Mock direct marketing campaign study

Executive summary

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Summary:

In order to optimize targeting and maximize the revenue of the direct marketing campaign, recommendations are designed using the data science methodology. The propensity models for the client's response to different types of products as well as the analytical model for the expected revenue from engaging new clients are developed. The ranking of the clients according to the expected revenue and the proposed type of the offered product are provided. The expected revenue from the 15% of the top ranked clients is estimated to be **424.6[1]**.

Propensity model explanation:

Using the mock dataset, general characteristics of the clients with known history of the response to the marketing offer were concluded. The important factors discriminating between positive and negative responses are found to be the **age of the client, bank tenure, actual current and savings accounts balance.** The importance of these factors to the propensity of the client to respond to the marketing offer can be explained by the general socio-economic status of different age groups. For example, young clients are unlikely to buy the consumer loan. The longer bank tenure is an indicator of the client loyalty and trust to the bank services. Moreover, the accounts balance are generic measures of the client's financial activity which predict the propensity to respond.

Several clients with anomalous revenue, suggesting their different nature, were identified. In order to not bias the expected revenue models, these clients are not included in the analysis. We propose manual review of these cases in order to evaluate the appropriateness of the general recommendation strategy for these individuals.

General recommendations on the strategy:

The provided list with the ranking of the clients and the proposed class of the marketing offer can be used in order to improve targeting of the campaign. Top

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[1] Unfortunately, units of the target variable were not provided in the task definition.

ranked candidates have to be contacted first in order to optimize the campaign revenue.

Future considerations

The model accuracy is limited by the size of the training dataset, therefore collecting more data would be beneficial for further improvements.