# AI-Powered Collections System – Executive Summary

## Slide 1: System Overview – How It Works

* 1. \*\*Input\*\*: Real-time customer data (credit score, income, missed payments, utilization) flows into the system.
* 2. \*\*Decision Logic\*\*: Predictive model scores customers based on delinquency risk using ML algorithms.
* 3. \*\*Action Layer\*\*: Based on risk, system triggers automated actions like SMS outreach, repayment plan offers, or flags for agent review.
* 4. \*\*Learning Loop\*\*: System continuously monitors customer responses and updates model logic to improve future actions.

## Slide 2: Workflow Diagram (Optional Visual)

* - Customer Data → Risk Scoring Model → Action Engine → Outcome Tracker → Model Refinement
* - Use a simple loop diagram to visually represent flow and feedback.

## Slide 3: Role of Agentic AI – Human vs. Machine

* \*\*Autonomous Tasks\*\*:
* - Risk scoring and segmentation
* - Automated outreach (e.g., SMS, email)
* - Updating model based on feedback loop
* \*\*Human Oversight Required\*\*:
* - Final review for high-risk interventions (e.g., denying credit)
* - Handling customer complaints or escalations
* - Periodic audit of fairness and bias

## Slide 4: Responsible AI Guardrails

* - \*\*Fairness Audits\*\*: Regularly test model performance across income, age, and employment segments.
* - \*\*Explainability\*\*: Use transparent models or tools like SHAP for complex ones.
* - \*\*Compliance Checks\*\*: Align with financial regulations like GDPR, fair lending laws.
* - \*\*Human-in-the-loop\*\*: Keep agents involved in high-impact or sensitive decisions.

## Slide 5: Expected Business Impact

* \*\*Business KPIs\*\*:
* - Reduce 30+ day delinquency rate by 10% in 3 months.
* - Lower operational costs through automation.
* - Improve model accuracy over time.
* \*\*Customer Outcomes\*\*:
* - More personalized and timely support.
* - Fairer decisions through bias mitigation.
* - Improved trust and satisfaction with proactive communication.