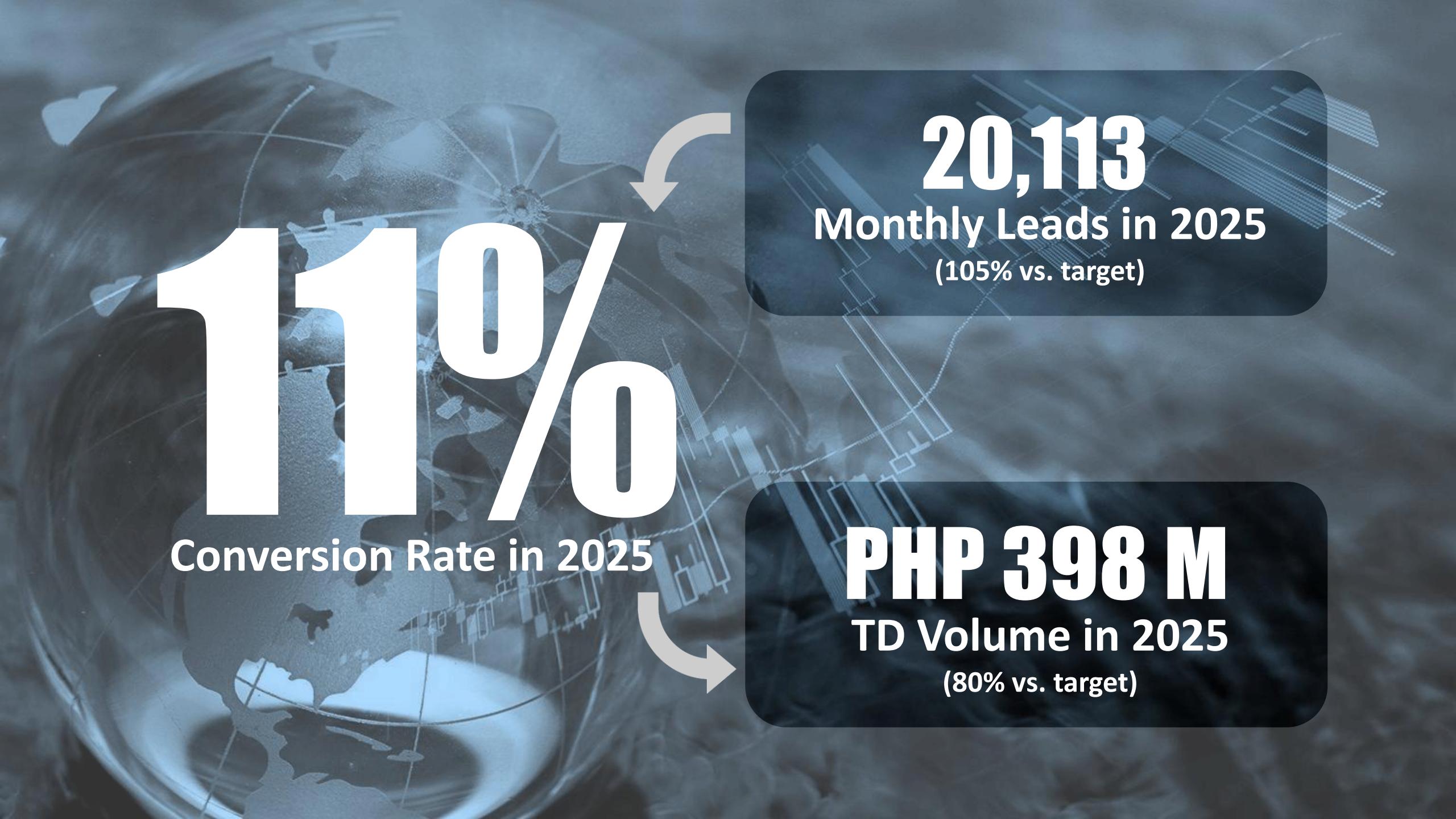




# Leveraging Machine Learning to Improve Lead Quality for Bank-initiated Campaigns

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Capstone Project



# 11%

Conversion Rate in 2025



**20,113**  
Monthly Leads in 2025  
(105% vs. target)

**PHP 398 M**  
TD Volume in 2025  
(80% vs. target)

## BUSINESS CHALLENGE

## QUESTION ANSWERABLE BY DATA

While the bank has an abundant pool of customers ripe for offering Term Deposit to get sufficient leads, downstream conversion and revenue are lagging indicating a **quality gap in acquired leads**.

