

# Wells Fargo India & Philippines (WFIP)

## Campus Analytics Challenge - 2021

The Challenge Begins Now!!

### Context:

A Global Bank ('The Bank' or 'Bank') which offers products and services to its retail customers ranging from various kinds of deposits to credit in the form of credit cards, auto loans, mortgages and personal loans in looking to expand its business. To achieve this the Bank is looking to enhance its customer targeting strategy. The bank has historical data on past campaigns and customer attributes from both internal and external sources. Bank intends to use this data to come up with an optimum strategy to target the right set of customers for its 'Personal Loan' product. The objective of the strategy is to increase its revenues while keeping the risk under control. The teams are expected to use the available data to come up with a logical and scientifically derived solution for each of the two problems that the Bank faces. The teams are free to use any framework, technique or model to come up with their solution.

### Problem Statements:

From the data links provided below, use the 'Train' data for building the strategy/model while 'Test' data for answering the below questions.

#### Problem 1:

Which customers should the bank target for the Personal Loan product, such that the expected default rate for the bank is minimum (and must not exceed 2%) while targeting maximum customers?

- The teams are expected to come up with a binary (Y/N) flag for the 'Test' population to indicate the customers to be included in the campaign
- Teams should explain the approach used for this selection with clearly defined variables used and any technique/model deployed
- Output should include total targeted customers with expected Default Rate\* (should be explicitly mentioned in the presentation)

#### Problem 2:

Which channel should I use for contacting the customer, so that I can optimize my cost vs. benefit?

- The teams are expected to indicate the channel corresponding to each of the target customer selected as output from Problem 1
- Teams can use same channel or a mix of multiple channels for reaching the customer
- Teams should explain the approach used for this selection with clearly defined variables used and any technique/model deployed
- Output should include total cost of targeting the selected customers

\* Default Rate: Percentage of Customers who ever defaulted on their credit obligations (from the Total)

### Where is the Data?

The data files (along with data dictionary and channel cost) for the challenge can be downloaded from the below location using the team's Gmail ID given at the time of registration:

<https://drive.google.com/drive/folders/1YebGcTUM7swujlnMTdL7q8PCbPA22hhs>

### Additional Instructions:

- When creating your solution, you may use standard statistical methods, or develop your own novel method in order to extract and/or represent thematic information from the data file
- The output of the analytics challenge must include solution to both the business problems as stated above
- Additionally, the submissions need to include:
  - ✓ A presentation (maximum 7 slides) with Slide 1 - listing the name of the team, campus and participants, Slide 2 - giving the executive summary and Remaining 5 Slides - explaining your proposed approach, solution and expected outcome (along with why one (modelling/strategy) technique was preferred over other in case multiple approaches were considered)
  - ✓ The final output file with (Y/N) indicator and communication channel to be used
  - ✓ Any code/model used or any other supporting technical documentation, clearly explaining the variables used in the decision strategy and the approach
  - ✓ Codes submitted should be well commented and should be able to replicate the output as indicated in the approach. Also provide environment configuration file that lists the names and versions of the libraries used
  - ✓ Teams must provide citations and sources where applicable

### Submitting the Solution:

- Mail your solution to the WFIP official email ID: **WellsFargoIPAnalytics@wellsfargo.com**
- Do not use any compression software (.zip etc.) as it will be blocked by the incoming firewall.
- Please keep your submission size to 2 MB. In case all the files are not fitting into 2 MB size, multiple emails are allowed
- All submissions are to be done from official mail IDs. In the submission mail please mention your team's name and details
- Copy your campus SPOC in the mail
- Details for submissions for subsequent rounds (Round 2 and Round 3) will be shared with the shortlisted teams

### Judging Criteria:

Entries will be judged based on responses to each of the problem statements. Approach used and presented in arriving at the solution will be an important criterion for arriving at the final scores. The key criteria that will be used for judging the entries are listed below.

#### 1. Originality and innovation

- a) Creativity and uniqueness of the proposed method, implementation and usability.

## 2. Rigor

- b)** Is the solution working, complete, comprehensive, and clear?
- c)** Are the results reproducible, and reliable?
- d)** Is analysis reliable? Is the output robust? What tests/validations were performed to ascertain robustness?
- e)** Is the result/output able to adequately discriminate amongst approved vs declined?
- f)** Do the design and the approach demonstrate robustness and coherence?
- g)** Did you acknowledge and justify all necessary assumptions?
- h)** Is the description of the strengths and limitations of your method well thought-out?
- i)** Does the model maximize F1 score? How does the solution handle missing/outlier values? Does the solution use the least set of feature variables?

## 3. Actionability of insights

- j)** Summary / Interpretation of the output, specification of limitations, etc.?

## 4. Overall quality of presentation

- k)** Effective choice of visuals, page layout and emphasis on key points, wherever necessary.
- l)** For the written language parts of the deliverables, does each point flow logically from the previous point?

By participating in this Challenge, you agree to abide by these Rules, and the decisions of the Sponsor (WFIP) and its judges, which shall be final and binding in all matters relating to the Challenge.