BANK LOAN INSIGHTS: "DATA-DRIVEN ANALYSIS FOR SMARTER LENDING"

Access Dashboard:

https://public.tableau.com/views/Project_17410912172800/Summary?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

Note:

This Tableau Public project is best viewed on a desktop browser, as some features may not function properly on a mobile browser.

PROBLEM STATEMENTS

Dashboard 1: Summary

To effectively monitor and evaluate our bank's lending activities, we are creating a dynamic **Bank Loan Report**. This report will provide **valuable insights** into key loan metrics, helping us track trends, assess portfolio health, and refine our lending strategies. By leveraging **data-driven decision-making**, we can identify opportunities for growth, mitigate risks, and ensure sustainable financial performance. With this comprehensive analysis, we aim to stay ahead of market shifts and make informed lending decisions.
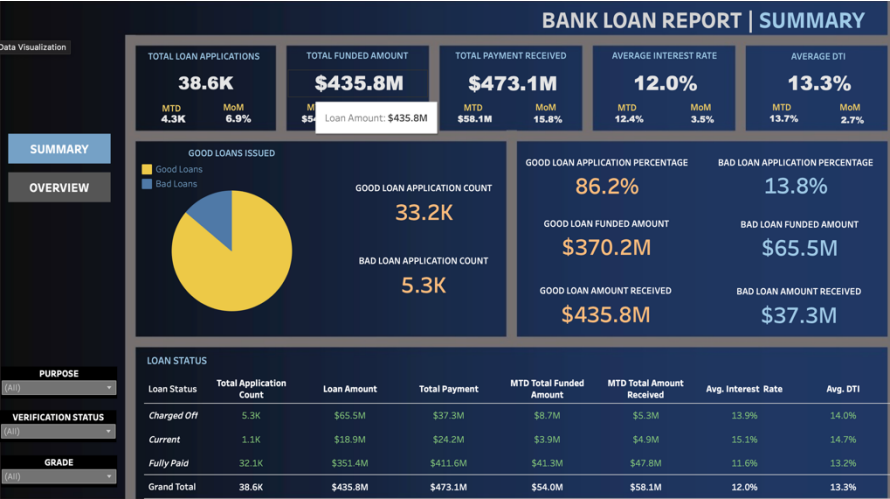
Total Loan Applications:

- Calculate the total number of loan applications received in a given period.
- Track **Month-to-Date (MTD) Loan Applications** and analyze **Month-over-Month (MoM) changes**.

Total Funded Amount:

- Measure the total loan amount disbursed.
- Monitor **MTD Total Funded Amount** and track **MoM changes** to identify trends.

Total Amount Received:

- Track the total loan repayments received.
- Analyze **MTD Total Amount Received** and observe **MoM variations** for cash flow insights.

Average Interest Rate:

- Calculate the average interest rate across all loans.
- Monitor **MTD average interest rate** and track **MoM changes** to understand cost trends.

Average Debt-to-Income Ratio (DTI):

- Assess the **average DTI** of borrowers to gauge financial health.
- Track **MTD average DTI** and analyze **MoM fluctuations** for better risk management.

Good Loan Application Percentage:

- Calculate the percentage of loan applications classified as **'Good Loans'** (loans with a status of **'Fully Paid'** or **'Current'**).

Good Loan Applications:

- Count the total number of **'Good Loan'** applications (loans with a status of **'Fully Paid'** or **'Current'**).

Good Loan Funded Amount:

- Measure the total loan amount disbursed for **'Good Loans'** (principal amounts of loans with a status of **'Fully Paid'** or **'Current'**).

Good Loan Total Received Amount:

- Track the total payments received for **'Good Loans'** (loans with a status of **'Fully Paid'** or **'Current'**).

Bad Loan Application Percentage:

- Calculate the percentage of loan applications classified as **'Bad Loans'** (loans with a status of **'Charged Off'**).

Bad Loan Applications:

- Count the total number of **'Bad Loan'** applications (loans with a status of **'Charged Off'**).

Bad Loan Funded Amount:

- Measure the total loan amount disbursed for **'Bad Loans'** (principal amounts of loans with a status of **'Charged Off'**).

Bad Loan Total Received Amount:

- Track the total payments received for **'Bad Loans'** (loans with a status of **'Charged Off'**).

Loan Status Grid View:

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.' This report will serve as a valuable tool for analysing and

understanding the key indicators associated with different loan statuses. 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.

Dashboard 2: Overview

In our Bank Loan Report project, we aim to visually represent critical loan-related metrics and trends using a variety of chart types. These charts will provide a clear and insightful view of our lending operations, facilitating data-driven decision-making and enabling us to gain valuable insights into various loan parameters.

Monthly Trends by Issue Date (Line Chart):

- Chart Type: Line Chart
- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
- X-Axis: Month (based on 'Issue Date')
- Y-Axis: Metrics' Values

Objective: This line chart will showcase how 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received' vary over time, allowing us to identify seasonality and long-term trends in lending activities.

### 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 filled map will visually represent lending metrics categorized by state, enabling us to identify regions with significant lending activity and assess regional disparities.

Loan Term Analysis (Donut Chart):

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

Objective: This donut chart will depict loan statistics based on different loan terms, allowing us to understand the distribution of loans across various term lengths.
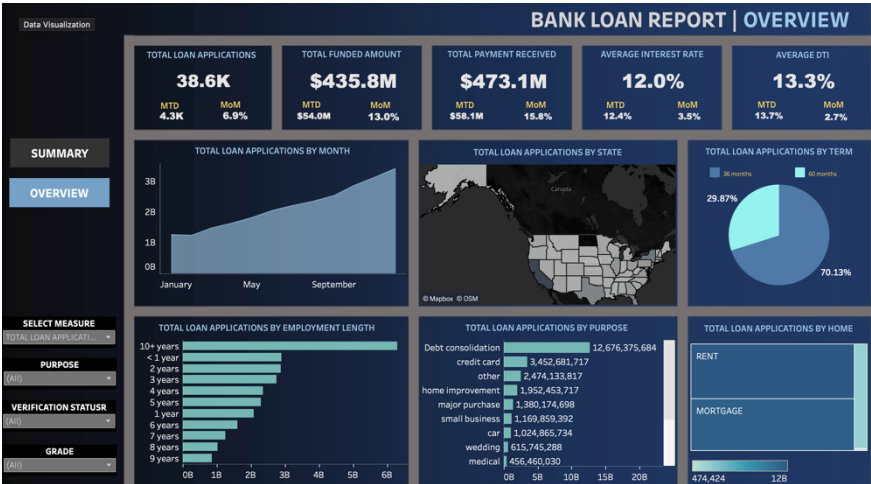
Employee Length Analysis (Bar Chart):

- Chart Type: Bar Chart
- Metrics: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'
- X-Axis: Employee Length Categories (e.g., 1 year, 5 years, 10+ years)
- Y-Axis: Metrics' Values

Objective: This bar chart will illustrate how lending metrics are distributed among borrowers with different employment lengths, helping us assess the impact of employment history on loan applications.

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, aiding in the understanding of the primary reasons borrowers seek financing.

Home Ownership Analysis (Tree Map):

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

Objective: This tree map will display loan metrics categorized by different home ownership statuses, allowing for a hierarchical view of how home ownership impacts loan applications and disbursements.