

# How Data & Data Analytics Company Support Micro & Small Lending □

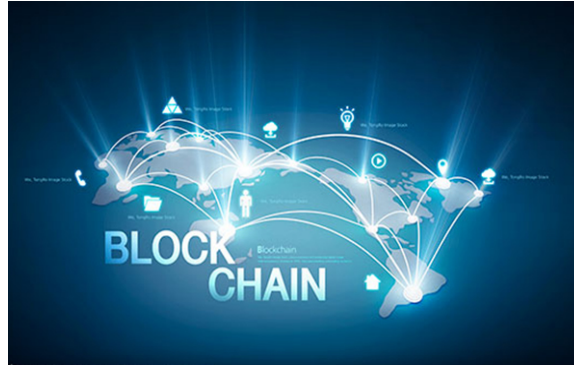


百融云创  
Bairong, Inc.

2020-11

# About Bairong

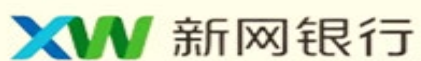
## Bairong Technology Co., Ltd.



- ◆ Founded in March 2014, Bairong is a *CreTech (Credit Technology) company* using advanced technologies such as AI, big data and cloud computing to innovatively provide full lifecycle *managerial products and services* for institutions in the area of *credit, insurance, investment and asset management*.
- ◆ Bairong is committed to becoming the largest fintech service provider in China. With the goal of spreading integrity culture and developing integrity ecology, we adheres to contribute to the construction of the national credit evaluation system and the realization of inclusive finance!



## Banks



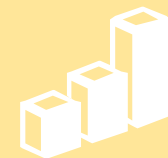
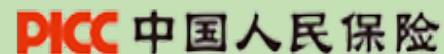
## Consumer Finance



## Auto Finance



## Insurance & Trust



## Online Platform



# Difficulties in credit evaluation

- **Current status:** In China, the credit investigation report of the people's Bank of China (PBOC) is an important basis for some enterprises to judge loan applications. The report includes the credit status of individuals and enterprises.
- **Problem:** Limited coverage, **fewer than 50% of the population have adequate lending histories**, appropriate third-party institutions are demanded to provide data & analytics services with the help of fintech



## *Borrower quality deteriorates*

Low-income groups, high-risk groups joined.



## *Limited coverage*

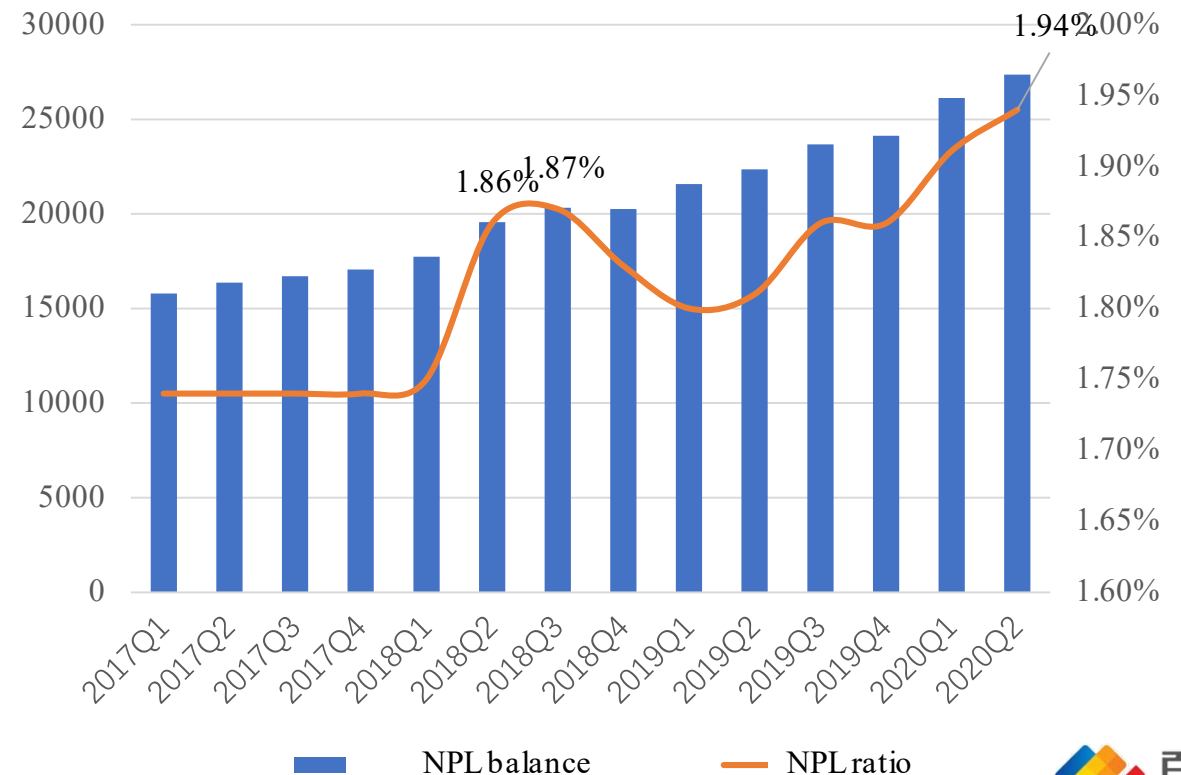
Relying solely on the credit report of the PBOC cannot meet the credit demand of people with no credit record.



