

[RFC] Propensity Loan Take Up 2025

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Status	(CR) On Review
Backlog	
Estimate	Oct 2025
Documents	

Stakeholder

D - Decider		Stephen Partono
A - Accountable		
R - Responsible		
C - Consulted		
I - Informed		

Background

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Since the launch of the **Direct Lending** product in October 2024, Bank Jago has faced the challenge of a low loan *take-up rate* from prospective customers who have received loan offers. Although various acquisition programs have been implemented — such as reminders, WhatsApp notifications, telemarketing, and marketing promotions — the loan conversion rate remains suboptimal.

To improve the effectiveness of acquisition strategies, a **propensity model** or **customer segmentation** is needed to identify groups with a higher probability of taking up loans. With this model, promotional activities and outreach efforts (e.g., campaigns, notifications, or telecalls) can be more precisely targeted toward the most potential segments.

This approach is expected to increase marketing efficiency, enhance customer experience through *personalized targeting*, and ultimately improve the overall loan *take-up rate*.

Scope

1. Developing model propensity take up with existing features all
2. Developing model propensity take up with existing features non bureau

No. 2 is an optional strategy, to be applied if the results in No. 1 show segmentation that is concentrated or already reflective of a particular risk segment score (EWS Score).

Requirement

1. Label / Target

For every customer who passes underwriting, we will provide a loan offer (uploaded in the app). Loan offers are generated at the beginning of each month (on the 4th–5th) and remain valid until their expiration date in the following month.

The target determination is calculated from the offer date. If the customer makes their first disbursement (start facility date) any time from Day +1 after the offer date until the loan offer expires, the customer will be flagged as *take-up*.

The simplified logic is as follows:

period offer	flag_take_up
2025-08-05	If start_facility_date between 2025-08-06 (period offer+1) and expiry_date (2025-09-05) then 1 else null end
etc	

Source :

- jago-bank-data-production.dwh_core.loan_offer
- jago-bank-data-production.data_mart.credit_risk_vintage_account_direct_lending

Backtest :

Reference script : ongoing

2. Features

The features to be used are existing ones, namely: demography, funding balance (last 1–6 months), funding transactions (last 1–6 months), and bureau features (excluding collectability and DPD category).

The connection across variables can be made using id_number or customer_id_lfs, while the connection across time periods is determined by ensuring that the latest feature period (business_date) precedes the offer period.

Source :

- Jago-bank-data-production.data_mart.customer
- Jago-bank-data-production.model_features.successful_transaction_features
- Jago-bank-data-production.model_features.funding_balance_features

- Jago-bank-data-production.model_features.slik_features (bureau)
- Jago-bank-data-production.credit_risk.cbas_customer_level (bureau)

Reference script : ongoing