Capital One ("PFG Bank"): Credit Card Exercise

Your goal is to maximize profits in solicitation 92-1 by planning and implement two rounds of mailings of up to 12 different product solicitations to up to 750,000 prospects.

There are 750,000 people in a database; 250,000 in each of three BK groups (150, 200, and 250). You are invited to send, AT MOST, one solicitation to each of these people. Each solicitation will offer one and only one of the 12 available products, but you may send different solicitations (products) to different people.

You may send your solicitations in two separate mailings (the first one will be called a test, and the second will be called a roll out). Or you may forego a test and simply send out a single roll-out mailing. As the case suggests, each mailing costs $800 (i.e. $800 for the test and $800 for the roll out). The first product solicitation you develop costs $10,000, and each additional product solicitation costs $1,000 to develop. Each solicitation costs $0.50 per piece to print and mail.

Note: You only get one shot at this: You can do exactly one test mailing and one roll-out mailing. If you make a mistake in either mailing, I do not have the ability to reset the exercise to let you correct your mistake. Please be careful!

To log in for the exercise as a team, submit decisions, or review team results, go to

https://forio.com/simulate/darden/credit-card-simulation

I will send a user ID and a password of each team in a separate email.

Once you log in you will find on the landing page a link to a pdf called "Scenario Description and User Guide," which repeats the case and provides screenshots of the way the exercise proceeds.

Preparation questions:

1. Why does Lifetime Customer Value vary with BK score? Why does Lifetime Customer Value vary with product? (See Exhibit 2 in answering these questions.)

2. Are predictive models on the basis of historical data applicable in this case? If so, why? If not, why not?

3. Is there a "best product" which works for all customers?

4. Describe and justify your testing strategy

Write-up Instructions:

- Please provide a written document addressing the preparation questions and describing and justifying your testing strategy.

- Grading system: I will use your results from the interactive web simulation to assess the results of your testing strategy. I will score each team in terms of profits from your decisions. About 1/3 of the grade (35 points) will be based on the profit and about 2/3 based on the quality of your arguments in the write-up (65 points).

Hints:

- In case you would like to analyze the data in Exhibit 1, follow the guidelines from the lecture on how to analyze experiments in Stata.

- A question that will come up during the case is the required number of responses you want to get for each test cell. If in doubt, settle for about 5000 per cell. Using the sample size calculator, this is what you need to distinguish 2% from 3% response rate. This is just a guideline – feel free to deviate from it if you feel the need for more (or less) precision.

- If case you decided to use JMP, please notice that you have an option of adding factors either as "Discrete Numeric" or as "Categorical." Please use only "categorical" for the APR, fee, and fixed/var factors.