

Bank Loan Report Analysis

Unlocking insights into loan performance and risk.





Problem & Objective

Lack of Centralized View

No real-time loan performance across key indicators.

Limited Tracking

Difficulty tracking applications, funded amounts, interest rates, and DTI MoM.

Project Goal

Develop interactive report for monthly trends and data-driven decisions.

Dataset Summary

Data Source: Kaggle

- Rows: 38,576
- Columns: 24

Key Features:

- Address state, Employment Length, Grade
- Home Ownership, Issue Date, Loan Status
- Purpose, Term, DTI, Interest Rate, Loan Amount





Tools & Techniques



Kaggle API/CSV

Data acquisition for analysis.



Power BI

Visualization and reporting.

Exploratory Data Analysis

01

Import & Transform

CSV into Power BI, clean data in Power Query.

02

Data Quality Checks

Column types, missing values, duplicates.

03

Create New Tables

New 'Date' table for time-based analysis.

04

Develop Measures

MTD, MoM, Average Rates, Good/Bad Loans.



Key Performance Indicators (KPIs)

1

Total Loan Applications

MTD & MoM tracking.

2

Total Funded Amount

MTD & MoM changes.

3

Total Amount Received

MTD & MoM analysis.

4

Average Interest Rate

MTD & MoM variations.

5

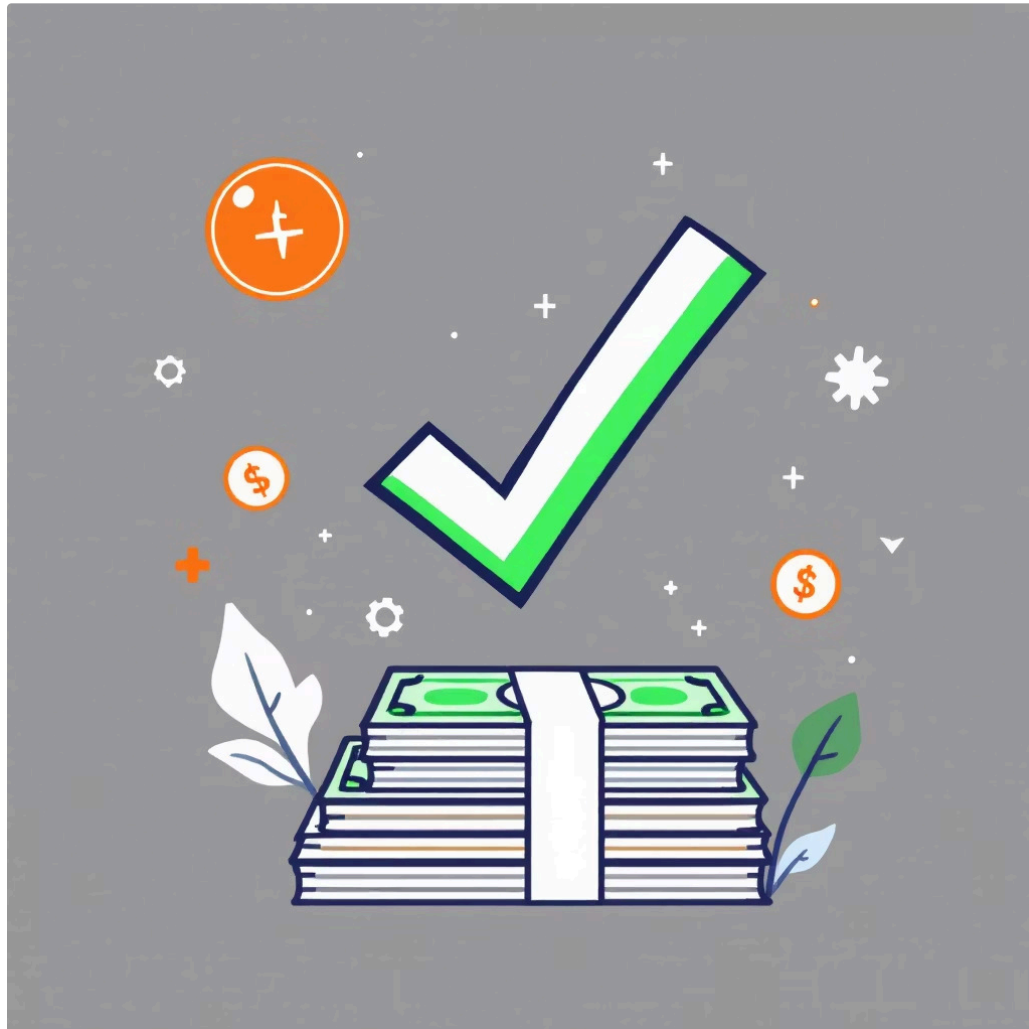
Average DTI

MTD & MoM fluctuations.

Good vs. Bad Loan KPIs

Good Loan KPIs

- Application Percentage (Fully Paid, Current)
- Total Applications
- Funded Amount
- Total Received Amount



Bad Loan KPIs

- Application Percentage (Charged Off)
- Total Applications
- Funded Amount
- Total Received Amount



Dashboard 2: Overview Charts



Monthly Trends

Applications, Funded, Received by Issue Date.



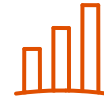
Regional Analysis

Lending metrics by state (Filled Map).



Loan Term Analysis

Distribution across term lengths.



Employment Length

Impact of employment history on loans.



Loan Purpose

Breakdown by categories.



Home Ownership

Hierarchical view of loan metrics.



Dashboard 3: Details

Objective: Provide a comprehensive, user-friendly interface for vital loan data.

- Holistic snapshot of key loan-related metrics.
- Detailed insights into loan portfolio, borrower profiles, and performance.

Recommendations

→ Promote Low-Default Loans

Target marketing for purposes with lower default rates.

→ Focus on High-Performance States

Increase lending in states with higher good-loan ratios.

→ Tie Growth to Bad-Loan Ratios

Set MoM growth targets with acceptable bad-loan ratios.

→ Strengthen Credit Screening

Prioritize applicants with lower DTI and strong repayment history.

→ Align Marketing Campaigns

Match campaigns to segments with high approval-to-good-loan conversion.