

Bank Problem Statement

The lending department is responsible for monitoring loan performance, borrower behavior, and overall portfolio health. Currently, the organization lacks a centralized reporting system to track key loan metrics, identify risk patterns, and evaluate lending trends. This limits the ability of decision makers to assess performance, manage risk, and make data-backed lending decisions.

To address this gap, the organization requires a comprehensive analytics solution that provides clear KPIs and visual insights covering loan applications, funded amounts, repayments, borrower profiles, and loan status. The goal is to enable consistent monitoring, trend analysis, and informed decision making across the loan portfolio.

KPI Requirements

1. Total Loan Applications

There is no clear visibility into the total number of loan applications received over time. This makes it difficult to assess demand and track growth. Month-to-Date (MTD) and Month-over-Month (MoM) trends are required.

2. Total Funded Amount

The organization lacks a consolidated view of the total amount disbursed as loans. Tracking MTD funded amounts and MoM changes is essential for understanding lending volume and capital deployment.

3. Total Amount Received

There is limited insight into the total amount received from borrowers through repayments. This restricts the ability to evaluate cash flow and repayment behavior. MTD and MoM analysis is required.

4. Average Interest Rate

Without tracking the average interest rate, the organization cannot assess the overall cost and pricing behavior of its loan portfolio or observe changes over time.

5. Average Debt-to-Income Ratio (DTI)

The absence of DTI analysis makes it difficult to evaluate borrower financial health and risk exposure. Average DTI, along with MTD and MoM changes, is required.

Good Loan vs Bad Loan KPIs

To better assess portfolio quality, the organization needs a clear separation between good and bad loans, including:

- Good Loan Application Percentage
- Good Loan Applications
- Good Loan Funded Amount
- Good Loan Total Amount Received
- Bad Loan Application Percentage
- Bad Loan Applications
- Bad Loan Funded Amount
- Bad Loan Total Amount Received

This distinction will help evaluate risk, defaults, and recovery performance.

Chart Requirements

1. Monthly Trends by Issue Date

To identify seasonality and long-term lending trends using line charts.

2. Regional Analysis by State

To understand geographic distribution of lending activity and regional disparities.

3. Loan Term Analysis

To visualize how loans are distributed across different term lengths.

4. Employment Length Analysis

To assess how borrower employment history impacts loan applications and funding.

5. Loan Purpose Breakdown

To understand the primary reasons borrowers seek loans.

6. Home Ownership Analysis

To evaluate how home ownership status influences loan behavior and disbursement.

Metrics displayed across charts include Total Loan Applications, Total Funded Amount, and Total Amount Received.

Details Dashboard Objective

The organization requires a detailed dashboard that provides a consolidated, loan-level view of all critical information. This dashboard will allow users to drill down into individual records, borrower profiles, and performance metrics, enabling efficient access to detailed insights.

Conclusions

Lending decisions are constrained due to the lack of structured KPIs and visual analytics. Implementing these dashboards will provide clarity into loan performance, borrower risk, and portfolio health. This will support better monitoring, stronger risk assessment, and more informed lending strategies.