## *Slow approval*

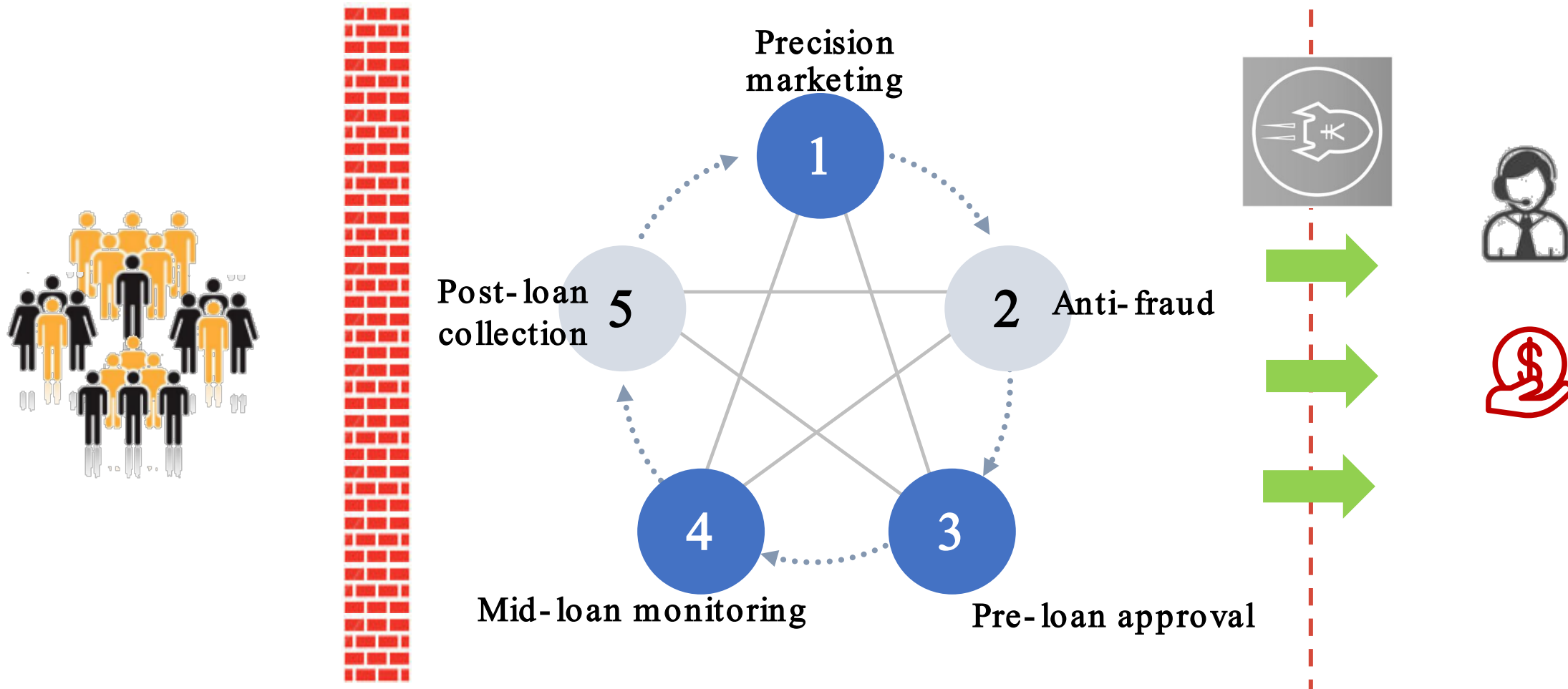
For many SMEs, they have been relying heavily on offline due diligence of borrowers, with a long approval process.