What customer data on demographics, relationships, transactions, behavior, and interactions can be used to **maximize the propensity to convert and enable delivery of higher campaign ROI?**



# OPPORTUNITIES TO CREATE CUSTOMER AND BUSINESS VALUE THROUGH OPTIMIZING CAMPAIGN LEAD QUALITY



## Reach Growth Targets Faster

With a significant boost in acceptance rate, the bank can expect that growth objectives will be met sooner, leaving more opportunity to overdeliver.



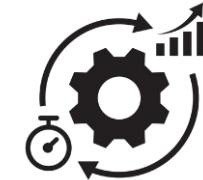
## Enhance Customer Experience

Better chances that customers will find the product relevant. Less complaints from those who may find the offers irrelevant and annoying.



## Optimal Use of Limited Resources

Money, time, and manpower are used to reach out to customers more likely to accept/subscribe.



## Sustained Benefit

Cycle of model validation and recalibration reduces the risk of bias and can capture market or behavior shifts more effectively.

# How do we solve and reap the benefits?



# CUSTOMER SEGMENTATION CAN HELP THE BANK TAILOR OFFERS BASED ON IDENTIFIED PROFILES



## Young and Single

**Age:** ~30 years old  
**Job:** Administrative  
**Marital Status:** Single  
**Educational Attainment:** University  
**Personal Loan:** None



## Mid to late 30s and Married

**Age:** ~36 years old  
**Job:** Blue Collar  
**Marital Status:** Married  
**Educational Attainment:** University  
**Personal Loan:** None



## 40+ Years Old and Married

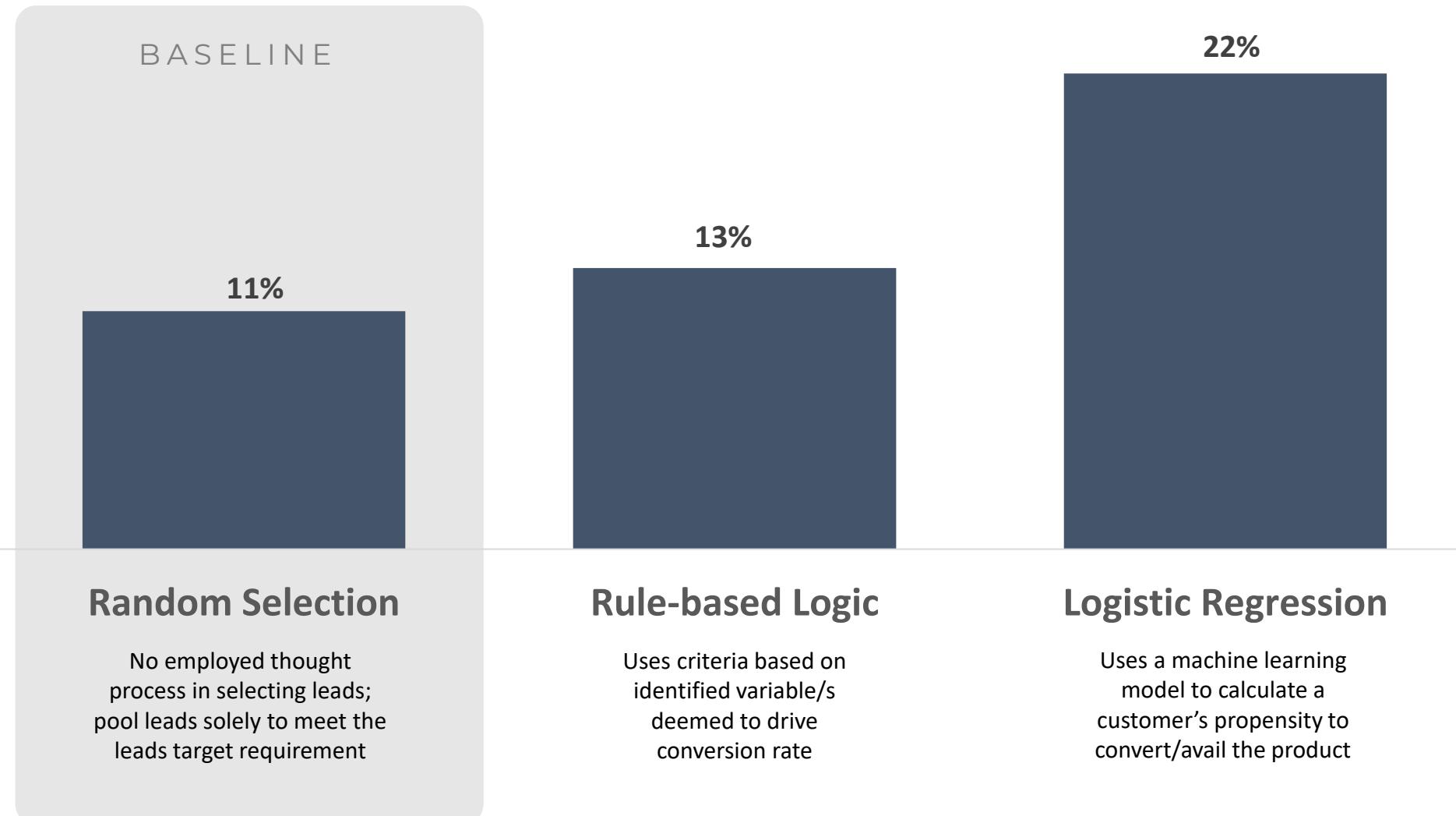
**Age:** ~47 years old  
**Job:** Blue Collar  
**Marital Status:** Married  
**Educational Attainment:** University  
**Personal Loan:** None



