LOAN PORTFOLIO ANALYSIS DASHBOARD

Presented by – Bhawna Bhoyar

Business Requirement

The bank aims to monitor and manage the loan portfolio effectively. To analyze loan distribution, repayment status, customer demographics, and risk assessment for informed decision-making. The key objectives include:

Credit Risk Management: Understanding how loans are performing—how many are being repaid, how many are charged off, and what patterns exist.

Customer Segmentation: Knowing the profile of borrowers based on income, verification status, and home ownership helps in designing custom financial products.

Operational Efficiency: Identifying underperforming areas or customer types can help reduce non-performing assets (NPAs).

Strategic Planning: Identifying geographic and demographic patterns helps in regional targeting and demand forecasting.

This dashboard is designed for financial analysts, portfolio managers, and decision-makers to gain data-driven insights into customer behavior and loan repayment trends.

KPI’s Requirement

KPI	Value / Insight	Why It Matters
Total Customers	37,264	Shows customer base and growth
Total Loan Amount	$420M	Measures financial exposure
Total Payments	$482M	Indicates loan recovery performance
Verified Customer Loan Value	$191M	Shows reliability and need to promote verification
Not Verified Loan Value	$134M	Indicates higher-risk group
Average Annual Income	$69K	Helps assess loan repayment capacity
Loan Status Distribution	Fully Paid (81%), Charged Off (15%), Current (4%)	Reveals repayment success and risk exposure
State-wise Loan Amount	CA ($75M), NY ($41M), TX ($30M), etc.	Highlights top-performing states
Year-wise Loan Trend	$2M (2007) → $254M (2011)	Demonstrates growth and loan demand
Month-wise Payment Status	Increasing fully paid loans over time	Useful for EMI behavior trends

Insights & Interpretations

State-wise Trends

- California, New York, and Texas contribute the most to loan disbursements.
- Lower penetration in states like Virginia and Illinois signals opportunity or risk concern.

Year & Month-wise Trends

- Yearly data shows exponential loan demand growth, especially after 2009.
- Month-wise status indicates improving repayment behavior — more fully paid loans observed in recent months.

Verification Insights

- Verified customers account for a large portion ($191M) of loan value.
- Promoting verification could reduce charge-offs and improve portfolio quality.

Home Ownership Patterns

- In 2011: Mortgage (23.2M) and Renters (21.6M) dominate the portfolio.
- Customers who own homes show better repayment behavior compared to renters.

Sub-grade Loan Distribution

- Grades A1–A5 show strong balances and generally lower risk.
- Grades C–E indicate rising revolving balances — signals of higher default risk.

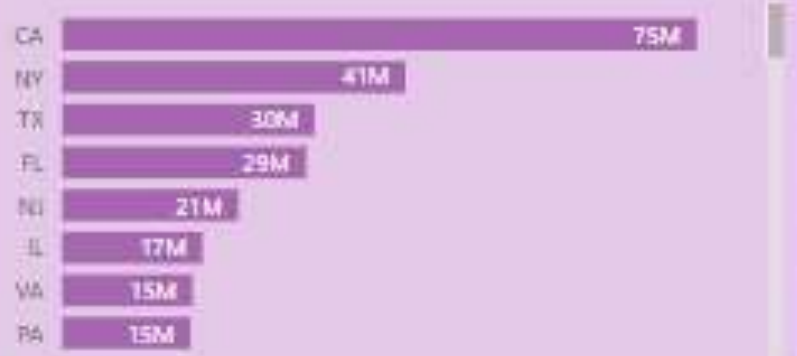
Loan Portfolio Analytics Dashboard

Interactive financial insights and portfolio management

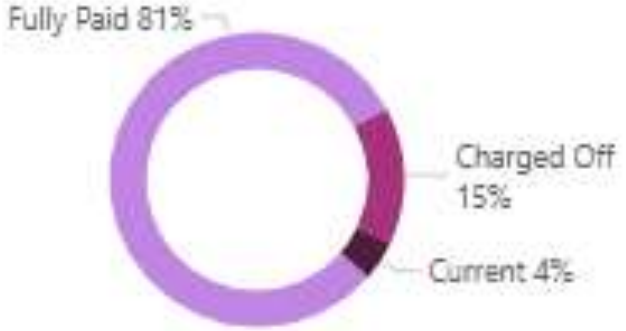
Year: All | Grade: All | Loan Status: All

37264	$ 482M	420M	191M	134M	69K
Total Customers	Total Payment	Total Loan Amount	Amt of Verified Person	Amt of not Verified P...	Avg Annual Income

