

# Summary

In this case study for X Education, a thorough lead scoring model was created to forecast the possibility of a lead becoming a paying customer. The major goal was to improve the efficiency of the sales process by identifying high-potential leads, allowing the sales team to better focus their efforts.

The model was built using logistic regression, with an emphasis on a wide range of demographic and behavioral factors. Among the characteristics evaluated, total time spent on the website, total visits, and constant lead engagement emerged as the best predictors of conversion. Furthermore, categorical characteristics such as the lead's profession (with working professionals having a higher conversion probability), lead source, and preferred contact channel were found as critical determinants.

## Key Findings

- Total time spent on the website, total visits, and page views per visit are all variables that have a major impact on lead conversion.
- Lead Origin, Lead Source, and Last Activity are all essential considerations.
- Leads with a score of 28 or higher are more likely to convert, with percentages as high as 87%.

The model's performance was assessed using criteria such as accuracy, precision, recall, and specificity, which indicated a strong predictive capability. The model's insights suggest that during periods of greater sales capacity, such as when interns are available, an aggressive strategy of decreasing the cutoff would be the most productive. In contrast, in periods when the organization has already accomplished its sales targets, a more cautious approach focusing just on the most likely prospects would reduce wasteful outreach efforts.

The model provides a dependable rating system that can assist X Education focus on leads with a high likelihood of conversion, hence improving their overall efficiency and conversion rate.