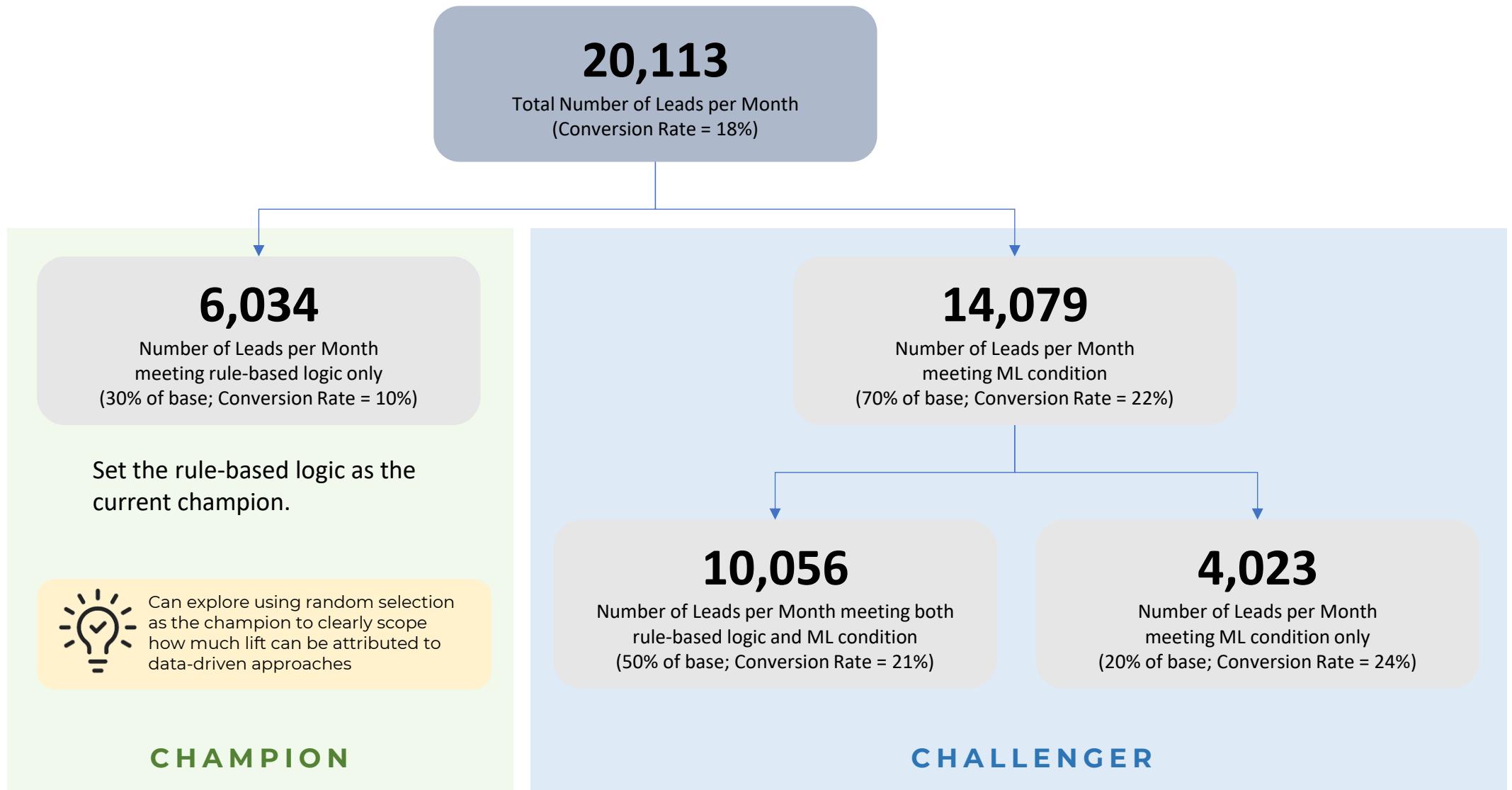
**LOW-HANGING FRUIT:** Given that these segments' only difference is home loan availment which also indicates higher conversion propensity, may be good to consider a Home Loan + Term Deposit Bundle Offer to selected customers

