' and 'SMS Sent' had the highest conversion ratios. This insight allows the sales team to do more follow-ups for these particular segments. Categorically unemployed people had

the highest conversion rates across all. This means that targeting working professionals more efficiently using social media could actually enhance conversions.

### **Model Development and Performance Evaluation**

It was split into a 70-30 train test ratio. Features were standard scaled, and highly correlated variables were removed. A lead scoring model was fit and evaluated using a logistic regression model. The test dataset is used with four models, and the best-performing model had an accuracy of 79.6%, which shows high generalizability. The model's recall is 84.5%, meaning that most of the leads that converted were identified by the model. Some of the false positives continued, whereby the leads that were not converted were designated as potential conversions.

### **Leads Score Prediction & Business Impact**

The leads scored 0 to 100 according to the lead scoring systems. Scores above 75 also indicated a high conversion potential and were prioritized as they would need immediate follow-up. Additional engagement was needed through campaign email, follow-ups, and offers till mid-range scores (40-75). It also prioritized low scores (it was under 40) so that money wasn't being wasted. Its efficiency improved, which meant that the sales team spent less time on fewer potential leads, and that also reduced wasted effort and improved overall conversion rates.

### **Strategic Recommendations**

The sales team should immediately respond for faster conversions to leads with scores of more than 75. Personalized follow-ups and limited-time offers should be used to convert leads

with scores of 40 to 75. To dish out the direct sales effort instead of the passive engagement strategies like email marketing, the leaders with lower scores should.

Marketing investments should be increased in high-conversion sources such as Google, referrals, and the Welingak website, and an effort should be made to improve engagement for API and landing page submissions. Additionally, testimonials and demo videos, as well as interactive content, should be used to enhance website engagement and increase conversion rates. With high demand, aggressive follow-ups should be used for lead scores greater than 50, and with low demand, resources should be shifted to creating long-term leads.