

Credit Card User Segmentation

Please limit yourself to 4 hours time!

Place your submissions to the Submissions sub-folder with the naming convention: lastname_firstname

The Goal

You work as a data scientist at a credit card company. A senior VP is leading an effort to reduce costs associated with signup incentives by offering credit cards with carefully targeted benefits that will attract new cardholders. As a first step, she would like you to examine cardholder data collected over the last 6 months in order to understand the various kinds of users who use the company's products. She is especially interested in getting an idea of which benefits to associate with each new card offering.

The Data

The data consists of [a csv file](#) with 8950 rows (one for each cardholder) organized in columns with descriptive headers.

Key to column labels:

CUST_ID : Credit card holder ID

BALANCE : Monthly average balance (based on daily balance averages)

BALANCE_FREQUENCY : Ratio of last 12 months with balance

PURCHASES : Total purchase amount spent during last 12 months

ONEOFF_PURCHASES : Total amount of one-off purchases

INSTALLMENTS_PURCHASES : Total amount of installment purchases

CASH_ADVANCE : Total cash-advance amount

PURCHASES_FREQUENCY : Frequency of purchases (percentage of months with at least one purchase)

ONEOFF_PURCHASES_FREQUENCY : Frequency of one-off-purchases

PURCHASES_INSTALLMENTS_FREQUENCY : Frequency of installment purchases

CASH_ADVANCE_FREQUENCY : Cash-Advance frequency

AVERAGE_PURCHASE_TRX : Average amount per purchase transaction

CASH_ADVANCE_TRX : Average amount per cash-advance transaction

PURCHASES_TRX : Average amount per purchase transaction

CREDIT_LIMIT : Credit limit

PAYMENTS : Total payments (due amount paid by the customer to decrease their statement balance) in the period

MINIMUM_PAYMENTS : Total minimum payments due in the period.

PRC_FULL_PAYMENT : Percentage of months with full payment of the due statement balance

TENURE : Number of months as a customer