Technical Case: AIR MILES

Please prepare a 15-minute presentation that addresses the questions provided. The presentation should have a balance of approach and rationale, as well as showcasing insights from your analysis. Providing visuals such as graphs and charts would be helpful in facilitating comprehension and discussion with your audience. Assume the audience is a mix of technical and non-technical managers at the client organization. Please submit any files used for analysis: Excel workbooks, PowerPoint, R/python scripts/notebooks.

Notes:

* If you feel at any time you are missing information, or questions are unclear, please base your answers or findings on your own assumptions and document them. Some questions are intentionally left with some interpretation.
* All data is fictional but has signal and noise that would be expected of traditional transactional data.
* The data set is composed of a sample of 5,000 customers from 12 stores. Assume this is the entire store sales, but some strange behavior may be observed due to the down-sampling.

**Overview**

Hugh’s Organics is a regional grocer operating in Eastern Europe (i.e. Czech Republic, Slovakia, Hungary), and have opened a new store in Berlin to expand into new markets. They have run a loyalty program for the last 10 years and have recently engaged your company to help design a short-term promotion.

Loyalty members receive a base offer of 1 point for every $10 spent in store. For example, if a person spends $18 in store one day, and $35 the next, they would earn 1 point the first day and 3 points the following day. For ease of calculations, assume an additional 10% of points were issued as bonus points from various promotions. A total of 1,500 customers redeemed 150,000 points in 2007, for $1,500 off their groceries.

**Question #1: Promotional Analysis**

Hugh’s Organics recently ran a promotion in their new Berlin store, E01. For the month of June 2018, with each transaction, customers enter a draw for a variety of prizes with each purchase. The promo cost a total of $5,000 to run (includes advertising, prizes etc.).

Use descriptive analytics to evaluate whether this is a **good promotion to run again** or more frequently, and feel free to include any recommendations or thoughts you have based off your findings. What worked and what didn’t? How could things be changed or improved? Consider using store E03 in Budapest as a control market where the promotion was not run.

**Question #2: Centralized Measurement**

Hugh’s Organics would like to do more marketing campaigns and are planning to expand their strategy beyond just new stores promotions: products (buy X product get Y points), frequency (come X times), basket (spend X) and redemption (redeem X points in store) are all offer constructs they are planning to implement quickly.

The marketing team is wondering if instead of measuring each promotion manually like you did in #1, this could be handled by an automated framework that your team could build. The main requirement would be to measure all these different campaigns in an **automated** centralized tool, covering all constructs and analyzing data accordingly. As the product owner, you need to build a detailed roadmap for the next 12 months detailing (but not limited to):

* Where would you start
* How would you prioritize features
* What are the different stages (and timelines) of the framework’s creation
* Which tools would you use to analyze and share results
* How would you capture user feedback post implementation

For the sake of this exercise assume you have 1 direct report.

**Question #3: Intake process**

Your centralized measurement tool for Hugh’s Organics was such a success that the client started requesting the addition of multiple new features (all more urgent than the other). To improve efficiency and organization, you need to come up with an intake process for the project. What would it look like? Would you build an **intake form** – and if so, what would be the fields, tools and communication plan?