## **AI-Powered Collections Strategy**

Leveraging Agentic AI for Scalable, Fair, and Effective Debt Management at Geldium

# How the System Works

- Inputs
  - O Real-time customer data (e.g., income, credit utilization, missed payments, payment history)
- Decision Logic
  - O Combines predictive scores and business rules to determine optimal actions.
  - O Decision engine applies the rules to create targeted interventions
- Actions
  - O Automated outreach: payment reminders, hardship offers, repayment plans.
  - O Tailored customer engagement through SMS, email, or phone calls
- Learning Loop
  - O Continuously refines the system's actions based on real-time feedback (e.g., repayment rates, customer engagement).

## System Components and Workflow

### Data Pipeline

O Gathers essential customer information, including financial behavior (e.g., income, missed payments, credit utilization)

### Decision Engine

- O Applies machine learning models and business rules to determine actions
- O Factors in customer's risk level, payment history, and predicted behavior

### Action Layer

O Executes interventions: automated SMS/email reminders, customized repayment offers, hardship assistance

### Learning Loop

- O System adapts based on the results of previous actions
- O Future decision-making improves based on repayment outcomes

# Role of Agentic AI

Agentic Al autonomously handles routine collections tasks, while human oversight ensures critical decisions are fair and nuanced

Autonomous	Human Oversight
Sending automated reminders (SMS/email)	Offering tailored debt restructuring plans
Providing general repayment offers	Reviewing escalations or legal actions
Follow-up for low-risk customers	Verifying high-risk cases (e.g., legal action)
Adaptive behavior based on customer actions	Manual review of sensitive or complex scenarios

## Responsible AI Guardrails

- Fairness
  - O Regular bias audits to ensure equal treatment of all customer segments
  - O Minimize disparate impact based on demographics or financial status
- Transparency
  - O Clear, accessible explanations for all Al-driven decisions
  - O Customers are informed of their rights and the basis of decisions
- Compliance
  - O System aligns with GDPR, ECOA, and relevant financial regulations (e.g., consumer protection laws)
- Oversight
  - O Human intervention required for critical decisions or sensitive cases (e.g., denying hardship assistance)

## **Expected Business Impact**

- Business Outcomes
  - O 15% reduction in 30+ day delinquency for high-risk customers within the first 6 months.
  - O Automate 60% of outreach actions, reducing operational costs
- Customer Outcomes
  - O Improve customer satisfaction through timely, respectful, and tailored interventions.
  - O Enhance trust by offering transparent, fair, and empathetic outreach
- Operational Efficiency
  - O Scale operations by automating routine tasks, allowing staff to focus on more complex cases

# Impact on Geldium's Collections Strategy

### **How This AI-Powered System Benefits Geldium**

- Enhanced Scalability: Al-driven automation allows for large-scale outreach without compromising personalized service
- Cost Efficiency: Significant reduction in manual outreach, reducing labor costs
- Improved Risk Management: Predictive models help target interventions to at-risk customers, improving collection efficiency
- Better Customer Experience: Fair and transparent system increases customer trust and satisfaction, leading to higher repayment rates