Loan Portfolio Management and Performance

Problem Statement:

Advanced Dashboard Development for Loan Data Analysis. The current approach to loan data analysis lacks depth and interactivity, hindering the ability to derive meaningful insights for informed decision-making. Traditional reporting methods fall short in providing a comprehensive view of lending operations, borrower behavior, and loan performance metrics. There is a pressing need for advanced dashboard design to address these limitations and unlock the full potential of our loan data.

Objective:

Our goal is to design and implement an advanced, interactive dashboard that provides a comprehensive analysis of loan data, encompassing lending operations, borrower behavior, and loan performance metrics. This dashboard aims to enhance data depth and interactivity, enabling stakeholders to extract meaningful insights for informed decision-making and to fully leverage the potential of our loan data.

Dashboard 1: Summary Page

Purpose:

This dashboard offers stakeholders a general overview of the bank's situation. It provides key performance indicators (KPIs) to support the evaluation of the bank's lending operations.

Features:

Total Applications:

- Displays the number of customer records involved in lending activities.

- Monitors Month-to-Date (MTD) and Month-over-Month (MoM) percentage changes to aid in decision-making.

Total Funding Amount:

- Shows the cumulative amount of funds lent by the bank over time.

- Analyzing disbursed funds alongside MTD and MoM indices provides deeper insights into funding operations.

- Helps the bank respond quickly to changing trends.

Total Amount Received:

- Indicates the total cash flow the bank has received from lending activities to date.

- Provides specific details about the revenue generated from lending operations.

- Helps prevent losses in the lending process by observing MTD and MoM indices for actionable insights.

Average Interest Rate:

- Presents the average interest rate across all loans.
- Assists stakeholders in making decisions to adjust interest rates to reduce future customer attrition by focusing on MTD and MoM trends.

Average Debt-to-Income (DTI) Ratio:

- Supports the evaluation of borrowers' financial resilience.
- Tracks patterns in MTD and MoM indices to assess borrower stability.

Good Loans vs. Bad Loans:

- Shows the distribution between good and bad loans.
- Classified using KPI indices (applications, funding, payments) and presented as percentages.

Loan Status:

- Provides a grid displaying various loan statuses.
- Offers insights to support stakeholders in data-driven decision-making.

Dashboard 2: Operational Insights

Purpose:

This dashboard provides specific insights into various aspects of lending operations. It offers the operations team a closer look at locations, borrower statuses, lending purposes, and peak times during the year, supporting them in identifying trends, target customers, and key locations.

Features:

Monthly Trends by Issue Date:

- Displays the trend of KPI metrics throughout the year in lending activities.

Loan Term Distribution:

- Provides detailed information about the percentage distribution of loans across different terms.

Loan Distribution by State:

- Illustrates the distribution of loans across all states in the USA.
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Customer Purpose Analysis:

- Analyzes metrics related to the purposes of borrowers.
- Supports decision-making regarding target customer segments.

Employment Length Analysis:

- Assesses the impact of borrowers' employment history on lending metrics.

Home Ownership Evaluation:

- Evaluates borrowers' trustworthiness in lending activities and disbursements based on home ownership status.

Dashboard 3: Detailed Insights

Purpose:

This dashboard offers an in-depth exploration of loan data, equipping users with comprehensive access to key metrics and loan details, thereby empowering informed decision-making.

Objective:

The "Detailed Insights" dashboard serves as a user-friendly platform providing a comprehensive solution for in-depth analysis of the loan portfolio, enhancing our capacity to make informed lending decisions.

Implementation Strategy:

- **Design Intuitive Layouts:**
- Craft each dashboard with an intuitive layout to ensure seamless navigation and interaction.

Integrate Real-Time Data:

- Incorporate real-time data feeds for up-to-the-minute analysis and decision-making.

- **Incorporate User Feedback:**

- Establish mechanisms to gather user feedback continually.

- Use feedback to refine and enhance dashboard functionalities over time