

## Risk Analyst I - Case - External

### 1. Introduction

If you get here, we already see you as a good fit for our company. Now, we propose a challenge similar to the ones you will face working with us.

The challenge has two parts, created to help you build the knowledge needed to implement the technical assessment in the end.

- The first challenge is similar to what you will be doing on a daily basis.
- The second challenge will help you understand how the payments industry works.

We expect you to grasp our role and the challenges within the financial industry, bringing innovative solutions to the table. Your evaluation will focus on logical reasoning, effective problem-solving, innovation, analytical mindset, customer centricity, and the performance of your solutions, rather than the aesthetics of your presentation.

### 2. Tasks

#### 2.1 Get your hands dirty

You have received a [spreadsheet](#) containing **hypothetical transaction data**. Your challenge is to identify potential suspicious behaviors and propose anti-fraud solutions.

#### Steps of the challenge

1. **Analyze the provided data**
  - Identify suspicious behaviors in the transactions.
  - Explain **what you found, what led you to this conclusion, and what actions you would take.**
2. **Broaden your analysis**
  - Beyond the provided spreadsheet, what other types of data would you consider relevant to detect potential fraud patterns?
3. **Provide recommendations**
  - Based on your conclusions, what measures would you suggest to **prevent fraud and/or chargebacks** in the future?
4. **Design an anti-fraud solution**
  - Propose a solution (conceptual or technical) that could support fraud detection or prevention.
5. **Present your results**
  - Summarize your findings, reasoning, and suggestions clearly.
  - You may use charts, tables, dashboards, or any other tool to enrich your presentation.

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## Data hints

- **User\_id** → identifier of the cardholder
  - **Device\_id** → identifier of the device used
  - **Has\_cbk** → indicates whether the transaction received a fraud-related chargeback
  - All transactions occurred in a **card-not-present (CNP)** environment.
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## Tools

- You may use any programming language or data analysis tool you are comfortable with.
- Feel free to be **creative** and explore different approaches.

### 2.1. Understand the Industry

1. Explain briefly the money flow, the information flow and the role of the main players in the payment industry.
2. Explain the main differences between acquirer, sub-acquirer and payment gateway, and how the flow explained in the previous question changes for these players.
3. Explain what chargebacks are, how they differ from a cancellation and what is their connection with fraud in the acquiring world.
4. What is an anti-fraud and how an acquirer uses it.

Good luck!