BANK LOAN REPORT

**DASHBOARD 1: SUMMARY**

To effectively monitor and assess our bank's lending activities and performance, we need to create a comprehensive Bank Loan Report. This report will provide insights into key loan-related metrics and their changes over time. The report will support data-driven decision-making, help us track the health of our loan portfolio, and identify trends to inform our lending strategies.

Key Performance Indicators (KPIs) Requirements:

1. Total Loan Applications: We need to calculate the total number of loan applications received during a specified period. Additionally, we should track the Month-to-Date (MTD) Loan Applications and observe the Month-over-Month (MoM) changes.
2. Total Funded Amount: Understanding the total amount of funds disbursed as loans is crucial. We also want to monitor the MTD Total Funded Amount and analyze the Month-over-Month (MoM) changes.
3. Total Amount Received: Tracking the total amount received from borrowers is essential for assessing the bank's cash flow and loan repayment. We should analyze the Month-to-Date (MTD) Total Amount Received and observe the Month-over-Month (MoM) changes.
4. Average Interest Rate: Calculating the average interest rate across all loans, MTD, and monitoring the Month-over-Month (MoM) variations in interest rates will provide insights into the overall cost of our lending portfolio.
5. Average Debt-to-Income Ratio (DTI): Evaluating the average DTI for our borrowers helps us gauge their financial health. We need to compute the average DTI for all loans, MTD, and track Month-over-Month (MoM) fluctuations.

Good Loans vs. Bad Loans KPIs To evaluate the performance of our lending activities and assess the quality of our loan portfolio, we need to create a comprehensive report that distinguishes between 'Good Loans' and 'Bad Loans' based on specific loan status criteria.

Good Loan KPIs:

1. Good Loan Application Percentage: Calculate the percentage of loan applications classified as 'Good Loans,' which includes loans with a status of 'Fully Paid' and 'Current.'
2. Good Loan Applications: Identify the total number of loan applications falling under the 'Good Loan' category.
3. Good Loan Funded Amount: Determine the total amount of funds disbursed as 'Good Loans,' which includes the principal amounts of loans with a status of 'Fully Paid' and 'Current.'
4. Good Loan Total Received Amount: Track the total amount received from borrowers for 'Good Loans,' which encompasses all payments made on loans with a status of 'Fully Paid' and 'Current.'

Bad Loan KPIs:

1. Bad Loan Application Percentage: Calculate the percentage of loan applications categorized as 'Bad Loans,' which includes loans with a status of 'Charged Off.'
2. Bad Loan Applications: Identify the total number of loan applications categorized as 'Bad Loans,' consisting of loans with a status of 'Charged Off.'
3. Bad Loan Funded Amount: Determine the total amount of funds disbursed as 'Bad Loans,' which comprises the principal amounts of loans with a status of 'Charged Off.'
4. Bad Loan Total Received Amount: Track the total amount received from borrowers for 'Bad Loans,' which includes all payments made on loans with a status of 'Charged Off.'

Loan Status Grid View To gain a comprehensive overview of our lending operations and monitor the performance of loans, we aim to create a grid view report categorized by 'Loan Status.' This report will provide insights into key indicators associated with different loan statuses, such as 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Received,' 'Month-to-Date (MTD) Funded Amount,' 'MTD Amount Received,' 'Average Interest Rate,' and 'Average Debt-to-Income Ratio (DTI).' This grid view will support data-driven decision-making and enable us to assess the health of our loan portfolio.

**DASHBOARD 2: OVERVIEW**

In our Bank Loan Report project, we aim to visually represent critical loan-related metrics and trends using a variety of chart types. These charts will provide a clear and insightful view of our lending operations, facilitating data-driven decision-making and enabling us to gain valuable insights into various loan parameters.

1. Monthly Trends by Issue Date (Line Chart):
   * Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
   * Objective: Showcase how these metrics vary over time, allowing us to identify seasonality and long-term trends in lending activities.
2. Regional Analysis by State (Filled Map):
   * Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
   * Objective: Visually represent lending metrics categorized by state, enabling us to identify regions with significant lending activity and assess regional disparities.
3. Loan Term Analysis (Donut Chart):
   * Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
   * Objective: Depict loan statistics based on different loan terms, allowing us to understand the distribution of loans across various term lengths.
4. Employee Length Analysis (Bar Chart):
   * Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
   * Objective: Illustrate how lending metrics are distributed among borrowers with different employment histories, helping us assess the impact of employment on loan applications.
5. Loan Purpose Breakdown (Bar Chart):
   * Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
   * Objective: Provide a visual breakdown of loan metrics based on the stated purposes of loans, aiding in the understanding of the primary reasons borrowers seek financing.
6. Home Ownership Analysis (Tree Map):
   * Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
   * Objective: Display loan metrics categorized by different home ownership statuses, allowing for a hierarchical view of how home ownership impacts loan applications and disbursements.

These diverse chart types will enhance our ability to visualize and communicate loan-related insights effectively, supporting data-driven decisions and strategic planning within our lending operations.

**DASHBOARD 3**: **Data**

In our Bank Loan Report project, we recognize the need for a comprehensive 'Details Dashboard' that provides a consolidated view of all the essential information within our loan data. This Details Dashboard aims to offer a holistic snapshot of key loan-related metrics and data points, enabling users to access critical information efficiently.

The primary objective of the Details Dashboard is to provide a comprehensive and user-friendly interface for accessing vital loan data. It will serve as a one-stop solution for users seeking detailed insights into our loan portfolio, borrower profiles, and loan performance.