PROBLEM STATEMENT

DASHBOARD 1: SUMMARY

Key Performance Indicators (KPIs) Requirements:

1. **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).

2. **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.

3. **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.

4. **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.

5. **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.

PROBLEM STATEMENT

DASHBOARD 1: SUMMARY

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.

PROBLEM STATEMENT

DASHBOARD 2: OVERVIEW

CHARTS

1. **Monthly Trends by Issue Date (Line Chart):** To identify seasonality and long-term trends in lending activities
2. **Regional Analysis by State (Filled Map):** To identify regions with significant lending activity and assess regional disparities
3. **Loan Term Analysis (Donut Chart):** To allow the client to understand the distribution of loans across various term lengths.
4. **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.
5. **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.
6. **Home Ownership Analysis (Tree Map):** For a hierarchical view of how home ownership impacts loan applications and disbursements.

Metrics to be shown: 'Total Loan Applications,' 'Total Funded Amount,' and 'Total Amount Received'

PROBLEM STATEMENT

DASHBOARD 3: DETAILS

GRID

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.

Objective:

The primary objective of the Details Dashboard is to provide a comprehensive and user-friendly interface for accessing vital loan data. It will serve as a one-stop solution for users seeking detailed insights into our loan portfolio, borrower profiles, and loan performance.

BANK LOAN REPORT

Summary

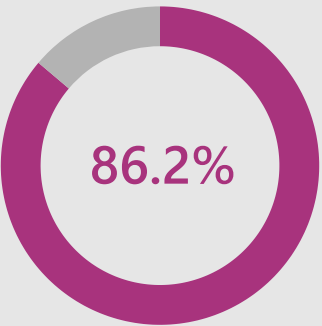| Total Loan Applications		Total Funded Amount		Total Amount Received		Avg Interest Rate		Avg DTI	
38.6K		**$435.8M**		**$473.1M**		**12.0%**		**13.3%**	
MTD	MoM	MTD	MoM	MTD	MoM	MTD	MoM	MTD	MoM
4.3K	6.9%	$54.0M	13.0%	$58.1M	15.8%	12.4%	3.5%	13.7%	2.7%

GOOD LOAN ISSUED

86.2%

33K
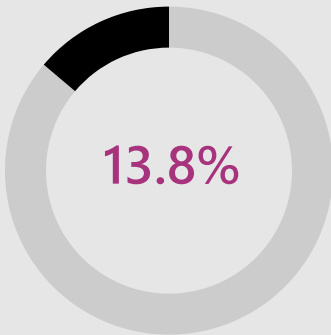Good Loan Applications

$370.2M
Good Loan Funded Amount

$435.8M
Good Loan Amount Received

BAD LOAN ISSUED

13.8%

5K
Bad Loan Applications

$65.5M
Bad Loan Funded Amount

$37.3M
Bad Loan Amount Received

State
All

Grade
All

Purpose
All

LOAN STATUS

loan_status	Total Loan Applications	Total Funded Amount	Total Amount Received	MTD Total Amount Received	Average Interest Rate	Avg DTI
Charged Off	5,333	$6,55,32,225	$3,72,84,763	$53,24,211	13.88%	14.00%
Current	1,098	$1,88,66,500	$2,41,99,914	$49,34,318	15.10%	14.72%
Fully Paid	32,145	$35,13,58,350	$41,15,86,256	$4,78,15,851	11.64%	13.17%
Grand Total	**38,576**	**$43,57,57,075**	**$47,30,70,933**	**$5,80,74,380**	**12.05%**	**13.33%**

