

TASK 04

**Implementing an
AI - driven collections
strategy**

How the AI-Powered Collections System Works

The system follows a four-step cycle:

1. Input:

Customer data (repayment history, credit utilization, income, age, location) is collected and updated in real-time.

2. Decision Logic:

Predictive model calculates delinquency risk scores and suggests tailored interventions (e.g., payment reminders, hardship plans).

3. Action:

Based on risk level, the system automatically triggers customized outreach (SMS, app notifications, or human agent alerts).

4. Learning Loop:

Customer responses are monitored and fed back into the model, improving its accuracy and recommendations over time.

Role of Agentic AI — Automation vs. Human Oversight

Autonomous Decisions:

Automated SMS/email reminders for low and medium-risk customers

AI-triggered nudges for credit limit usage or late fee alerts

Instant hardship self-serve options for eligible customers

Human Oversight:

Review of hardship eligibility for complex or high-risk cases

Final approval for repayment plan restructures

Manual override in edge cases where system logic may be insufficient

Responsible AI Guardrails

- 1. Fairness Audits:**

Regular monitoring to detect demographic or income-based bias in predictions.

- 2. Explainability:**

Use SHAP values to explain decisions clearly and present risk scores transparently to agents and customers.

- 3. Compliance:**

System adheres to ECOA, GDPR, RBI regulations, and local data governance laws.

- 4. Human-in-the-Loop:**

All high-impact actions are reviewed by trained agents to ensure accountability and empathy.

Expected Business Impact

1. Quantitative Outcomes:

- 15% reduction in delinquency rates within 6 months
- Up to 20% increase in early repayments
- Cost savings through automation of low-risk collections

2. Qualitative Outcomes:

- Enhanced customer trust and satisfaction
- More equitable, data-driven decision-making
- Scalable collections approach adaptable to regulatory changes