

## summary

The challenge was to improve the rate at which potential leads become actual customers for X Education, which was currently only at 30%. To address this, a model was developed to give each lead a score, indicating how likely they are to convert. The goal was to achieve a conversion rate of 80%, as set by the CEO.

To build this model, several steps were taken. The data was cleaned by removing incomplete or irrelevant information, and missing data was filled in. Analysis was done to understand which factors have a significant impact on conversion. The data was then prepared for modeling by creating new features, dividing it into training and testing sets, and ensuring everything was ready for analysis.

The actual model was created through multiple iterations. Variables were selected based on their importance and the model's stability was ensured. The final model used 12 key variables and was tested on both training and testing data. The model's performance was assessed using various metrics like accuracy and sensitivity.

Based on the model's findings, recommendations were made to improve lead conversion. These included focusing more on advertising through the Welingak Website, offering discounts for referrals that lead to conversions, and targeting working professionals more aggressively due to their higher likelihood of converting.

The project provided valuable experience in working with data, understanding its patterns, building models, and evaluating their performance. It also emphasized the importance of choosing the right metrics and understanding the balance between different factors. Ultimately, the analysis provided insights into what drives lead conversion rates and suggested strategies to achieve higher rates.