

COMMERCIAL BANKING, CORP

REQUEST FOR PROPOSAL RFP #: DM - F2.H2

TITLE: BANKING INSURANCE PRODUCT – REVISITED CLOSING DATE AND TIME: OCTOBER 19, 2023 @ 5:00 PM

Banking Insurance Product – Revisited: DM – F2.H2

Purpose

By responding to this Request for Proposal (RFP), the Proposer agrees that s/he has read and understood all documents within this RFP document.

Submission Details

Responders to this RFP should supply:

- A business report up to 5 pages (not including cover page, table of contents, or any needed appendix), including any supporting plots and tables
- The commented code used to produce the results

The report should address all points described in the "Objective" section below and be submitted electronically (through Moodle).

Background

The Commercial Banking Corporation (hereafter the "Bank") is seeking a continuation from RFP IP – F1.H3. The Bank is interested in developing a decision tree model to predict which customers are most likely to purchase a variable rate annuity product. You should use the training data set with original variables (not binned) to train the model.

Objectives

The scope of services in this phase include:

- The creation and discussion of a decision tree model to predict the likelihood of purchasing a variable rate annuity.
- Accuracy measure of this model on the validation data set compared to the best Logistic model created.
- Visualization (if possible) of the final decision tree model.

Data Provided

Use the following two data sets (provided from Logistic regression class):

- 1. The training data set **insurance_t** contains 8,495 observations and 48 variables.
- 2. The validation data set **insurance_v** contains 2,124 observations and 48 variables.

Be sure to keep missing information as missing and do NOT manually bin the variables.