

Comprehensive Financial Insights Report

1. Introduction

This report presents a comprehensive analysis of financial and demographic data using categorical, numerical, and relational visualizations. The goal is to uncover patterns in income, savings, loans, and customer behavior to inform financial decision-making and segmentation strategies.

2. Categorical Insights

- BRId

BRId 3 dominates; BRId 2 and 4 are least frequent.

- GenderId

Balanced distribution between GenderId 1 and 2.

- IAId

IAId 1-4 and 8-15 have higher counts; others are lower.

- Credit Cards

Most individuals have 1 card; fewer have 2 or 3.

- Nationality

Europeans and Asians dominate; Africans least represented.

- Occupation

High diversity; no single occupation dominates.

- Fee Structure

High fee structure is most common.

- Loyalty Classification

Jade is most common; Platinum is least.

- Properties Owned

Even distribution across 0-3 properties.

- Risk Weighting

Risk 2 is most common; higher risks are rare.

- Income Band

Medium income band dominates.

- Nationality Cross-tabs

Europeans dominate across BRId, IAId, Loyalty, and Credit Cards.

3. Numerical Insights

All financial variables (Estimated Income, Superannuation Savings, Credit Card Balance, Bank Deposits, Checking Accounts, Saving Accounts, Foreign Currency Account, Business Lending) exhibit right-skewed distributions. Most individuals have low values, with a small number holding very high amounts. This indicates wealth concentration among a few individuals.

4. Scatter Plot Insights

- Business Lending vs Bank Loans: Strong positive correlation.
- Bank Loans vs Credit Card Balance: Higher loans linked to higher credit card balances.
- Estimated Income vs Checking Accounts: Positive trend with variability.
- Age vs Superannuation Savings: Slight negative correlation; savings decline post-retirement.
- Checking Accounts vs Foreign Currency Accounts: Positive correlation.
- Checking Accounts vs Saving Accounts: Strong positive correlation.
- Bank Deposits vs Saving Accounts: Deposits feed into savings growth.

5. Correlation Matrix

The correlation matrix reveals strong relationships between financial variables:

- Bank Deposits & Checking Accounts: 0.84
- Bank Deposits & Saving Accounts: 0.75
- Bank Loans & Business Lending: 0.42

These correlations highlight how liquidity, savings, and lending behaviors are interconnected.

6. Financial Behavior Lifecycle

1. Income -> Liquidity: Higher income leads to higher checking balances.
2. Liquidity -> Savings Growth: Checking balances correlate with savings and deposits.
3. Savings -> Diversification: Wealthier individuals hold foreign currency accounts.
4. Credit Expansion: Business lending and loans grow together; credit card balances rise with loans.
5. Retirement Drawdown: Superannuation savings decline with age.

7. Conclusion

This analysis reveals a coherent financial lifecycle: income drives liquidity, which supports savings growth and diversification. Credit expansion parallels this process, while retirement introduces a drawdown phase in superannuation savings. Categorical variables highlight demographic skew, balanced gender distribution, and financial behaviors centered around single credit card ownership,

medium income, and lower risk weightings.