EXECUTIVE SUMMARY OF LEAD SCORING CASE STUDY

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:

- Prioritize features like 'Lead Origin_Lead Add Form', 'Current Occupation_Working Professional', and website engagement for enhancing lead generation.
- Focus on engaging working professionals who have a higher chance of conversion and financial capability.
- Offer incentives such as discounts to encourage more referrals from existing customers, leveraging their higher conversion rates.
- Utilize digital marketing strategies, like Google ads and email campaigns, more frequently to boost conversion efficiency.
- Target leads with recent 'SMS Sent' or 'Email Opened' activities, as these are indicative of a higher interest in conversion.
- Invest in analyzing and improving the website's user experience to keep potential customers engaged longer, thereby increasing conversion opportunities.
- Tailor course offerings and marketing efforts towards the most in-demand specializations, such as Marketing Management and HR Management, to attract and maintain interest in those fields.