

# CloudWalk

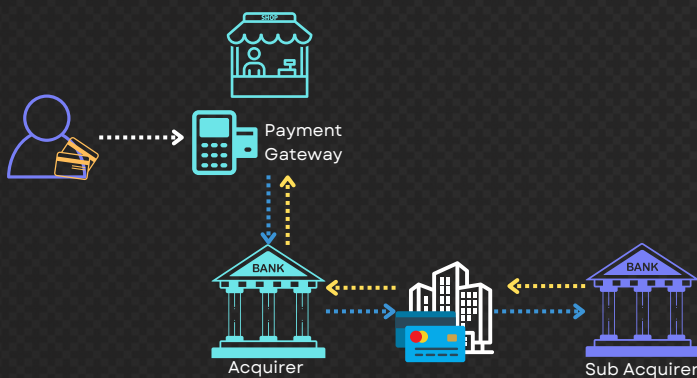
- INDUSTRY FUNDAMENTALS
- CUSTOMER CASE
- ANTI FRAUD CHALLENGE

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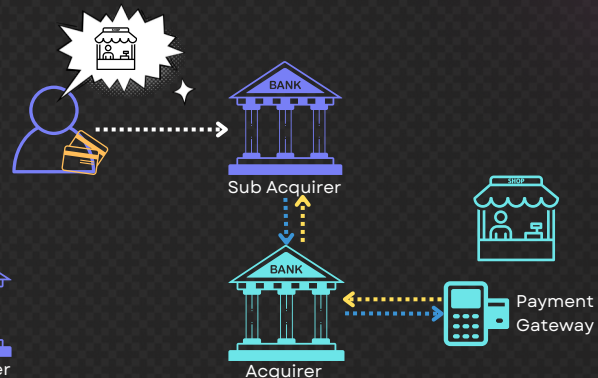
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## INDUSTRY FUNDAMENTALS

# Money Flow



# Chargeback



1. Explain briefly the money flow, the information flow and the role of the main players in the payment industry.

In summary, the money flow involves the movement of funds from the customer to the merchant, the information flow includes the secure transmission of payment data, and the key players (Acquirers, Sub-Acquirers, and Payment Gateways) collaborate to facilitate smooth and secure electronic transactions.

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.

Well, the Acquirer facilitates electronic payment transactions between merchants and card networks.

The Sub-Acquirer works with the acquirer to extend its services, often acting as a partner or reseller.

And the Payment Gateway is the tech infrastructure enabling secure transmission of payment information.

3. Explain what chargebacks are, how they differ from a cancellation and what is their connection with fraud in the acquiring world.

Simple: Chargebacks are initiated by the cardholder to dispute a transaction, while cancellations are typically initiated by either the customer or the merchant before the completion of the transaction

The fraud happens after receiving a service - when the transaction already went through clearing and settlement - then requesting a chargeback.



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?

Well, if the merchant is right, this is a friendly fraud case.

If it was a local buy, it's great to have an evidence like a surveillance camera that will identify the customer in the store.

If it is virtual, Proof of Delivery.

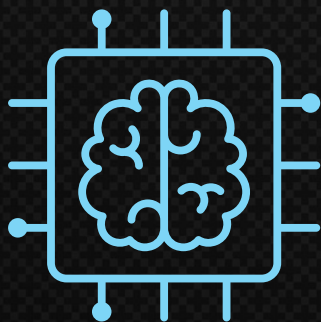
If it was a service provided, receipt of the service done signed by the customer locally.

If the merchant is unable to provide any of these data so we can help in his defense, we should advise him to consider having the tools to provide them in the next case so that his defense can be accepted by the issuer.

Plus, we should contact the issuer to verify what is their “ideal” evidence batch so we can advise the merchant to have the necessary tools to fulfill it if needed.

# ANTI FRAUD

## Isolation Forest Model (Unsupervised Learning)



Spot Outliers in  
Imbalanced Data

## STEPS

- Retrieve training CSV
- Convert into pandas dataframe
- Analyze Data and Add 3 Columns for Training
  - Time Interval
  - Attempts in Time Interval X
  - Attempts in Time Interval X
- Train over Data
- Create Flask Endpoint
- Receive incoming data
- Predict

## INSIGHTS

### Suspicious Behavior Patterns

- Consecutive Attempts
- Values Outliers
- Sum of Attempts Values

### Data Insights

- Geolocation
- Category Consumption per Payment Gateway

