**BANK LOAN REPORT**

**PROBLEM STATEMENT**

**DASHBOARD 1: SUMMARY**

**Objective:**  
To monitor and assess our bank's lending activities and performance by creating a comprehensive Bank Loan Report. This report must provide insights into key loan-related metrics, enabling data-driven decisions, tracking of the loan portfolio's health, and identification of trends to inform lending strategies.

This dashboard must provide a high-level overview of the bank's lending activities. It must include:

1. **Total Loan Applications:**
   * Calculate the total number of loan applications received.
   * Track Month-to-Date (MTD) loan applications.
   * Monitor Month-over-Month (MoM) changes.
2. **Total Funded Amount:**
   * Sum the total amount of funds disbursed as loans.
   * Track the MTD funded amount.
   * Monitor MoM changes.
3. **Total Amount Received:**
   * Calculate the total amount received from borrowers.
   * Track MTD amount received.
   * Monitor MoM changes.
4. **Average Interest Rate:**
   * Calculate the average interest rate across all loans.
   * Track the MTD interest rate.
   * Monitor MoM changes.
5. **Average Debt-to-Income Ratio (DTI):**
   * Calculate the average DTI for all borrowers.
   * Track the MTD average DTI.
   * Monitor MoM fluctuations.

#### Good Loan v Bad Loan KPIs

**Objective:**  
To evaluate the performance of lending activities and assess the quality of the loan portfolio by distinguishing between 'Good Loans' and 'Bad Loans' based on specific loan status criteria.

This section must assess the quality of the loan portfolio:

1. **Good Loan KPIs:**
   * **Good Loan Application Percentage:** Percentage of loan applications classified as 'Good Loans.'
   * **Good Loan Applications:** Total number of 'Good Loan' applications.
   * **Good Loan Funded Amount:** Total funded amount for 'Good Loans.'
   * **Good Loan Total Received Amount:** Total received amount from 'Good Loans.'
2. **Bad Loan KPIs:**
   * **Bad Loan Application Percentage:** Percentage of loan applications classified as 'Bad Loans.'
   * **Bad Loan Applications:** Total number of 'Bad Loan' applications.
   * **Bad Loan Funded Amount:** Total funded amount for 'Bad Loans.'
   * **Bad Loan Total Received Amount:** Total received amount from 'Bad Loans.'

#### Loan Status Grid View

**Objective:**  
To gain a comprehensive overview of lending operations by creating a grid view report categorized by 'Loan Status.'

This grid must categorize loans by status, providing a comprehensive overview:

* **Metrics:**
  + Total Loan Applications
  + Total Funded Amount
  + Total Amount Received
  + MTD Funded Amount
  + MTD Amount Received
  + Average Interest Rate
  + Average Debt-to-Income Ratio (DTI)

**DASHBOARD 2: OVERVIEW**

**Objective:**  
To visually represent critical loan-related metrics and trends using a variety of chart types, facilitating data-driven decision-making and enabling the identification of trends and patterns.

This dashboard must visually represent critical loan-related metrics and trends:

1. **Monthly Trends by Issue Date:**
   * Track changes in total loan applications, funded amount, and amount received over time.
   * Identify seasonal trends and long-term patterns.
2. **Regional Analysis by State:**
   * Visualize lending metrics by state to assess regional disparities.
3. **Loan Term Analysis:**
   * Break down loan statistics based on different loan terms.
4. **Employee Length Analysis:**
   * Analyze lending metrics across borrowers with different employment lengths.
5. **Loan Purpose Breakdown:**
   * Categorize loans based on the stated purposes.
6. **Home Ownership Analysis:**
   * Categorize loans based on home ownership status to see how it impacts lending.

**DASHBOARD 3: DETAILS**

**Objective:**  
To provide a comprehensive 'Details Dashboard' offering a consolidated view of all essential loan data. This dashboard must act as a user-friendly interface for accessing critical insights into loan portfolios, borrower profiles, and loan performance.

This dashboard must provide a consolidated view of all essential information:

* Offer a comprehensive, user-friendly interface to access critical loan data, borrower profiles, and loan performance metrics. This dashboard must serve as a detailed snapshot of the bank's loan portfolio.