Credit Card User Segmentation

Place your submissions to the Submissions sub-folder with the naming convention: DC2X_first_last

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.

CUST_ID : Identification of Credit Card holder (Categorical)

BALANCE : Balance amount left in their account to make purchases (

BALANCE_FREQUENCY : How frequently the Balance is updated, score between 0 and 1 (1 = frequently updated, 0 = not frequently updated)

PURCHASES : Amount of purchases made from account

ONEOFF_PURCHASES : Maximum purchase amount done in one-go

INSTALLMENTS_PURCHASES : Amount of purchase done in installment

CASH_ADVANCE : Cash in advance given by the user

PURCHASES_FREQUENCY : How frequently the Purchases are being made, score between 0 and 1 (1 = frequently purchased, 0 = not frequently purchased)

ONEOFFPURCHASESFREQUENCY : How frequently Purchases are happening in one-go (1 = frequently purchased, 0 = not frequently purchased)

PURCHASESINSTALLMENTSFREQUENCY : How frequently purchases in installments are being done (1 = frequently done, 0 = not frequently done)

CASHADVANCEFREQUENCY : How frequently the cash in advance being paid

CASHADVANCETRX : Number of Transactions made with "Cash in Advanced"

PURCHASES_TRX : Number of purchase transactions made

CREDIT_LIMIT : Limit of Credit Card for user

PAYMENTS : Amount of Payment done by user

MINIMUM_PAYMENTS : Minimum amount of payments made by user

PRCFULLPAYMENT : Percent of full payment paid by user

TENURE : Tenure of credit card service for user