### NPL balance & ratio of commercial banks



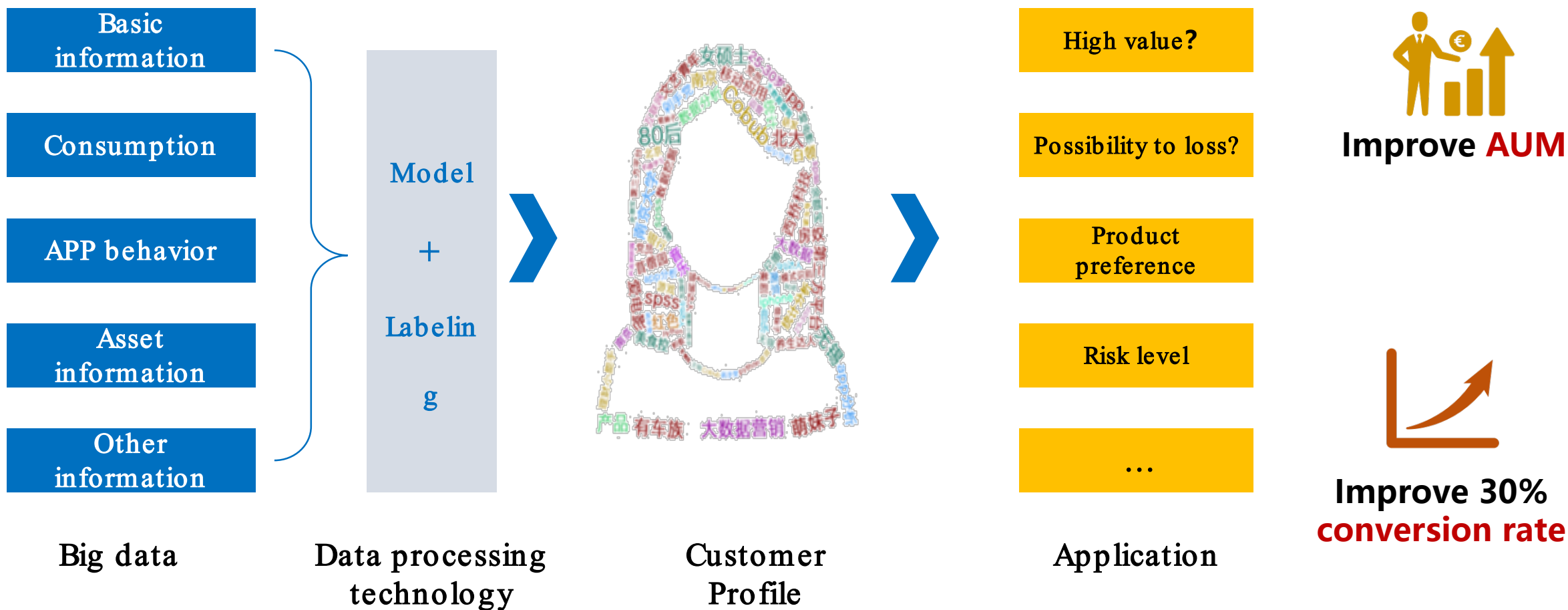
# Full life-cycle Intelligent Risk Control Program

- Intelligent risk management solution can help financial institutions to build a life-cycle risk control strategy, We help institutions to greatly reduce the cost of manual review and achieve efficient and comprehensive risk management for applicants.



