**Project Summary: Loan Recovery & Customer Risk Segmentation Using POWER BI**

The Power BI dashboard gives a clear picture of how the bank is performing in terms of loan recovery. It shows how much money the bank has given out as loans, how much has been paid back, and how much is still due or at risk because some people have not repaid their loans on time.

This dashboard includes useful charts and key numbers that help us understand patterns—like which types of loans are most common, who is more likely to repay late or default (based on gender, age group, or loan purpose), and which customers need follow-up for due amounts.

Overall, the dashboard helps the bank’s team quickly spot problem areas and take smart actions to improve their loan recovery process and reduce losses. It turns complex data into easy visuals so that anyone—whether from finance or management—can understand and make decisions.

**Improved Summary in Bullet Points**

**1. Key Dashboard Metrics (KPIs)**

* **Total Loan Amount** – Shows how much total money has been given as loans.
* **Total Due Amount** – Displays the total amount still unpaid by customers.
* **Total Paid Amount** – Amount that customers have already paid back.
* **Default Rate** – Percentage of loans that were not repaid at all.
* **Recovery Rate** – Percentage of loans successfully recovered.

These help quickly understand the bank’s financial health regarding loans.

**2. visualizations/Charts**

* **Bar Charts**:
  + Compare loan amounts across repayment status (On Time, Late, Defaulted).
  + Show breakdown by gender or loan purpose.
* **Pie Charts**:
  + Represent percentage share of loan types (e.g. Home, Education, Business).
  + Show how repayment status is distributed.
* **Trend Lines or Tables** :
  + May show overdue trends or top defaulters.

These visuals make it easier to identify issues or positive trends quickly.

**3. Filters and Slicers**

* Filters allow the user to customize the view of data by:
  + **Repayment Status** (On Time, Late, Defaulted)
  + **Gender**
  + **Loan Purpose**
  + **Age Group**
  + This makes the dashboard dynamic and interactive, helping to find specific answers.

**4. Insights Gained from Dashboard**

* Certain loan purposes (like **Medical** or **personal** ) have **higher default rates**.
* Customers of a particular **gender or employment type** may pay on time more often.
* **Late repayments** and **defaults** are costing the bank significantly.
* **Due amounts** are concentrated among a specific group of borrowers.

These insights can guide loan policies, targeting, and recovery strategies.

**5. Why This Dashboard Is Important**

* Helps **bank managers** make faster, data-driven decisions.
* Allows easy tracking of **risky loans** and helps in prioritizing **recovery efforts**.
* Gives a complete view of **how well the loan system is working**.
* Can be used in meetings to explain loan performance in a visual and simple way.