## **Lead Conversion Rate Optimization - Summary Report**

#### 1. Executive Summary:

The following report provides a comprehensive analysis of our lead conversion rate optimization efforts and key insights derived from the logistic regression model. This model aims to assign lead scores to potential customers, enabling us to focus our resources on high-potential leads and improve lead conversion rates.

#### 2. Model Evaluation:

Our logistic regression model has undergone rigorous evaluation on both the training and test datasets. The model demonstrates good performance in predicting lead conversions with the following metrics:

- Train Data:
- Accuracy: 80.8 %
- Sensitivity: 80.7 %
- Specificity: 80.8 %
- Test Data:
- Accuracy: 80.2 %
- Sensitivity: 79.3 %
- Specificity: 80.6 %

### Key Insights:

The company should prioritize making calls to leads with the following characteristics based on the coefficients from the final model:

#### Higher probabilities of conversion (Positive coefficients):

Lead Origin: Lead Add Form, Lead Import

Lead Source: Olark Chat, Welingak Website

Last Activity: Had a Phone Conversation, Others, SMS Sent

#### Lower probabilities of conversion (Negative coefficients):

Last Activity: Olark Chat Conversation, Modified, Unreachable

Current Occupation: Unemployed, Student

These leads have coefficients that positively contribute to the probability of conversion. Therefore, the company should target them for calls as they are more likely to convert into paying customers.

# 3. Top Contributing Variables:

The model identifies the top contributing variables to lead conversion probability.

These include:

Lead Origin_Lead Add Form	3.914415
Last Activity_Others	3.378900
Last Activity_Had a Phone Conversation	2.994631
Lead Source_Welingak Website	2.021243
Last Notable Activity_Unreachable	1.639852
Lead Origin Lead Import	1.495523

#### 4. Conclusion:

In conclusion, the logistic regression model provides valuable insights into lead conversion rate optimization. By strategically targeting high-potential leads and aligning our resources effectively, we can enhance lead conversion rates and overall business growth.