

Capstone: AI-Powered Attrition Classifier

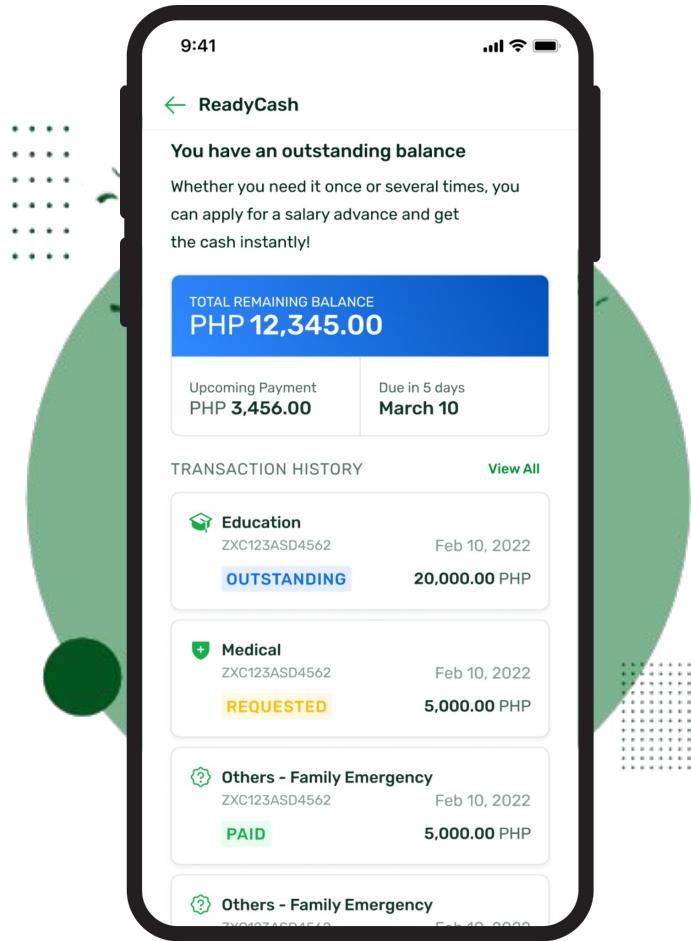
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Overview

ReadyCash

Salary Advance solution providing your employees to **access emergency funds** when they need it most

- 1 Immediate access to cash, no delays or waiting periods between applications.
- 2 Multiple applications allowed within your existing credit limit, enabling flexibility
- 3 Automatic payroll deductions for sustainable and hassle-free repayments.



NPL Benchmarks across financial sectors



BSP-regulated bank Consumer Loans

Philippine banks' consumer loan NPL ratio was 5.38% as of September 2025.



Online lending platform benchmark

BillEase reported an overall NPL ratio around 7-8% (June 2024). Home Credit reported its NPL ratio "remains below 10%."



Digital banks (early-stage volatility)

