Problem Statement

Dash Board 1: Summary

Total Loan Applications:

We need to calculate the total number of loan applications received during a specified period. Additionally, it is essential to monitor the Month-to-Date (MTD) Loan Applications and track changes Month-over-Month (MoM).

Total Funded Amount:

Understanding the total amount of funds disbursed as loans is crucial. We also want to keep an eye on the MTD Total Funded Amount and analyse the Month-over-Month (MoM) changes in this metric.

Total Amount Received:

Tracking the total amount received from borrowers is essential for assessing the bank's cash flow and loan repayment. We should analyse the Month-to-Date (MTD) Total Amount Received and observe the Month-over-Month (MoM) changes.

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 our lending portfolio's overall cost.

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 Loan v Bad Loan KPI's

Good Loan:

- 1. Good Loan Application Percentage
- 2. Good Loan Applications
- 3. Good Loan Funded Amount
- 4. Good Loan Total Received Amount

Bad Loan:

- 1. Bad Loan Application Percentage
- 2. Bad Loan Applications
- 3. Bad Loan Funded Amount
- 4. Bad Loan Total Received Amount

Loan Status Grid View

In order 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.' By providing insights into 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 empower us to make data-driven decisions and assess the health of our loan portfolio.

CHARTS

Dash Board 2: Overview

- 1. Monthly Trends by Issue Date (Line Chart): To identify seasonality and long-term trends in lending activities
- **2.** Loan Term Analysis (Donut Chart): To allow the client to understand the distribution of loans across various term lengths.
- **3.** Employee Length Analysis (Bar Chart): How lending metrics are distributed among borrowers with different employment lengths, helping us assess the impact of employment history on loan applications.
- **4.** Loan Purpose Breakdown (Bar Chart): Will 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.
- **5. Home Ownership Analysis (Tree Map):** For a hierarchical view of how home ownership impacts loan applications and disbursements.

GRID

Dash Board 3: Details

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.