Business Summary Report: Predictive Insights for Collections Strategy

# 1. Summary of Predictive Insights

- **High-Risk Customer Segments:** Customers with **high outstanding balances**, **previous late payments**, or **high credit utilization** are most likely to become delinquent. Young borrowers or new account holders with limited credit history also show higher risk.

- **Key Predictors of Delinquency:**

* Past missed or late payments
* Large outstanding balances relative to account limits

- **Patterns for Collections Team:**

* Delinquent accounts are more likely to be concentrated among customers with repeated payment issues rather than one-off defaults.
* Adjusting outreach and monitoring thresholds for high-risk segments could prevent further delinquencies.

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| Key Insight | Customer Segment | Influencing Variables | Potential Impact |
| High credit utilization increases delinquency | Customers with >80% credit utilization | Credit utilization ratio, outstanding balance, past late payments | Implement alerts, repayment reminders, or limit adjustments to reduce risk |
| History of late payments predicts future defaults | Customers with ≥2 missed payments in last 6 months | Past late payments, outstanding balance, account age | Prioritize collections outreach to prevent delinquency escalation |
| Large outstanding balance correlates with missed payments | Customers with balances above median | Balance amount, debt-to-income ratio, credit utilization | Offer flexible repayment plans or targeted credit counseling |

# 2. Recommendation Framework

* **Restated Insight:** High credit utilization is strongly associated with increased delinquency risk.
* **Proposed Recommendation:** Proactively manage high-utilization accounts to reduce delinquency rates.

**SMART Recommendation:**

* **Specific:** Target customers with credit utilization above 80% and provide personalized repayment support.
* **Measurable:** Aim to reduce delinquency in this segment by **15% within 6 months**.
* **Actionable:** Implement automated alerts, repayment reminders, and temporary credit limit adjustments for high-risk accounts.
* **Relevant:** Addresses a key predictor of delinquency, improving portfolio quality and reducing financial risk.
* **Time-bound:** Execute interventions over the next **6 months** and monitor delinquency metrics monthly.

**Justification and Business Rationale:**  
Managing high-utilization accounts reduces the likelihood of missed payments, improves collections efficiency, and safeguards revenue. Targeted interventions are cost-effective and align with Geldium’s objective of sustainable credit management.

# 3. Ethical and Responsible AI Considerations

- **Fairness:** Ensure sensitive attributes like gender, age, or location do not influence model predictions. Example: If younger customers are overrepresented in flagged high-risk accounts, check for potential bias.

- **Explainability:** Logistic regression coefficients allow clear interpretation of factors driving delinquency, making it easy to explain predictions to non-technical stakeholders.

- **Responsible Financial Decision-Making:** Recommendations prioritize support and prevention over punitive measures, helping customers manage debt responsibly.

- **Transparency and Accountability:** Document model assumptions, decisions, and data sources. Maintain privacy by avoiding sensitive personal information.