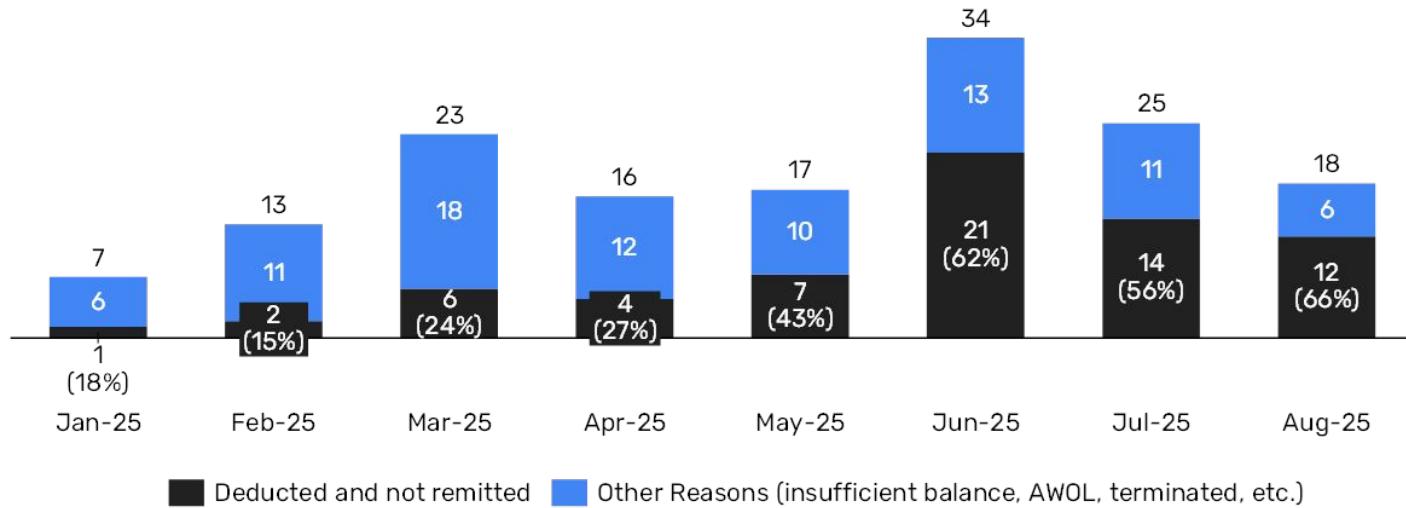
Digital banks saw NPLs spike as high as ~25% during early portfolio build-out, driven by small loan books and rapid experimentation, before improving to ~7.5% as controls and scale matured.



Sprout's target is bank-comparable risk 2026

Our goal is to converge toward a ~4% LTD / NPL ratio, consistent with traditional banks' consumer portfolios and well below unsecured digital benchmarks.

Problem: Non-Performing Loans have risen to >6% (goal is < 4%). 56% of NPLs are attrition-related while the rest are due to operational issues (which can still be collected)



How this happens

1) Employee uses ReadyCash

2) Employee resigns unexpectedly

3) Final pay is insufficient to cover loan payment

4) Loan becomes non-performing

Solution: AI-powered attrition classifier

MACHINE LEARNING MODEL

Predicts which employees are likely to resign **before** they apply for a loan

Model Accuracy

99.3%

Detection Rate

93%

Key Risk Indicators

Job tenure and experience patterns

Employee age and career stage

Satisfaction survey responses

Compensation competitiveness

Promotion and growth trajectory

Solution: The classifier was trained using a freely-available dataset. This is still a POC but we can reuse the methodology using ReadyCash and employee data.

IBM HR Analytics Employee Attrition & Performance

Data Card Code (1229)



Solution: The classifier will be run during loan application. The available total loanable amount will then be adjusted based on the results.

LOW RISK

82% of employees

50%

of net pay

Up to: P50,000

MEDIUM RISK

4% of employees

35%

of net pay

Up to: P35,000

HIGH RISK

14% of employees

0%

of net pay

*****employee classification percentages are based on the open-source dataset used to train the model. We will have to repeat and slightly modify the training of the model using our actual data before we can test.**

Solution: The classifier will be run during loan application. The available total loanable amount will then be adjusted based on the results.

Current NPL Target NPL
7% ————— **2.5-4.5%**

40-70%

reduction in attrition-related NPL

ADDITIONAL BENEFITS

Proactive risk management for existing loans

Early warning alerts for high-risk borrowers

Data-driven underwriting decisions

Reduced manual review workload

Solution: The classifier will be run during loan application. The available total loanable amount will then be adjusted based on the results.

PHASE 1

Pilot

Month 1-2

Retrieve actual data from lakehouse

Rerun training pipeline using new data

Develop model serving API

Integrate API to RC new loan flow

Early access to one high-risk client

PHASE 2

Refinement

Month 3-4

Adjust thresholds based on data

Expand to all high-risk clients

PHASE 3

Full Deployment

Month 5+

Deploy to all RC clients

Monthly risk re-scoring

Quarterly model retraining

Summary

AI model predicts employee attrition with 99% accuracy

Risk-based loan limits protect against high-risk borrowers

Expected **40-70% reduction** in attrition-related NPL

Target NPL rate: 2.5-4.5% (below 3% threshold)