

AI-Powered Collections System

Executive Briefing for Geldium

System Workflow – End-to-End Flow

- **Inputs:** Customer financial data, payment history, engagement patterns, demographics
- **Decision Logic:** Predict risk segments (low, medium, high) using ML models
- **Actions:** Tailored interventions – reminders, hardship plans, agent calls, escalations
- **Learning Loop:** System retrains with new outcomes to improve predictions

System in Action – Collections Journey

- Low Risk Customers → Automated gentle nudges (SMS/email reminders)
- Medium Risk Customers → Flexible repayment plans + chatbot negotiation
- High Risk Customers → Escalation to human agents for personalized review
- Feedback Tracking → Customer responses and repayment outcomes update the model

Role of Agentic AI

Autonomous AI vs Human Oversight

Autonomous AI:

- Automated payment reminders
- Dynamic repayment plan suggestions
- Customer segmentation & risk scoring
- Routine chatbot interactions

Human Oversight:

- Final approval of hardship assistance
- Review of disputed/complex cases
- Monitoring for bias & compliance checks
- Escalation of high-value / sensitive accounts

Responsible AI Guardrails

- **Fairness:** Regular bias audits (age, gender, income group)
- **Explainability:** Transparent risk score drivers (missed payments, DTI ratio)
- **Compliance:** Aligned with ECOA, GDPR, FCA, FCRA
- **Customer Rights:** Appeals process, clear communication, privacy protection

Expected Business Impact

Business KPIs:

- Reduce delinquency rate by 15–20%
- Cut collection costs through automation
- Improve repayment recovery timeline
- Scalable system across portfolios

Customer Outcomes:

- Fairer treatment across demographics
- Greater transparency in decisions
- Improved customer experience & trust
- Flexible repayment support options