SUMMARY

X Education, an online education company catering to industry professionals, employs various marketing strategies, including online platforms like Google, to promote its courses. Upon visiting the website, potential customers may explore courses, fill out forms, or engage with content. Leads are identified when individuals provide their contact information, and the sales team follows up to convert them into customers. The typical lead conversion rate stands at approximately 30%.

The dataset underwent preprocessing, addressing missing values, dropping unnecessary columns, and handling outliers. Recursive Feature Elimination (RFE) was employed to select essential features, resulting in 15 columns out of the original 48. Logistic regression models were constructed, and manual feature reduction, based on p-values below 0.05, was performed. Logistic Regression Model - 4 emerged as the final choice, demonstrating significant p-values and avoiding multicollinearity with VIFs below 5.

The top three factors influencing the lead conversion rate were identified as 'Lead Source_Welingak Website', 'Current_Occupation_Working Professional', and 'Lead Source_Reference' show a high conversion rate, emphasizing their importance in lead generation efforts. These insights enable the sales team to prioritize efforts towards leads with a greater likelihood of conversion.

Key Recommendations:
- Prioritize features like 'Lead Source_Welingak Website', 'Current_Occupation_Working Professional', and 'Lead Source_Reference' in lead generation efforts due to their high conversion rates.
- Target working professionals aggressively, considering their higher conversion probability and potential better financial situations.

- Incentivize referral leads from existing customers with discounts or rewards to encourage more referrals.

- Increase the frequency of media usage, such as Google ads or email campaigns, to save time and boost the conversion rate.

- Focus on leads with 'Last Activity' as 'SMS Sent' or 'Email Opened,' as they tend to have higher conversion rates.

- Analyze the behavior of customers spending more time on the website to enhance the user experience and increase conversion rates.

- Tailor course offerings and marketing campaigns based on the popularity of specializations, providing targeted content for fields like Marketing Management and HR Management to attract and retain customers.