Marketing and Customer Analytics
Batch 19 Term 6

Implementation and Execution Challenges

This deliverable has 20% weightage in the Consolidated Score Sheet and consists of 3 parts named Challenges 1 through 3.

Due Date: 28th January 2024, 11:55 PM

General Instructions:

1. This is an **individual assignment**.
2. **Do NOT submit .zip files**.
3. Code files rendered/exported as pdfs will **strictly not be considered for evaluation**.
4. The Honor Code for this submission is **3N-a.**
5. There are **3 submission folders** on LMS for the Implementation and Execution Challenges. Upload your submission files on LMS accordingly.
    - **MCAN I&E Challenges – 1**
    - **MCAN I&E Challenges – 2**
    - **MCAN I&E Challenges – 3**
6. Any late submission will attract a penalty as mentioned in the course outline.
7. **Email submissions are NOT allowed**. All the submissions must be made on LMS.
8. Handwritten content will not be considered for evaluation.
9. There is no penalty for early submissions!
10. **Please adhere to the given instructions. Submissions will not be considered if the instructions are not followed**.

Assignment Details and Deliverables:

- There are **three** Implementation and Execution Challenges, and each Challenge requires a separate submission on LMS. These Challenges are extensions of each of the Individual Assignments.
- Any Excel files and data (.csv files) that you may require can be found under the respective Individual Assignment – i.e., if you require any files for Challenge 1, please refer to the files shared as part of Assignment – 1.
- All work leading up to the submitted work, in all assignments of this course, must be in Python or R. Excel files are provided on LMS and in some other assignments to give you a simple, transparent computational specification of what needs to be done. **Your submitted work is NOT to be done in Excel**.
- To add some detail to the above point: Please provide your code as a Jupyter notebook for Python **(.ipynb)** or an R markdown file **(.rmd or .html)**. The code file(s) must be **fully executed** before submission and all **results/outputs of the code must be retained** in the submission file(s).
- All submissions in this course are individual assignments. There is to be no sharing whatsoever of program code or any written submission, in this and every future submission, because that detracts from learning. Such sharing is a violation of ISB's

Honor Code. If you are not able to do the HWs, please approach the faculty or the TA. We are here to help.

- The expected formats of the submission files are specified below:
  - **.pdf report**
    - Include only the required answers and explanations for all questions/parts.
    - **Do not copy questions** in the report – include only the question numbers.
    - Code files rendered/exported as pdfs will not be considered for evaluation.
    - Do not submit Word documents.
  - **Python (.ipynb) or R (.rmd or .html) code files**
    - Include comments wherever required.
    - Solutions and outputs must be retained in the fully executed code files before submission.
    - Excel workbooks will strictly not be considered for evaluation.
  - **Assignment Submission Form**
    - Must be **submitted separately** with the appropriate details filled in.
- The deliverables for each challenge are further detailed in the assignment briefs.

Challenge 1 is based on Product Optimization.

Deliverables:

1. A **PDF report** containing your responses to all the questions.
2. Your **R or Python codes** in the specified format.
3. Assignment Submission Form

Challenge 2 is based on Segmentation.

Deliverables:

1. A **pdf report** containing your responses for Tasks 1 and 2.
2. Your **R or Python codes** in the specified format.
3. Assignment Submission Form

Challenge 3 is based on Paid Search Bid Optimization and Display Advertising.

These challenges do not need any code writing, they need only some plain text responses possibly accompanied by some equations and graphics. You can submit these in a **1-2 page PDF report**. Also submit the **Assignment Submission Form** separately.