# Precision marketing based on KYC

- With the help of big data and data processing technology □ gradually change the business pattern from “product-centered” to “customer-centered”
- Marketing response model can effectively find highly responsive potential customers and narrow the marketing scope



# Fraud types using high-tech

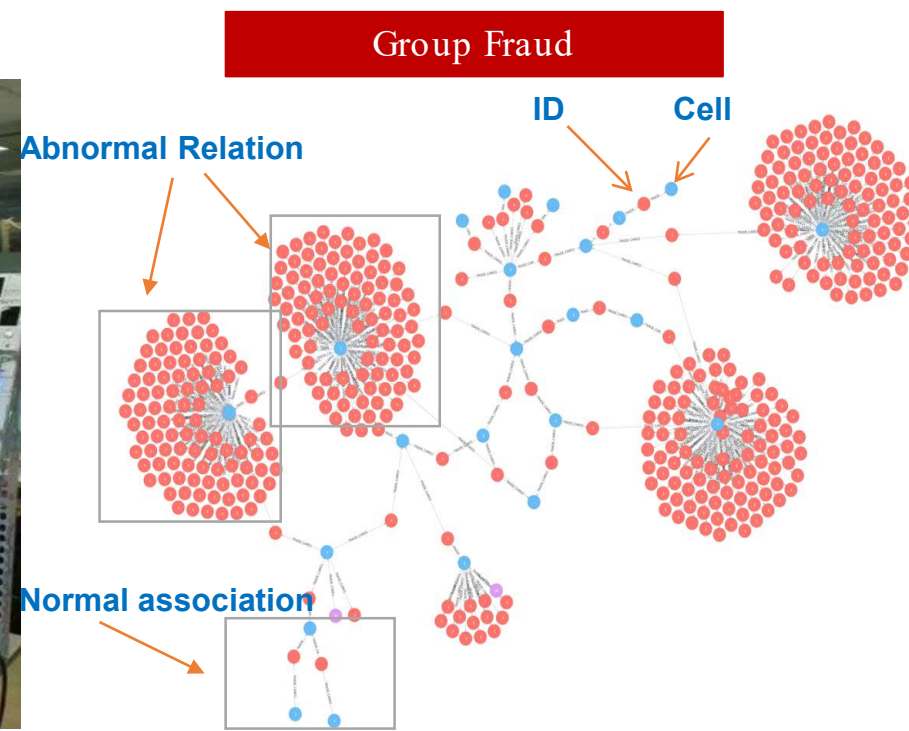
- With the help of fin-tech, banks have realized online approval and real-time lending, but new fraud methods based on the characteristics of these products have also been continuously upgraded.
- While customers enjoy flexible and convenient services, bank's fraud risks have become more **hidden and professional**.



Virtual face recognition



Group Control System



# Common types of fraud

## Fraud types



### *Fake identity*

Use others identity to apply



### *Fake information*

Fill in fake information to qualify for a loan



### *Bad history*

Overdue records



### *Group fraud*

Organized and premeditated activity

## Device fraud



Financial institutions



# Supplementary anti-fraud & credit evaluation data

- We evaluate borrower's behavior pattern from various dimensions in order to fully assess their risk. Through the multi-dimensional and all-round data, the pre-loan applicant portrait is created.



