

Bank Customer Dataset Analysis



By: Yougender Chauhan

Lekha Ajit Kumar



California State University, Los Angeles

Submitted to Dr Shilpa Balan

OBJECTIVE OF THE STUDY:

The objective of the study is to analyze various aspects of customer demographics and financial behavior within a banking context. The study's aim is to provide insights into the demographics, financial behaviors, and socio-economic characteristics of the customer base in the context of banking services. By addressing these research questions, the study aims to understand how factors like education, gender, property ownership, marital status, income, age, and ways of living may influence or correlate with banking-related behaviors and outcomes. This analysis can help inform banking strategies, marketing efforts, and customer service approaches.

Demographics and Banking Behavior: By examining customer demographics, the study seeks to shed light on the diverse backgrounds and socio-economic characteristics of the bank's clientele. This understanding is crucial as it provides insights into who the customers are and their financial circumstances.

Financial Behavior Insights: The study aims to uncover patterns and trends in how customers interact with the bank. For example, it explores factors like credit status, promotions, property ownership, and income levels, which are all critical aspects of financial behavior.

Identification of Correlations and Influences: One of the key goals is to identify correlations and influences. By analyzing the data, the study aims to answer questions like whether gender has an impact on property ownership or how education levels relate to marital status. These findings can be valuable in understanding customer motivations and decision-making processes.

DATASET(S)/ DATA SOURCE URL:

<https://www.kaggle.com/datasets/xanikalsen/bank-customers-dataset>

Data Description

| NAME | DESCRIPTION | Example value |
|---------------|--|---------------|
| ID | Client number | 5008821 |
| CREDITSTATUS | Credit loan status 0: 1-29 days past due 1: 30-59 days past due 2: 60-89 days overdue 3: 90-119 days overdue 4: 120-149 days overdue 5: Bad debts / Write-offs C: paid off for that month X: no loan for the month | 2 |
| AGE | Age of the Client | 59 |
| GENDER | Gender (M = Male, F = Female) | F |
| CAMPAIGN | Number of Promotions | 13 |
| OWNPROPERTY | Owns a car (Y = Yes, N = No) | Y |
| CHILDRENCOUNT | Number of children | 1 |
| INCOMETOTAL | Annual Income | 135000 |

| | | |
|----------------|---|-------------------|
| INCOMETYPE | Income category | Working |
| EDUCATIONLEVEL | Education level | Higher education |
| MARITALSTATUS | Marital status | Married |
| HOUSINGTYPE | Way of living | House / apartment |
| MOBILE | Owens a mobile phone (1 = Yes, 0 = No) | 1 |
| EMAIL | Has an e-mail account (1 = Yes, 0 = No) | 1 |
| OCCUPATION | Occupation | Managers |
| FAMSIZE | Family size | 5 |

QUESTIONS OF ANALYSIS:

1. What is the distribution of education levels among the customers, and how does it vary between genders?
2. What is the breakdown of property ownership between the customer base, does gender have any effect on the breakdown?
3. What is the distribution of marital status among the customers, and how does it vary between genders and education levels?
4. Is there any difference in annual income among the customers, categorized by their ways of living, and how does this distribution differ between age groups?

5. How does the composition of customer families, including family size, correlate with their credit loan status, while accounting for variations in income categories and the presence of children?

REFERENCES:

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3. Article title: How can banking data analysis mitigate financial risks?

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