Project Summary Report

The analysis is done for X Education company to build a model wherein need to assign a lead score to each of the leads such that the customers with higher lead score have a higher conversion chance and the customers with lower lead score have a lower conversion chance. To identify the most potential leads, also known as 'Hot Leads'. Conversion rate should go up as the sales team will now be focusing more on communicating with the potential leads given a ballpark of the target lead conversion from 30% to 80%. A typical lead conversion process can be represented using the following funnel:

Below are the steps used for Best module for effective lead conversion:

Data Reading Cleaning –

Importing data and reading the data for null, missing and NaN values. Dropping unnecessary data which are less important for the data visualization. We have changed the categorical variable for 'Select' variable to 'others'. Also converted yes and no to 1 and 0.

Using EDA –

Using the graph for the checking correlation between variables.

Lots of data are irrelevant in categorical variables. No outliers found in the data.

Dummy variable –

We have created dummy variables after clearing data. For Numerical data we have used MinMaxScaler.

Train-Test Split –

We have divided the data in Train and Test 70% and 30 % respectively for the precise module building.

Model Building –

Used RFE module building in the first 20 variables. And the rest variable was removed depending on VIF values and p-value.

Prediction –

Prediction was done on test data and the optimum cut off as 0.37 with accuracy, Sensitivity and specificity of came around 73%.

ROC is 0.77 quite good

Precision and Recall –

It was found that the variables that are matters the most in the potential buyers are:

1. The total time spend on website

2. Total no of visits

3. Leads source by Google, Direct Traffic, Organic search.

4. Last activity was more on SMS, Olark chat conversation.

5. Current occupation is as working profession.

From the above observation X Education can make optimal use of the employees as they have very High Chances of getting almost all buyers to change their mind and buy their product.