Executive report

A. Objective

Use dummy data to maximise revenue from direct marketing campaigns with below expected results;

1. Which clients have higher propensity to buy Consumer Loan?
2. Which clients have higher propensity to buy Credit Cards?
3. Which clients have higher propensity to buy Mutual Funds?
4. Which clients to contact with which offer?
5. What would be the expected revenue based on the developed strategy.

B. Result on the data points with labels

1. The propensity scores for every client and for every offer are considered. An assumption is made that a propensity score of 0.6 or higher represents a good enough score assuring that the client shall buy a given product. The clients are then filtered based on the propensity threshold and then sorted based on the expected revenue in descending order. Below results are obtained;

a. 43 clients should be contacted with CL offer with expected revenue of 481 €
b. 26 clients are to be contacted with MF offers with expected revenue of 363€
c. 31 clients to be contacted for CC offers with expected revenue of 317€
d. Total expected revenue is 1161€

C. Result on the data points without labels

2. Similar assumptions as in the case of datapoint with labels, are considered and below results are obtained;

a. 40 Clients are to be contacted with CL offers with predicted revenue of 232€
b. 26 Clients are to be contacted for MF offers with an predicted revenue of 171€
c. 34 Clients are to be contacted with CC offers with predicted revenue of 233€
d. Total predicted revenue is 636€

D. Improvements

1. Better tuning of Logistic regression.
2. More target correlated features.
3. More labelled data for training and testing.

E. Conclusion

1. A detailed analysis of given data was done.
2. Feature engineering among features and with target variable was done, so that no correlated features are included.
3. The developed algorithm shall help the marketing team to contact the right clients with right offers, hence avoiding wastage of time and resources.
4. By gathering more labelled data with more target correlated features and trying out deep learning models shall probably give better results.