Business Summary Report: Predictive Insights for Collections Strategy

# 1. Summary of Predictive Insights

Briefly restate your model’s findings from Task 2. Focus on high-risk segments, key predictors of delinquency (e.g., missed payments, credit utilization), and any meaningful patterns the Collections team should be aware of.  
  
 The predictive model identified that **missed payments**, **high credit utilization**, and **low account balances** are the top predictors of loan delinquency.

 **Customers with multiple delinquency instances** in their history are significantly more likely to default again.

 **Young adults with low income and high utilization rates** form a high-risk segment that needs close monitoring.

Optional: Include a Key Insights Summary Table (you may create this in Excel or insert manually).

| **Key Insight** | **Customer Segment** | **Influencing Variables** | **Potential Impact** |
| --- | --- | --- | --- |
| High delinquency risk among repeat offenders | Customers with past delinquencies | Delinquency Count, Missed Payments | Prioritize proactive outreach or stricter policies |
| Young adults with high utilization are vulnerable | Age < 30, Low Income, High Utilization | Age, Income, Credit Utilization Ratio | Offer financial counseling, limit credit increase |
| Low balance triggers higher risk | Low-income groups | Account Balance, Monthly Payment | Early warnings and customized repayment plans |

# 2. Recommendation Framework

Based on one of your model’s insights, outline your recommended intervention. Your recommendation should follow a SMART approach (Specific, Measurable, Actionable, Relevant, Time-bound).

Use the following subheadings to guide your structure:

* **Restated Insight:** Customers with high credit utilization and previous delinquencies are more likely to default again.
* **Proposed Recommendation:** Launch a **High-Risk Monitoring Program** targeting repeat defaulters with over 70% credit utilization.

#### SMART Criteria:

* **Specific:** Identify and monitor customers with >1 past delinquency and credit utilization >70%.
* **Measurable:** Track reduction in delinquency rate among this group by at least 20% over 6 months.
* **Actionable:** Implement monthly credit checks and automatic alerts for collection agents.
* **Relevant:** Supports Geldium’s goal to reduce defaults and improve repayment behavior.
* **Time-bound:** Run the pilot program from **August 2025 to January 2026**.
* **Justification and Business Rationale:**  
  By proactively engaging high-risk customers, Geldium can reduce future losses, build trust, and improve repayment efficiency, ultimately leading to stronger customer relationships and better portfolio quality.

### 3. Ethical and Responsible AI Considerations

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Reflect on the fairness, transparency, and impact of your model and recommendation.  
  
 **Bias Risk:** There’s a potential risk of **discriminating against younger or lower-income customers**, so all model outputs should be validated against demographic fairness.

 **Explainability:** We used a logistic regression model, which offers high transparency and allows the Collections team to understand the influence of each variable.

 **Responsible Financial Decision-Making:** Instead of denying services, we aim to **support** at-risk customers with tailored financial strategies.

 **Other Principles:** Data privacy is preserved, no personally identifiable data is exposed, and the model’s decisions are documented for accountability.

Keep your report under two pages. Write in plain, professional language. Use headings, bullet points, or short paragraphs to make it easy for the reader to follow.