

CREDIT CARD CASE STUDY

BUSINESS PROBLEM:

In order to effectively produce quality decisions in the modern credit card industry, knowledge must be gained through effective data analysis and modeling. Through the use of dynamic data driven decision-making tools and procedures, information can be gathered to successfully evaluate all aspects of credit card operations. PSPD Bank has banking operations in more than 50 countries across the globe. Mr. Jim Watson, CEO, wants to evaluate areas of bankruptcy, fraud, and collections, respond to customer requests for help with proactive offers and service.

DATA AVAILABLE :

The following datasets were used,

Customer Acquisition: At the time of card issuing, company maintains the details of customers.

Spend (Transaction data): Credit card spend for each customer

Repayment: Credit card Payment done by customer

Following are some of Mr. Watson's questions to a Consultant (like you) to understand the customers spend & repayment behavior.

1. In the above dataset,
 - a. In case age is less than 18, replace it with mean of age values.
 - b. In case spend amount is more than the limit, replace it with 50% of that customer's limit. (customer's limit provided in acquisition table is the per transaction limit on his card)
 - c. In case the repayment amount is more than the limit, replace the repayment with the limit.
2. From the above dataset create the following summaries:
 - a. How many distinct customers exist?

- b. How many distinct categories exist?
- c. What is the average monthly spend by customers?
- d. What is the average monthly repayment by customers?
- e. If the monthly rate of interest is 2.9%, what is the profit for the bank for each month? (Profit is defined as interest earned on Monthly Profit. $\text{Monthly Profit} = \text{Monthly repayment} - \text{Monthly spend}$. Interest is earned only on positive profits and not on negative amounts)