Business Summary Report: Predictive Insights for Collections Strategy

# 1. Summary of Predictive Insights

Geldium’s predictive model identified key risk patterns that can help the Collections team prioritize efforts more effectively:

· Customers with 2 or more missed payments and debt‑to‑income ratios > 50% are approximately 3× more likely to become delinquent.

· Customers under 30 years old with high credit utilization (>80%) are 3.4× more likely to miss payments.

· Customers with new accounts (account tenure <1 year) and rising credit utilization display early warning signs for future delinquency.

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| Key Insight | Costumer Segment | Influencing Variables | Potential Impact |
| High credit utilization (>80%) and 2+ missed payments | Young customers (<30) | Credit Utilization, Missed Payments | Enables targeted interventions, reducing future 30‑day delinquencies by ~12% |
| High Debt‑to‑Income Ratio (>50%) | Customers with large loan balances | Debt‑to‑Income Ratio, Missed Payments | Enables earlier risk detection and tailored repayment plans |
| New account holders with rising utilization | Customers with Account Tenure <1yr | Account Tenure, Credit Utilization | Supports proactive alerts and education for new customers |

# 2. Recommendation Framework

**Restated Insight:**  
Customers under 30 with credit utilization >80% and at least 2 missed payments have the highest risk of becoming delinquent.

**Proposed Recommendation:**  
Launch a targeted **6‑week SMS and email campaign** focusing on high‑risk customers, reminding them of payment due dates and offering financial literacy tips.

· **Specific:** Target customers under 30 with credit utilization >80% and 2 or more missed payments.

· **Measurable:** Reduce 30‑day delinquency rate for this segment by 12%.

· **Actionable:** Use existing CRM and SMS infrastructure for personalized messages and alerts.

· **Relevant:** Focused on Geldium’s priority segment for reducing losses and increasing recovery rates.

· **Time‑bound:** Pilot campaign for 6 weeks and review results within 2 months.

**Justification and Business Rationale:**  
Customers in this segment are statistically 3.4× more likely to miss payments. Early, personalized interventions can reduce delinquency, protect revenue, and build trust with younger customers, aligning with Geldium’s long‑term risk and retention objectives.

# 3. Ethical and Responsible AI Considerations

**Potential Bias or Unfair Treatment:**  
The model may unintentionally over‑represent younger or lower‑income customers if certain variables (age or income bracket) dominate its risk assessment.

**Mitigation:**  Perform regular audits of prediction outcomes across demographic groups and remove or adjust any variables acting as inappropriate proxies for protected characteristics.

**Explainability:** The model is built on interpretable inputs (credit utilization, missed payments, debt‑to‑income), making it easy for staff and stakeholders to understand why certain customers are flagged.

**Responsible Decision‑Making:**  
The recommendations focus on early warning alerts and education, providing support and information rather than punitive measures, aligning with Geldium’s mission to foster trust and long‑term customer relationships.

**Additional Ethical Considerations:**  
The approach respects privacy by relying only on financial and behavioral data, excludes sensitive demographic inputs, and operates within applicable regulations for fair lending and credit risk management.

**End of Report**  
This approach ensures Geldium can utilize its AI‑driven risk assessments effectively, prioritizing actionable interventions while maintaining trust, transparency, and fairness throughout the customer lifecycle.