Job stability



Income stability



Consumption information



Stability level



Capital demand



Debt Repay Stress



Judicial information

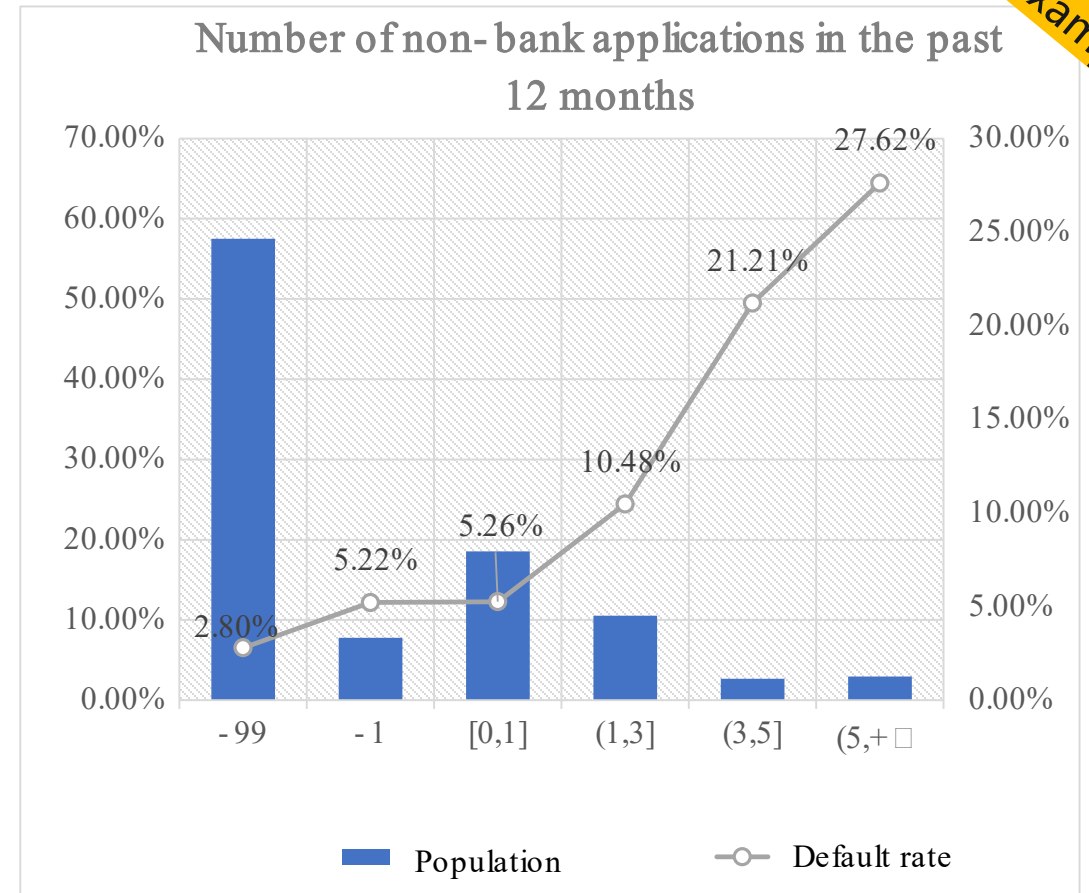
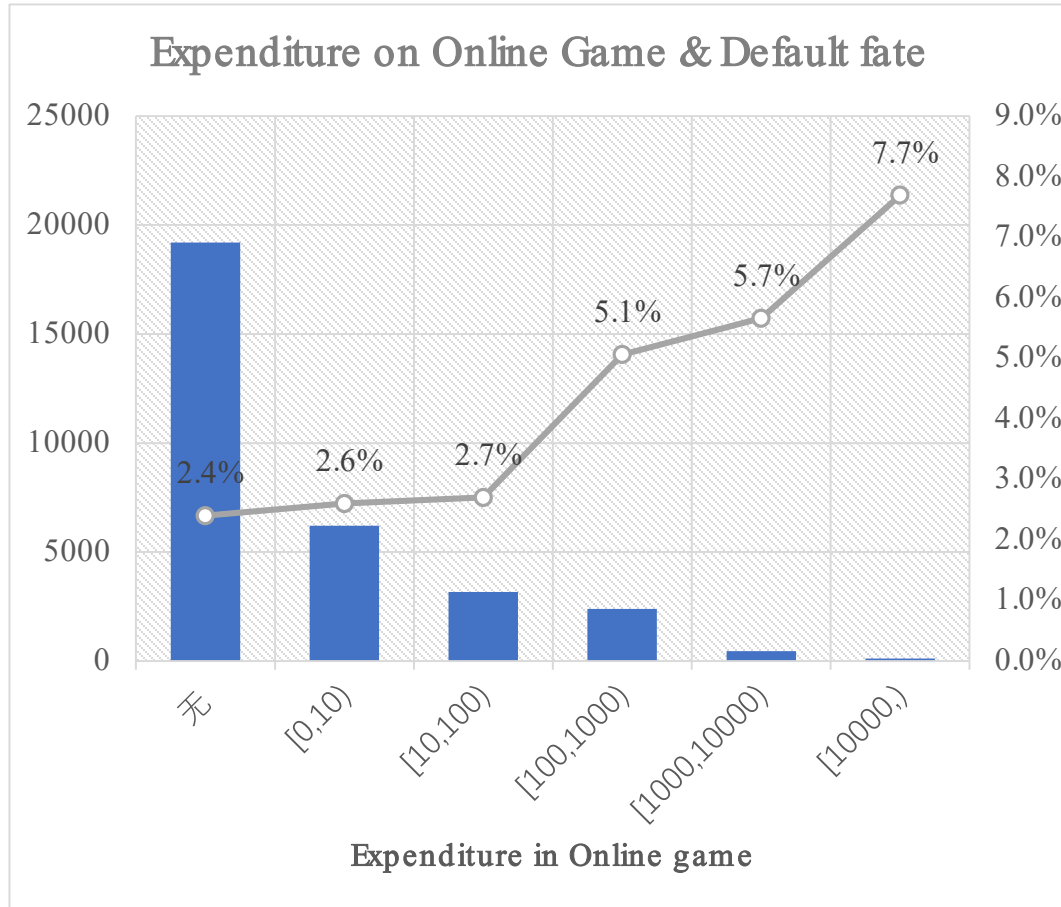


