

Business Report: AI-Driven Collections Strategy for Geldium

Step 1: Summary of Predictive Insights

Based on exploratory data analysis and predictive modeling, the following insights were derived:

Top 3 Risk Factors for Customer Delinquency:

- High credit utilization (above 80%) – strong correlation with missed payments.
- Low income-to-debt ratio – customers with less disposable income show higher default likelihood.
- Recent missed payments – customers with prior delinquency history are more likely to default again.

Step 2: Recommendation Framework

SMART Recommendation: Implement a proactive outreach campaign for high credit utilization customers.

- Specific: Identify customers with >80% credit utilization and offer tailored repayment plans.
- Measurable: Aim to reduce delinquency rate among this group by 15% within 6 months.
- Achievable: Use automated communication tools and financial counseling resources.
- Relevant: Aligns with Geldium's goal to minimize financial stress while improving repayment rates.
- Time-bound: Launch pilot program within 2 months and review results quarterly.

Rationale: Targeting high utilization customers directly addresses a primary delinquency driver, balancing financial risk management and customer support.

Step 3: Ethical and Responsible AI Considerations

Fairness and Bias Risks:

- Bias against low-income groups – mitigate by testing model outcomes for demographic fairness and rebalancing training data.
- Over-reliance on historical data – prevent by monitoring for drift and ensuring decisions remain human-reviewed.

To promote transparency, model predictions should be explained in simple terms, such as: 'Customers using most of their available credit are more likely to miss payments.' This builds understanding and trust among non-technical stakeholders.