Summary report

The problem statement given to us is identifying conversions from potential leads. This problem is equivalent to solving a learning problem such as a binary classification when we got the data set, we explore the data identified of your insights-built logistic regression model evaluate on a test sample and identified that we are able to achieve 80% performance in identifying a hot lead or conversion with a reasonably strong performance. We will be able to help with the business team increase their conversion rate.

The Logistic regression model was built after analysing and prepping the data, the data provided was cleaned variables by dropping them where null values were greater than 35% of the data. Some variables were discarded as those were not needed in our analysis like 'City and 'Country' as most of the leads were generated in India.

After the data cleaning and EDA, the data was split into Train and test data and Model was built by adjusting the VIF and P values using data fitting and later the Accuracy, specificity, sensitivity, precision and recall values were calculated from training and test data sets and optimal cutoff was generated using ROC curve.

In order to increase the lead conversion, the best prospects from which the leads generated should be prioritized. 'Total Visits', 'Total Time Spent on Website', 'Page Views Per Visit' contribute most towards the probability of a lead getting converted. The variables What is your current occupation_Working Professional, Lead Origin_Lead Add Form, Last Activity_SMS Sent, Lead Source_Welingak website have high conversion rates and thus should be given attention and priority.

In order to maximize conversion, Phone call and text message modes are the most effective way to reach out to leads. This will lead to better conversion rate for business teams.The prospects should be given tangible information about the product, this can be done by educating sales team with information about the product and by understanding and solving individual needs of the prospects.