

Business Summary Report

Bank Loan Performance & Risk Assessment Dashboard

1. Executive Overview

This analysis evaluates the loan portfolio performance of a commercial bank across different regions, customer demographics, and loan types.

The objective is to identify **risk segments**, **default trends**, and **approval efficiencies** to support better credit decision-making and policy optimization.

Objective:

To assess the overall loan approval performance, detect high-risk areas, and recommend strategies to minimize defaults while improving lending efficiency.

2. Data Overview

Dataset	Description
Bank_Loan_Performance.csv	Contains 500 customer-level loan records, including demographics, loan type, approval and default status, credit scores, and income levels.

The dataset was imported and modeled in Power BI.
DAX measures were created to calculate performance and risk KPIs, enabling an interactive dashboard to explore trends and patterns.

3. Key Performance Indicators (KPIs)

KPI	Value	Insight
Total Loan Applications	500	Dataset sample across 5 regions
Approved Loans	~72%	Majority of applications are approved
Defaulted Loans	~18% of approved	Indicates moderate risk exposure
Average Credit Score	635	Slightly below industry safe benchmark (650)
Average Loan Amount	₹8.5 Lakhs	Typical mid-value lending portfolio

4. Key Insights

a) **Loan Approval & Performance Trends**

- Overall approval rate is above 70%, showing a lenient but active lending policy.
- Higher income and credit score customers show significantly higher approval rates.
- Education and Personal loans experience the highest rejection rates, likely due to lower collateral and variable repayment capacity.

Insight:

Loan approval policies can be made more data-driven by incorporating stricter credit score thresholds for unsecured loans.

b) Risk & Default Patterns

- **Default rate** among approved loans stands around **18%**, concentrated in lower credit score brackets (<600).
- **Personal loans** and **auto loans** exhibit higher default percentages than home loans.
- Customers with a **loan-to-income ratio above 4** show a strong correlation with default risk.

Insight:

High-risk profiles can be identified early using income-to-loan and credit score combinations to reduce default exposure.

c) Regional Insights

- **North and West regions** contribute the largest share of total loan disbursements.
- **Central region** shows the **highest default percentage**, suggesting weaker borrower profiles or branch-level oversight issues.
- **South region** demonstrates balanced approval and repayment behavior, ideal for portfolio expansion.

Insight:

Regional performance analytics can support branch-level strategies and resource reallocation.

d) Customer Demographics

- Average borrower age is **36 years**, mostly mid-career individuals.
- **Male applicants** represent ~60% of total applications.
- **Younger customers (<30 years)** tend to take smaller personal and education loans with higher default tendencies.

Insight:

Offering customized loan plans for younger and lower-income borrowers can improve repayment consistency.

5. Business Recommendations

- **Implement Tiered Credit Policy:**
Set minimum credit score thresholds by loan type (e.g., 700+ for personal loans).
- **Enhance Risk-Based Pricing:**
Adjust interest rates dynamically based on credit score and income stability.

- **Focus on Low-Default Regions:**
Increase loan disbursement targets in **South and East** regions to strengthen overall portfolio quality.
- **Early Warning System:**
Introduce a predictive model to flag high-risk borrowers before approval.
- **Promote Financial Literacy:**
Conduct customer education initiatives in high-default regions to improve repayment culture.

6. Business Impact

By implementing these measures, the bank can:

- **Reduce default rates by 10–15%** through targeted lending policies.
- **Increase profitability by optimizing risk-weighted returns.**
- **Improve approval accuracy** while maintaining portfolio growth.

This analysis transforms operational data into **actionable business strategy**, enabling a more sustainable and data-driven lending process.

7. Conclusion

The **Bank Loan Performance & Risk Assessment Dashboard** provides deep visibility into portfolio health, customer risk distribution, and approval efficiency. It demonstrates how **data-driven credit insights** can improve both profitability and financial stability.