BANK LOAN REPORT

Overview

- Summary
- Overview
- Details

Select Measure
Total Amount Received ▾

State
All ▾

Grade
All ▾

Good vs Bad Loan
All ▾

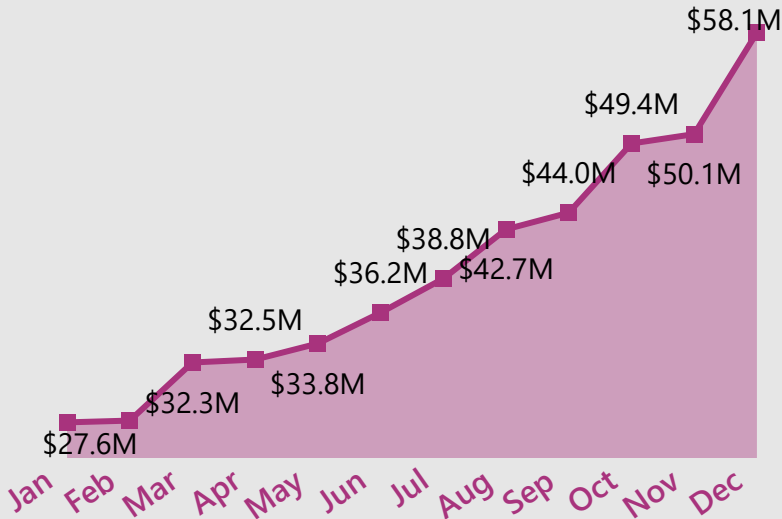| Total Loan Applications	Total Funded Amount	Total Amount Received	Avg Interest Rate	Avg DTI
38.6K	**$435.8M**	**$473.1M**	**12.0%**	**13.3%**
MTD 4.3K / MoM 6.9%	MTD $54.0M / MoM 13.0%	MTD $58.1M / MoM 15.8%	MTD 12.4% / MoM 3.5%	MTD 13.7% / MoM 2.7%

Total Amount Received by month

$27.6M (Jan), $32.3M (Mar), $32.5M (Apr), $33.8M (May), $36.2M (Jun), $38.8M (Jul), $42.7M (Aug), $44.0M (Sep), $49.4M (Oct), $50.1M (Nov), $58.1M (Dec)
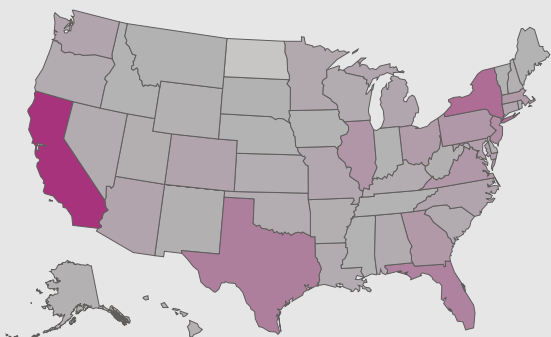
State

Total Amount Received by term
- 60 mon... 37.7%
- 36 months 62.3%
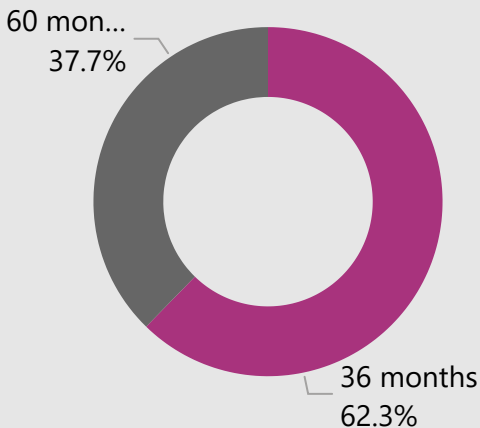
Total Loan Applications by emp length
Emp length	Amount
10+ years	$125.9M
2 years	$49.2M
3 years	$47.6M
< 1 year	$47.5M
4 years	$41.0M
5 years	$40.4M
1 year	$35.5M
6 years	$27.9M
7 years	$22.6M
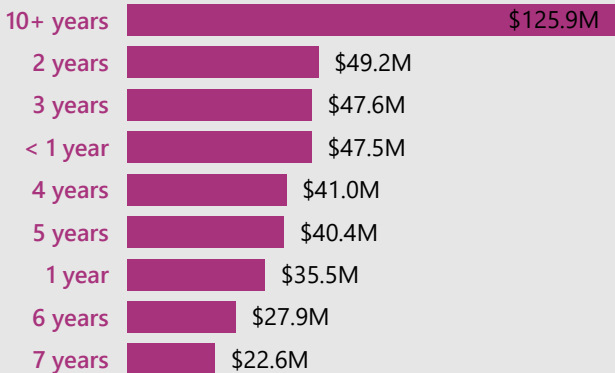
Total Amount Received by purpose
Purpose	Amount
Debt consolidation	$253.8M
credit card	$65.2M
home improvement	$36.4M
other	$33.3M
small business	$23.8M
major purchase	$18.7M
car	$11.3M
wedding	$10.3M
medical	$5.9M
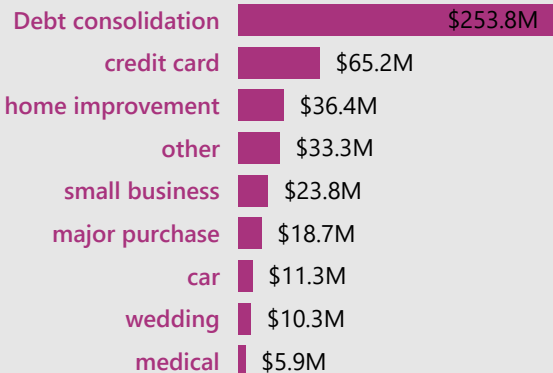
Total Amount Received by home ownership
- MORTGAGE $238.47M
- RENT $201.82M

