BANK LOAN REPORT

PROBLEM STATEMENT

DASHBOARD 1: SUMMARY

To monitor and assess the lending activities and performance of our bank, we need to create a comprehensive Bank Loan Report. The aim of this study is to clarify key loan-related factors and their temporal evolution. The report will help us monitor the condition of our loan portfolio, make informed decisions, and identify patterns that can direct our lending strategies.

Key Performance Indicators (KPIs) Requirements:

1. Total Loan Applications: It is necessary to ascertain how many loan applications were received overall over a specific time period. Tracking Month-over-Month (MoM) variations and keeping an eye on Month-to-Date (MTD) loan applications are also essential.

2. Total Funded Amount: Understanding the total amount of money given as loans is crucial. We also want to keep an eye on the MTD Total Funded Amount and see how it changes month over month (MoM).

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 look at the Month-to-Date (MTD) Total Amount Received and monitor the Month-over-Month (MoM) changes.

4. Average Interest Rate: To better comprehend the total cost of our lending portfolio, we may determine the average interest rate across all loans (MTD) and track monthly interest rate fluctuations.

5. Average Debt-to-Income Ratio (DTI): Evaluating our borrowers' average DTI allows us to measure their financial health. We must calculate the average DTI for all loans, MTD, and track month-to-month (MoM) fluctuations.

Good Loan & Bad Loan KPI's

To assess the performance of our lending activities and the quality of our loan portfolio, we must create a detailed report that distinguishes 'Good Loans' from 'Bad Loans' based on specific loan status criteria.

Good Loan KPIs:

1. Good Loan Application Percentage: We need to calculate the percentage of loan applications that are classified as Good loans. This category includes loans with the status Fully Paid and Current.

2. Good Loan Applications: Figuring out how many loan applications fall into the overall Good Loan category, which includes loans with the statuses of Current and Fully Paid.

3. Good Loan Funded Amount: Calculating the total amount of money disbursed as good loans. This includes the majority of loans that are in the Fully Paid and Current loan status at the moment.

4. Good Loan Total Received Amount: Keeping track of all payments made by borrowers on Good Loans, including those on loans with the statuses of Current and Fully Paid.

Bad Loan KPIs:

1. Bad Loan Application Percentage: Determining the percentage of loan applications that are categorized as poor loans. This group includes, in particular, loans with the loan status of Charged Off.

2. Bad Loan Applications: Figuring out how many loan applications—including those with the Charged Off loan status—fall under the Bad Loans category overall.

3. Bad Loan Funded Amount: Determining the total amount of funds disbursed as Bad Loans. This comprises the principal amounts of loans with a loan status of Charged Off.

4. Bad Loan Total Received Amount: Monitoring the entire amount of money collected from borrowers for poor loans, as well as all loan payments made with the loan status Charged Off.

Loan Status Grid View

To get a complete overview of our lending operations and monitor loan performance, we plan to provide a grid view report classified by Loan Status. This report can be used to study and understand the key indicators associated with different loan conditions. By providing information on metrics 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 help us make data-driven decisions and assess the health of our loan portfolio.

DASHBOARD 2: OVERVIEW

Our Bank Loan Report project aims to visually represent significant loan-related data and trends using a variety of chart formats. We can make data-driven decisions and gain valuable insights into various lending situations with the help of these charts, which will provide us with a clear and analytical image of how we lend money.

Below are the specific chart requirements:

1. Monthly Trends by Issue Date (Line Chart):

Chart Type: Line Chart
Metrics: Total Loan Applications, Funded Amount and Total Amount Received

X-Axis: Month (based on Issue Date) Y-Axis: Metrics Values

Goal: This line graph will help us identify long-term trends and seasonality in lending activity by showing the changes in Total Loan Applications, Total Funded Amount, and Total Amount Received over time.

2. Regional Analysis by State(Filled Map):

Chart Type: Filled Map
Metrics: Total Loan Applications, Total Funded Amount and Total Amount Received

Geographic Regions: States
Objective: This complete map will visually represent loan criteria by state, allowing us to assess regional disparities and locate regions with significant lending activity.

3. Loan Term Analysis (Donut Chart):

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

Objective: This donut chart, which displays loan information based on various loan durations, may help us understand how loans are distributed throughout term lengths.

4. Employee Length Analysis (Bar Chart):

Chart Type: Bar Chart
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

Objective: This bar chart illustrates how lending criteria are allocated among applicants with different employment periods, allowing us to assess the impact of employment history on loan applications.

5. Loan Purpose Breakdown (Bar Chart):

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

Objective: This bar chart will provide a visual breakdown of loan metrics based on the stated purposes of loans, which will aid in understanding the primary reasons why borrowers seek money.

6. Home Ownership Analysis (Tree Map):

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

Objective: To provide a hierarchical view of the ways in which home ownership affects loan applications and disbursements, this tree map will show loan metrics grouped by various home ownership statuses.

DASHBOARD 3: DETAILS

We are aware that our Bank Loan Report project requires a comprehensive "Details Dashboard" that provides a single, cohesive view of all the important details in our loan data. This Details Dashboard's goal is to give consumers an easy way to access critical information by offering a thorough summary of significant loan-related metrics and data points.

Objective:

The Details Dashboard's primary goal is to offer a thorough and intuitive interface for acquiring crucial loan data. For users looking for comprehensive information about our loan portfolio, borrower profiles, and loan performance, it will be a one-stop solution.