Bank Loan Analysis Power BI Dashboard Report

1. Project Title

Bank Loan Performance Dashboard – Analysis of Loan Applications, Funding, and Repayment Trends

2. Objective / Problem Statement

Banks often struggle to gain insights into the performance of issued loans, distinguish good loans from bad ones, and identify trends in borrower behavior. This dashboard aims to solve the following challenges:

Key Problem Statements

- How many total loans have been applied, funded, and paid over time?
- What is the overall financial health of the loan portfolio?
- What is the distribution between good loans (fully paid or current) and bad loans (charged off)?
- Are there any noticeable trends in regions, employment lengths, or loan purposes that correlate with defaults?
- What is the impact of interest rates and DTI ratios on loan performance?

3. Insights and Observations

1. **Geographic Trends:** States like California and Florida show a higher number of loan applications, but also contribute significantly to charged-off loans. This indicates regional lending strategies may need review.
2. **Risk Indicators:** Borrowers with high interest rates and high DTI values are more likely to default. These parameters are strong indicators of potential bad loans.

3. **Employment History:** Applicants with short employment length (less than 1 year) are disproportionately represented among bad loans. Stability in employment is a positive loan performance indicator.

4. **Loan Purpose Trends:** Loans taken for small businesses or educational purposes have slightly higher default rates compared to those for debt consolidation or home improvements.

5. **Home Ownership:** Homeowners tend to have better repayment records than renters, indicating asset-backed borrowers may be safer.

4. Conclusion

The Power BI dashboard successfully consolidates critical banking KPIs, enabling the bank to:

- Monitor month-to-month performance trends.
- Compare loan disbursement vs repayment.
- Evaluate borrower risk profiles based on loan status, interest rates, DTI, employment length, and other parameters.
- Perform state-level and purpose-level segmentation to identify patterns in good and bad loans.

It bridges the gap between raw data and decision-making, serving as a strategic tool for financial performance and credit risk analysis.