

Data Overview

This dataset contains three interrelated groups that provide a comprehensive picture of customers and their financial behavior.

The data begins with basic user information such as name, contact details, and registration date. It then moves to card data, which includes age, income, debts, number of credit cards, and credit score for each customer.

Finally, the transactions data records all financial operations carried out by customers, including amounts, dates, and transaction types.

By integrating these tables, we can obtain a holistic view that helps analyze spending patterns, assess risks, and support financial decision-making.

1. Transactions Data — `transactions.xlsx`

Column	Description
id	Unique ID for each banking transaction.
date	Date of the transaction.
client_id	ID of the client who performed the transaction.
card_id	ID of the card used in the transaction.
amount	Value of the amount withdrawn or paid.
use_chip	Whether the card chip was used during the transaction (Yes/No).
merchant_id	ID of the merchant or entity involved in the transaction.
merchant_city	City where the merchant is located.
merchant_state	State/Province where the merchant is located.
zip	Postal code of the merchant's location.
mcc	Merchant Category Code, indicating the type of business activity.
errors	Any errors that occurred during the transaction (e.g., declined payment).

2. Cards Data — `cards_data`

Column	Description
id	Unique ID of the banking card.
client_id	ID of the customer who owns the card.

Column	Description
card_brand	Card brand (Visa, MasterCard, etc.).
card_type	Type of card (Debit, Credit, Prepaid).
card_number	Card number.
expires	Card expiration date.
cvv	Security code (CVV) on the back of the card.
has_chip	Whether the card has a smart chip (Yes/No).
num_cards_issued	Number of cards issued to the customer.
credit_limit	Credit limit of the card.
acct_open_date	Date when the account linked to the card was opened.
year_pin_last_changed	Last year the PIN was changed.
card_on_dark_web	Whether the card was detected on the dark web.

3. Users Data — `users_data.csv`

Column	Description
id	Unique ID of the customer.
current_age	Customer's current age.
retirement_age	Planned retirement age.
birth_year	Year of birth.
birth_month	Month of birth.
gender	Gender (Male/Female).
address	Residential address.
latitude	Latitude of residence.
longitude	Longitude of residence.
per_capita_income	Average per-capita income in the customer's area.
yearly_income	Customer's annual income.
total_debt	Customer's total debt.
credit_score	Credit score.
num_credit_cards	Number of credit cards owned by the customer.

Summary

We have three interrelated datasets:

- **Users Data:** Provides customer identity and basic details.
- **Cards Data:** Provides financial details and credit history.
- **Transactions Data:** Shows how customers use their cards and where they spend their money.