# THERE IS AN OPPORTUNITY TO DOUBLE CONVERSION SUCCESS THROUGH THE USE OF PROPENSITY MODELS

## CONVERSION RATE COMPARISON BY STRATEGY



# RECOMMENDED LEADS GENERATION CHAMPION-CHALLENGER FRAMEWORK



# BUSINESS SHOULD BE MINDFUL OF KEY CONSIDERATIONS

## CAMPAIGN CONSIDERATIONS



### Campaign Prioritization

Customers who register high on propensity may also be part of other campaigns; need to align on prioritization.



### Contact Constraints

To avoid disengagement due to annoyance from too-frequent attempts to offer products, some customers may be in “cooling” status

## RISK AWARENESS



### CASA Cannibalization

For campaigns, fresh funds are preferred; need to avoid the transfer from a low-cost product like CASA to a high-cost product like TD.



### Bias and Compliance Checks

Regular checks on the model should be done to ensure no unintended favorability/adverse bias creeps in. Need to ensure compliance to regulatory body protocols.



GOAL IS TO HAVE THE ALWAYS-ON CAMPAIGN UP AND RUNNING AFTER TWO MONTHS

### CAMPAIGN EXECUTION PROPOSED TIMELINE

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10
<b>Business Unit / Product Owner</b>										
Finalize Program Paper										
Secure necessary permits										
Finalize campaign offer spiers										
Conduct sales/offer training										
Campaign launch support										
<b>Data and Analytics Office</b>										
Gather necessary data										
Data validation and cleaning										
Model development (or recalibration)*										
Provide leads list (champion-challenger framework)										
Set up campaign performance tracker										
Early read on campaign performance										

\* Assumes there is a usable base model to meet a shorter one-month timeline

**18%**

Improved Conversion Rate\*



**20,113**  
Monthly Leads  
(105% vs. target)

**PHP 652 M**  
Estimated TD Volume  
(130% vs. target)