**SUMMARY**

In this case study, problem statement was all about to find efficient ways to convert leads into 'Hot Leads'.And to do successful conversion require to assure promising leads with this analysis.The targeted efficiency for conversion rate was 50% more than original.

**To do this analysis following methods were followed:**

**1.Data Understanding and Exploration**

**•** In this dataset, there were 9240 rows and 37 columns.

• We seen that there are missing values in this dataset for more than 5 columns having 45% of missing data.

**2.Data Cleaning**

**•** For cleaning purpose we have removed null values from the data set and checked for duplicated values.

• Here we have considered 'select' option as null value beacuse user has not given any preference for the source.

• We also worked on numerical variable, Categorical variables and remove the ouliers.

**3.Data Preparation**

**•** The split was done at 80% and 20% for train and test data respectively.

• We have done scaling on the variables ['TotalVisits', 'Page Views Per Visit', 'Total Time Spent on Website']

**4.Model Building and Evaluation**

**•** For feature selection we have used RFE (recurssive feature elimination) to get 20 best of features

• Here we build Logistic Regression model as per suggested in the problem statement

• We achieved accuracy score of 81% and 81%, 82% of precision and recall respectively.

**5.Inference**

**•** API and Landing Page Submission have 30-35% conversion rate but count of lead originated from them are highest.

**•** Lead Add Form has more than 90% conversion rate but count of leads are not very high.

**•** Lead Import are very less in count.

**•** To improve overall lead conversion rate, we need to focus more on improving lead converion of API and Landing Page Submission origin and generate more leads from Lead Add Form.

**•** Google and Direct traffic generates maximum number of leads.

**•** Conversion Rate of reference leads and leads through welingakar website is high.

**•** To improve overall lead conversion rate, focus should be on improving lead converion of olark chat, organic search, direct traffic, and google leads and generate more leads from reference and welingak website.

**•** Leads spending more time on the website are more likely to be converted. Website should be made more engaging to make leads spend more time.