BANK LOAN REPORT

Details

- Summary
- Overview
- Details

State
All ▾

Grade
All ▾

Good vs Bad Loan
All ▾

	Total Loan Applications	Total Funded Amount	Total Amount Received	Avg Interest Rate	Avg DTI
	38.6K	**$435.8M**	**$473.1M**	**12.0%**	**13.3%**
	MTD / MoM	MTD / MoM	MTD / MoM	MTD / MoM	MTD / MoM
	4.3K / 6.9%	$54.0M / 13.0%	$58.1M / 15.8%	12.4% / 3.5%	13.7% / 2.7%

id	purpose	home_ownership	grade	sub grade	issue date	Total Funded Amount	Int rate	installment	Total Amount Received
54734	Debt consolidation	RENT	B	B4	09 August 2021	$25,000	0.12	829.10	$29,330
55742	credit card	RENT	B	B5	08 May 2021	$7,000	0.11	228.22	$8,216
57245	Debt consolidation	OWN	C	C2	10 March 2021	$1,200	0.13	40.50	$1,458
57416	Debt consolidation	RENT	C	C3	09 November 2021	$10,800	0.14	366.86	$13,208
58915	Debt consolidation	RENT	B	B3	08 April 2021	$7,500	0.10	162.34	$5,844
59006	credit card	MORTGAGE	C	C5	09 September 2021	$3,000	0.14	102.92	$3,705
61390	credit card	MORTGAGE	A	A5	10 February 2021	$4,000	0.08	125.13	$4,452
61419	Debt consolidation	RENT	D	D2	10 February 2021	$5,600	0.15	194.02	$6,475
62102	Debt consolidation	RENT	B	B1	10 April 2021	$3,200	0.10	103.08	$3,414
65426	car	MORTGAGE	B	B1	09 August 2021	$4,000	0.11	131.22	$2,755
65640	home improvement	MORTGAGE	C	C2	08 May 2021	$5,000	0.11	87.19	$3,154
66431	Debt consolidation	RENT	B	B5	09 February 2021	$2,525	0.12	84.12	$3,028
66749	Debt consolidation	MORTGAGE	C	C4	08 December 2021	$10,625	0.13	360.43	$12,975
66943	Debt consolidation	RENT	B	B4	10 August 2021	$2,800	0.11	61.57	$3,144
66964	Debt consolidation	MORTGAGE	D	D3	08 June 2021	$7,500	0.13	253.58	$9,129
67503	Debt consolidation	MORTGAGE	A	A4	09 October 2021	$10,000	0.09	316.11	$11,280
68163	small business	MORTGAGE	A	A3	10 February 2021	$3,000	0.07	92.82	$3,342
68281	Debt consolidation	RENT	A	A5	08 March 2021	$6,625	0.09	209.54	$7,542