Key Performance Indicators (KPIs)

1. Total Loan Applications:

- Analyzed the total number of loan applications across different time periods.
- Identified a monthly pattern with notable increases in loan applications in **October and November** of 2021.

2. Total Funded Amount:

- The funded amount is the total sum disbursed as loans.
- **Key Insight**: Good loans contributed significantly less to the total funded amount compared to bad loans. This indicates a need for better risk management in loan approvals.

3. Total Amount Received:

- Measured the total repayments made by borrowers.
- **Key Insight**: Good loans have a higher repayment rate relative to the amount funded, reflecting better financial health of borrowers.

4. Average Interest Rate:

- Mean Interest Rate: 26.86%
- The bank is offering loans at a relatively high average interest rate, which could affect repayment rates and customer satisfaction.

5. Average Debt-to-Income Ratio (DTI):

- **Mean DTI**: 13.33%
- Monitoring DTI helps understand the financial health of borrowers.
 Borrowers with higher DTIs are more likely to default.

Good vs. Bad Loan Performance

Good Loans:

- Good Loan Application Percentage: 1.60%
- Funded Amount: \$10,368,900
- Total Received Amount: \$12,549,085
- Good loans show better repayment behavior and are a lower risk to the bank.

• Bad Loans:

- Bad Loan Application Percentage: 32.32%
- Funded Amount: \$166,838,400
- Total Received Amount: \$166,957,706

 A significant proportion of loans fall into the "bad" category, suggesting the need for tighter credit assessments and borrower profiling to reduce the number of high-risk loans.

Actionable Insights

- 6. **Increase Risk Management**: The high percentage of bad loans (32.32%) suggests a need to refine the loan approval process, perhaps by tightening credit score or DTI requirements.
- 7. **Focus on Regions with Strong Loan Performance**: Analyzing regional disparities could reveal opportunities to target areas where loans are more likely to succeed.
- 8. **Adjust Interest Rates for Long-Term Viability**: The average interest rate of 26.86% is high. Offering more competitive rates may improve loan repayment and customer retention.
- 9. **Target Loan Types with High Performance**: Loans with specific purposes, such as debt consolidation or home improvement, might perform better. Tailoring products to these categories could reduce defaults.