Business Summary Report: Predictive Insights for Collections Strategy

1. Summary of Predictive Insights

Top Predictors

- **DTI Ratio:** The leading indicator; risk doubles (10% to 19%) as debt-to-income increases.
- **Utilization & Score:** Low scores combined with high credit usage act as a primary "stress test" for default.
- **Obligation Size:** Large loan balances relative to income are more predictive of risk than total income alone.

High-Risk Segments

- **Employment Status:** Unemployed individuals carry the highest risk (19.4%), whereas retirees are the most stable (11.5%).
- **High-Leverage Urban:** Los Angeles applicants with a **DTI > 0.40** represent the most critical risk cluster (19.6% delinquency).

Action: Top 3 Risk Factors

1. **DTI > 40%:** Monthly debt exceeding 40% of gross income.
2. **Employment Instability:** Current unemployment or short account tenure.
3. **High Utilization:** Heavy reliance on revolving debt limits.

Key Insight	Customer Segment	Influencing Variables	Potential Impact
High Debt-to-Income (DTI) ratios combined with Unemployment are the primary drivers of delinquency.	Applicants currently categorized as **Unemployed** who carry a **DTI above 0.40**, particularly in urban hubs like Los Angeles.	Debt_to_Income_Ratio, Employment_Status, Location, and Income.	Geldium can reduce net charge-offs by 15-20% by flagging this segment for **proactive hardship programs** or debt restructuring before they hit the 90-day delinquency threshold.

2. Recommendation Framework

Restated Insight: High **Credit Utilization (>75%)** and **High DTI (>0.40)** are the strongest predictors of delinquency. These "stressed" borrowers are 2.5x more likely to default within 90 days.

Proposed Recommendation: The "Early Warning & Wellness" (EWW) Program

- **Specific:** Send automated financial health alerts and debt-restructuring offers to customers exceeding 75% utilization and 0.40 DTI.
- **Measurable:** Aim for a **12% reduction** in accounts transitioning from "Current" to "30-Days Past Due."
- **Actionable:** Deploy real-time system triggers to flag high-utilization accounts for the Customer Success team's dashboard.
- **Relevant:** Directly targets the top risk driver identified by the model to shift from reactive collections to proactive prevention.
- **Time-bound:** 90-day pilot in Los Angeles/Houston (Q3) with full rollout by end of Q4.

Business Rationale: This strategy focuses on **Capital Preservation**. Intervening before a default occurs is significantly cheaper than late-stage legal recovery and collections. By acting as a financial partner during periods of stress, Geldium preserves its interest-bearing assets while building long-term customer loyalty and ethical brand equity.

3. Ethical and Responsible AI Considerations

The most impactful model is one that balances **Accuracy** (protecting the bank) with **Empathy** (protecting the customer). By prioritizing explainability and proactive intervention, Geldium can lead the industry in **Ethical AI**, proving that financial technology can be both high-performing and socially responsible.

Principle	Action for Geldium
Fairness	Regular "Bias Audits" to ensure no demographic group is unfairly penalized.
Transparency	Clear, plain-language explanations for all credit decisions.
Accountability	Human oversight for high-impact automated decisions.
Integrity	Using risk signals to help customers, not just avoid them.