

Model Summary:

1. Importing Data

2. Inspecting the Data frame

3. Data Preparation

- Encoding Categorical Variables
- Handling Null Values
- Examining unique values
- Deleting the column Lead Number because it already has a unique value.
- Deleting the five columns " Magazine, Receive More Updates About Our Courses, Update me on Supply Chain Content, Get updates on DM Content, I agree to pay the amount through cheque.

4. EDA

- Univariate analysis
- Bi variate analysis
- Outlier detection
- Checking data imbalance

5. Dummy Variable Creation

The top three categorical/dummy variables in the model which should be focused the most on in order to increase the probability of lead conversion are:

- Lead Origin
- Lead Quality
- Last Notable Activity

6 Test-Train Split

- Scale the data to account for differences in the magnitude and range of the numerical variables.

7. Feature Scaling

8. Looking at Correlations

9. Model Building

- Logistic Regression Model

- Feature Selection
- Using RFE,
- Improving the model further inspecting adjusted R-squared,
- VIF and p-values

10. **Build a final model**

11. **Model evaluation with different metrics Sensitivity, Specificity**

Recommendations:

- More money may be spent on advertising and other aspects of the Welingak website.
- Incentives/discounts for supplying references that convert to leads; promote additional references.
- Working professionals will be aggressively targeted since they have a high conversion rate and are in a better financial position to pay greater fees.