

Risk Analyst I - Case

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 three parts, created to help you build the knowledge needed to implement the technical assessment in the end.

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

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. 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.

2.2. Solve the problem

A client sends you an email asking for a chargeback status. You check the system, and see that we have received his defense documents and sent them to the issuer, but the issuer has not accepted our defense. They claim that the cardholder continued to affirm that she did not receive the product, and our documents were not sufficient to prove otherwise.

You respond to our client informing that the issuer denied the defense, and the next day he emails you back, extremely angry and disappointed, claiming the product was delivered and that this chargeback is not right.

Considering that the chargeback reason is “Product/Service not provided”, what would you do in this situation?

3. Get your hands dirty

Attached herein lies a [spreadsheet](#) with hypothetical transactional data. Imagine that you are trying to understand if there is any kind of suspicious behavior.

1. Analyze the data provided and present your conclusions. What suspicious behaviors did you find? What led you to this conclusion? What actions would you take?
2. In addition to the spreadsheet data, what other data would you consider to find patterns of possible fraudulent behavior?
3. Considering your conclusions, what would you further suggest in order to prevent frauds and/or chargebacks?
4. Create an anti-fraud solution.
5. Present your results and conclusions.

Some tips:

User_id: id of the cardholders;

Device_id: device used by the cardholder;

Has_cbk: transaction received a fraud chargeback or not.

All the transactions occurred in a card not present environment.

You can use any programming language that you want.

Feel free to be creative and use any tools you have in mind.

Good luck!