DASHBOARD 1: SUMMARY

To effectively monitor and evaluate our bank's lending activities and performance, we need to develop a detailed Bank Loan Report. This report will offer insights into key loan-related metrics and their trends over time. It will assist in making data-driven decisions, tracking the health of our loan portfolio, and identifying trends to inform our lending strategies.

Key Performance Indicators (KPIs):

- Total Loan Applications: Calculate the total number of loan applications received within a specific period. Track Month-to-Date (MTD) loan applications and observe Month-over-Month (MoM) changes.
- Total Funded Amount: Measure the total amount disbursed as loans. Monitor the MTD Total Funded Amount and analyze the MoM changes.
- Total Amount Received: Track the total amount received from borrowers to assess the bank's cash flow and loan repayment. Analyze the MTD Total Amount Received and observe the MoM changes.
- Average Interest Rate: Calculate the average interest rate across all loans, including MTD, and track the MoM variations.
- Average Debt-to-Income Ratio (DTI): Evaluate the average DTI for our borrowers to gauge their financial health. Compute the average DTI for all loans, MTD, and track MoM fluctuations.

Good Loan vs. Bad Loan KPIs

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

Good Loan KPIs

- Good Loan Application Percentage: Calculate the percentage of loan applications classified as 'Good Loans' (loans with statuses of 'Fully Paid' and 'Current').
- Good Loan Applications: Identify the total number of loan applications in the 'Good Loan' category.
- Good Loan Funded Amount: Determine the total amount disbursed for 'Good Loans.'
- Good Loan Total Received Amount: Track the total amount received from borrowers for 'Good Loans.'

Bad Loan KPIs:

- Bad Loan Application Percentage: Calculate the percentage of loan applications categorized as 'Bad Loans' (loans with the status of 'Charged Off').
- Bad Loan Applications: Identify the total number of loan applications in the 'Bad Loan' category.

- Bad Loan Funded Amount: Determine the total amount disbursed for 'Bad Loans.'
- Bad Loan Total Received Amount: Track the total amount received from borrowers for 'Bad Loans.'

Loan Status Grid View

To comprehensively monitor our lending operations, we will create a grid view report categorized by 'Loan Status.' This report will analyze key metrics such as 'Total Loan Applications', 'Total Funded Amount', 'Total Amount Received', 'MTD Funded Amount', 'MTD (Month to Date) Amount Received,' 'Average Interest Rate,' and 'Average Debt-to-Income Ratio (DTI)'.

DASHBOARD 2: OVERVIEW

Our Bank Loan Report project will use various chart types to visually represent critical loan-related metrics and trends, facilitating data-driven decision-making and offering valuable insights.

Monthly Trends by Issue Date:

- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Received'
- X-Axis: Month (based on 'Issue Date')
- Y-Axis: Metrics' Values
- Chart style: Area Chart.

Objective: Show how these metrics vary over time, identifying seasonality and long-term trends.

Regional Analysis by State:

- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Received'
- Geographic Regions: States
- Chart: Filled Type

Objective: Represent lending metrics by state to identify regions with significant activity and regional disparities.

Loan Term Analysis:

- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Received'
- Segments: Loan Terms (e.g., 36 months, 60 months)
- Chart: Donut Chart

Objective: Depict loan statistics based on different terms, showing distribution across various lengths.

Employee Length Analysis:

- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Received'
- X-Axis: Employee Length Categories (e.g., 1 year, 5 years, 10+ years)
- Y-Axis: Metrics' Values
- Chart: Bar Chart

Objective: Illustrate how lending metrics are distributed among borrowers with different employment lengths.

Loan Purpose Breakdown:

- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' 'Total Amount Received'
- X-Axis: Loan Purpose Categories (e.g., debt consolidation, credit card refinancing)
- Y-Axis: Metrics' Values
- Chart: Bar Chart

Objective: Provide a visual breakdown of loan metrics based on loan purposes, understanding why borrowers seek financing.

Home Ownership Analysis (Tree Map):

- Metrics: 'Total Loan Applications', 'Total Funded Amount', 'Total Amount Received'.
- Hierarchy: Home Ownership Categories (e.g., own, rent, mortgage)
- Chart: Tree Map

Objective: Display loan metrics by home ownership status, offering a hierarchical view of its impact on loan applications and disbursements.

DASHBOARD 3: DETAILS

The Details Dashboard will provide a consolidated view of essential information within our loan data, offering a holistic snapshot of key metrics and data points.

Objective: The Details Dashboard aims to provide a comprehensive, 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.