

Business Summary Report: Predictive Insights for Collections Strategy

1. Summary of Predictive Insights

Based on the predictive model developed in Task 2, several patterns were identified that help highlight customers at higher risk of delinquency.

- Customers with **higher Days Past Due (DPD)** and **multiple missed EMIs** show a significantly higher likelihood of becoming delinquent.
- Customers with **low income relative to EMI amount** are more vulnerable to repayment stress.
- Longer loan tenure combined with higher interest rates increases delinquency risk over time.

These insights can help the Collections team prioritize early intervention for high-risk customer segments.

Key Insight	Customer Segment	Influencing Variables	Potential Impact
High delinquency risk	Customers with DPD > 30	DPD, Missed EMIs	Early follow-up can reduce defaults

2. Recommendation Framework

Restated Insight:

Customers with high DPD and repeated missed EMIs are more likely to become delinquent if not contacted early.

Proposed Recommendation:

- **Specific:**
Prioritize proactive outreach for customers with DPD greater than 30 days and more than one missed EMI.

- **Measurable:**
Track reduction in delinquency rate and improvement in EMI recovery within this segment.
- **Actionable:**
Collections team can initiate reminder calls, SMS alerts, or repayment restructuring options.
- **Relevant:**
This directly supports Geldium's goal of reducing loan defaults and improving recovery efficiency.
- **Time-bound:**
Implement within the first 15–30 days of identifying early delinquency signals.

Justification and Business Rationale:

Early intervention helps prevent customers from slipping into severe delinquency, reduces recovery costs, and improves customer relationships.

3. Ethical and Responsible AI Considerations

Ethical and Responsible AI Considerations

The predictive model has been designed with fairness, transparency, and responsibility in mind.

- **Bias and Fairness:**
The model avoids unfair reliance on sensitive attributes such as gender or location to prevent biased treatment of customer groups.
- **Explainability:**
Logistic Regression allows easy explanation of why a customer is flagged as high risk, supporting transparent decision-making.
- **Responsible Financial Decisions:**
The recommendation focuses on early support and engagement rather than punitive actions.
- **Data Privacy:**
Customer data is used strictly for risk assessment purposes, ensuring compliance with data protection and privacy standards.