Task 1: KPI selection challenge

Scenario:

We work on a new product, a debit card for our merchants to let them access their earnings faster, without waiting bank transfer times. We've already done market research and will start communicating it to a merchant segment based on the research. The product workflow is:

- We email merchants to let them know about our new product. They can apply to it through a link.
- It can take up to 2 weeks for them to receive the debit card.
- When they made their first transaction, the card will be activated, and they will start receiving their earning to their card.
- If they change their setting from receiving their earning from the card to another setting, we count them as churned.

Questions:

- 1. Our first goal is to understand if we found product-market fit, if we solved their problem with our product. Based on the information above what should be our main KPI?
- 2. Which other metrics we should track?
- 3. What would you like to report, how would you visualize them, what kind of charts you would like to show?

Task 2: Data analysis challenge

Dataset attached in file [SumUp Task - Data analysis on card usage.xlsx]

- Analyze the data on how to decrease error rates.
- Which error statuses would you focus on?
- Summarize your findings with visualizations and write your suggestions to the product manager.

For the data visualization, Tableau is preferred but you can use any tool you want.

Task 3: SQL challenge

Assume the sample data is available in card_transactions table. Write the PostgreSQL query to list Client Id, Transaction Date, Amount EUR and a comparison column for each transaction that shows if the amount is increased or decreased compared to the previous transaction of the same client for all Approved transactions.

Result example:

Client Id	Transaction Date	Amount EUR	Comparison
1241	2/3/19 12:22	1.94	
1241	2/14/19 4:48	136.15	Increased
1241	3/1/19 16:11	16.1	Decreased
1241	3/1/19 18:40	7.33	Decreased
1242	2/21/19 10:52	0.05	
1242	2/25/19 12:09	1.78	Increased
1242	2/25/19 13:58	587.07	Increased