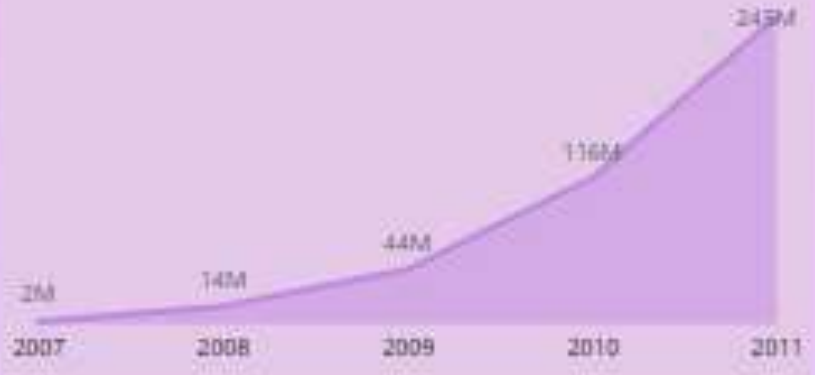
Loan Amount State wise



Loan Amnt & Status

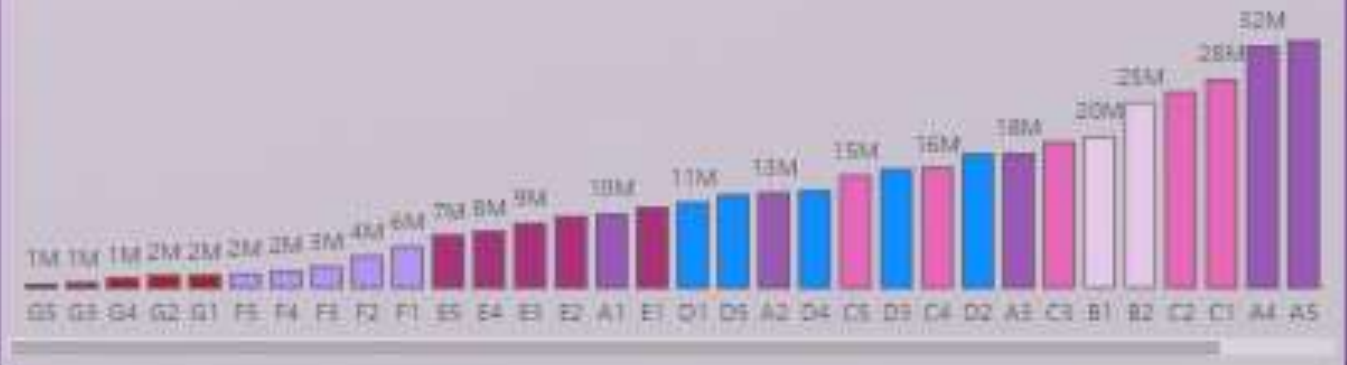


Loan Amnt per Year



Month Wise Status

Sum of revol_bal by sub_grade and grade



37264	482M	420M	191M	134M	69K
Total Custo...	Total Payment	Total Loan A...	Amt of Verifi...	Amt of not V...	Avg Annual I...

Year: All

Loan Status: All

Home Ownership VS Last Payment Date Stats

Year	MORTGAGE	NONE	OTHER	OWN	RENT
2008	**544625**			**39875**	**694700**
2009	**2368925**		**123800**	**364775**	**2451600**
2010					
Qtr 1	1055250		43000	187025	1380475
Qtr 2	1490175		30050	212150	1310375
Qtr 3	2225225		22800	386050	2051450
Qtr 4	2716125		73600	483575	2961050
2011	**23247075**	**10000**	**372875**	**3496775**	**21618750**

Recommendations:

- Target High-Performing States: Focus marketing or expansion efforts on high-loan-value states like California and New York.
- Verify More Borrowers: Verified customers show significant loan amounts—promoting verification may reduce risk.
- Watch Loan Grades: Sub-grades like A5 and B1-B5 have high revolving balances review risk exposure.
- Encourage Early Payments: Use month-wise trends to offer incentives for early or on-time payments.
- Monitor High-Rent Borrowers: Renters show high volumes in loan counts—consider their risk profile before approval.
- Focus on Fully Paid Segment: 81% fully paid is a strength. Learn customer characteristics from this segment for future targeting.

Conclusion

The Loan Analysis successfully provides a data-driven view of loan performance, empowering financial decision-makers to:

- Optimize lending strategies
- Reduce risk through better verification and segmentation
- Boost repayment rates with customer insights
- Expand in high-performing regions
- With 81% of loans fully paid and key customer behaviors clearly visualized, the organization is on a strong foundation but must continue to enhance risk monitoring, especially among non-verified and rental segments

Thank
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