

Summary Report

X Education is an online education company that offers courses to industry professionals. The company markets its courses on several websites and search engines like Google. Once people land on the website, they may browse the courses, fill out a form for a course, or watch some videos. When people provide their email address or phone number, they are classified as a lead. The leads are then contacted by the sales team to convert them into customers. The typical lead conversion rate at X Education is around 30%. The dataset was pre-processed and cleaned, which included handling missing values, dropping unnecessary columns, imputing data and treating outliers. To reduce the dimensionality of the dataset and select only the important features, Recursive Feature Elimination (RFE) was performed, and only 15 columns were selected out of the original 48. Logistic regression models were built, and manual feature reduction processes were used to build models by dropping variables with a p-value greater than 0.05. Logistic Regression Model - 4 was chosen as the final model as it showed significant p-values within the threshold, and there was no sign of multicollinearity with VIFs less than 5. The top three variables that influenced the lead conversion rate were 'Lead Origin_Lead Add Form', 'Current_Occupation_Working Professional' and 'Total Time Spent on Website'. Customers who spent more time on the website were more likely to convert, and leads generated through the lead add form and Working Professionals were more likely to convert. The sales team can use this information to prioritize their efforts and focus on leads that have a higher chance of conversion.

Based on these observations, several recommendations were made, like:

- Features such as 'Lead Origin_Lead Add Form', 'Current_Occupation_Working Professional', and 'Total Time Spent on Website' have a high conversion rate and should be utilized more in lead generation efforts.
- Working professionals should be aggressively targeted as they have a higher probability of converting and are likely to have better financial situations to pay for services.
- Referral leads generated by old customers have a significantly higher conversion rate and should be incentivized with discounts or other rewards to encourage more referrals.
- Increasing the frequency of media usage such as Google ads or email campaigns can save time and increase the conversion rate.
- Leads whose 'Last Activity' is 'SMS Sent' or 'Email Opened' tend to have a higher conversion rate and should be targeted more frequently.
- Analyzing the behaviour of customers who spend more time on the website can help improve the user experience and increase conversion rates, and company should focus on creating engaging content and user-friendly navigation to encourage customers to spend more time on the website.
- Understanding the most popular specializations can help tailor course offerings and marketing campaigns to specific groups of customers. Providing targeted content and resources for popular specializations such as Marketing Management and HR Management can also help attract and retain customers in those fields.