# Credit Card Financial Analysis Report

## Overview:

This report summarizes key findings derived from an analysis of customer spending patterns, acquisition costs, activation rates, and credit utilization across various card categories. The insights are designed to provide actionable recommendations for stakeholders and business leaders to improve customer engagement, optimize card offerings, and minimize potential risks related to credit utilization and delinquency.

## 1. Spending Patterns Analysis

**Objective:**To understand where customers are spending the most and identify trends in spending behaviour across various categories.

**Key Findings:**

* Bills lead as the highest spending category, with a total expenditure of 10,979,732.00 across 2,970 customers. This suggests that offering payment solutions for recurring bills could be a lucrative strategy to engage customers.
* Entertainment follows closely with 7,603,478.00 in total spending, made by 1,988 customers. This indicates an opportunity for targeted rewards and promotions in the entertainment sector.
* Fuel and Grocery categories also show high spending, with 7,477,522.00 and 6,904,779.00 spent by 1,759 and 1,502 customers, respectively. Cards could be tailored to cater to these categories with additional incentives like fuel rewards and grocery discounts.
* Food and Travel show relatively lower spending but still significant, with 6,708,507.00 and 4,847,995.00, respectively. These categories present an opportunity for partnerships with food delivery services and travel-related offers.

**Conclusion:**Focus on the Bills, Entertainment, and Fuel/Grocery categories to increase card usage. Targeted campaigns in these areas could boost spending and enhance customer loyalty.

## 2. Customer Acquisition Costs & Activation Rates

**Objective:**To assess the effectiveness of customer acquisition efforts and the activation success of various card categories.

**Key Findings:**

* The Blue card category exhibits the highest activation rate, with 5,270 activated customers out of 9,214 total customers. The average acquisition cost for the Blue card is 96.37, indicating this category is both cost-effective and widely popular.
* The Gold card has a relatively low activation rate, with 106 activated customers out of 188 total customers, at an average acquisition cost of 93.31.
* Platinum cards show a lower success rate with only 39 activated customers out of 67 total customers, despite an acquisition cost of 98.06.
* Silver cards show moderate success, with 394 activated customers out of 639 total customers, at an acquisition cost of 95.23.

**Conclusion:**  
The Blue card is the most successful in terms of activation and cost-effectiveness. Additional efforts should focus on improving activation rates for the Platinum and Gold cards, possibly through enhanced offerings or better customer onboarding.

## 3. Interest Earned vs. Customer Income

**Objective:**  
To understand the relationship between customer income and interest generated by credit card usage.

**Key Findings:**

* Higher-income customers generally generate more interest revenue due to larger balances and more frequent usage. This is in line with the typical behavior of wealthier customers who are more likely to carry balances, resulting in higher interest charges.

**Conclusion:**A targeted strategy for high-income customers, offering premium rewards or higher credit limits, could result in increased interest revenue while maintaining customer satisfaction.

## 4. Credit Utilization & Risk Analysis

**Objective:**  
To identify customers with high credit utilization ratios and assess potential risks associated with them.

**Key Findings:**

* Customers with an Avg\_Utilization\_Ratio greater than 0.7 are at a higher risk of defaulting on their balances, especially in high-spend categories like Fuel and Bills.
* High utilization and revolving balances indicate a need for closer monitoring of such customers to prevent defaults or delinquencies.

**Conclusion:**  
Stronger credit checks and potentially lower credit limits should be implemented for high-risk customers. Offering personalized interventions like financial counseling or payment options could reduce delinquencies and improve financial stability.

## 5. Delinquency Analysis

**Objective**:  
To identify factors contributing to delinquency and examine the characteristics of delinquent accounts.

**Key Findings:**

* Customers with high revolving balances and utilization ratios are more likely to become delinquent. The Bills and Entertainment categories, which show high spending and high utilization, are key areas of concern for delinquency risks.
* Delinquent accounts tend to show higher transaction volumes and revolving balances, making them susceptible to late fees and interest charges.

**Conclusion:**  
Targeted solutions for customers in the Bills and Entertainment categories with high credit utilization could reduce delinquency rates. Options for credit limit reductions, repayment plans, and financial education could be implemented to assist these customers.