

1. Banking Customer Data Cleaning & Quality Analysis

The dataset contains missing values, duplicates, and inconsistent financial data. Clean it and prepare it for analysis.

- Detect NULL values
- Handle missing income, occupation
- Remove duplicate rows
- Validate age & financial ranges

2. Customer Segmentation Analysis

Segment bank customers based on income, risk, loyalty, and assets.

Group by

- Loyalty Classification
- Risk Weighting
- Gender
- State

Identify

- High-value customers
- Risky customers
- Low-profit customers

Visuals

- Bar charts
- Box plots
- State-wise income heatmaps

3. Credit Risk Analysis Project

Analyze which customers pose higher credit risk.

Compare

- Bank Loans vs Income
- Credit Card Balance vs Risk Weighting

Identify red flags:

- High loans + low income
- Multiple properties + high debt

4. State & City-wise Banking Performance Dashboard

Which states and cities generate the most banking revenue?

State-wise

- Deposits
- Loans
- Business Lending

City-wise:

- Customer count

- Avg income

5.Bank Revenue Performance Dashboard

How is the bank earning money and from where?

- Total Bank Deposits
- Total Bank Loans
- Business Lending
- Credit Card Outstanding

Visuals

- KPI cards
- Monthly trend line
- State-wise revenue bar chart
- Loan vs Deposit comparison

6.Customer Profitability Dashboard

Which customers are most valuable to the bank?

- Avg balance per customer
- Total deposits by loyalty
- Loan-to-income ratio

Visuals

- Loyalty-wise profit
- Top 10 high-value customers
- Risk vs profitability matrix

7.Risk Exposure & Credit Monitoring Dashboard

How risky is the bank's loan portfolio?

- High-risk customer count
- Total loan exposure
- Avg credit card balance by risk

Visuals

- Risk weighting distribution
- Loan exposure heatmap

- High-risk customer table

8. State & City Expansion Strategy Dashboard

Where should the bank open new branches?

- Customer density
- Avg income
- Deposits per city

Visuals

- Map (India)
- City ranking table
- State-wise performance bars

9. Customer Demographics & Behavior Dashboard

Who are our customers?

- Age group distribution
- Gender ratio
- Occupation segments

Visuals

- Age buckets
- Gender donut chart
- Occupation-wise income

10. Executive Banking Overview Dashboard (CEO View)

Give me the bank's health in 1 page.

- Total customers
- Total deposits
- Loan exposure
- Risk ratio

Visuals

- KPI cards

- Trend lines
- Risk indicators

11. Data Quality Monitoring Dashboard

How clean is our data?

- % NULL values
- Duplicate count
- Invalid records

Visuals

- Column-wise NULL bar chart
- Data quality scorecard

12. Gender-based Financial Behavior Analysis

Do men and women show different banking behavior?

What you analyze

- Avg income by Gender
- Avg loans & savings
- Credit card usage