Usury application records



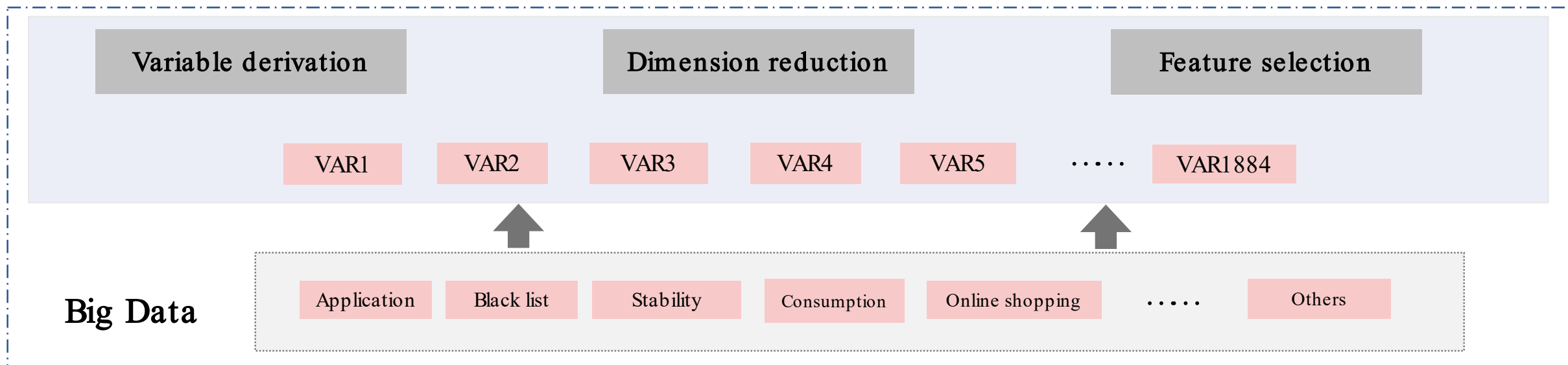
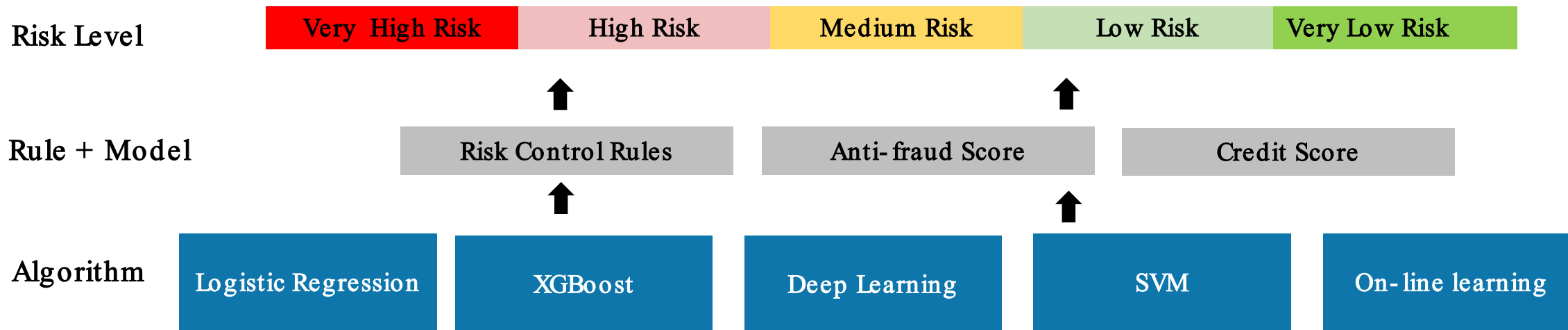
# Example – Multiple application, online game spending

- Higher amount of online game spending in the last 12 months, higher the possibility of default.
- Multiple application data is an important dimension of credit evaluation



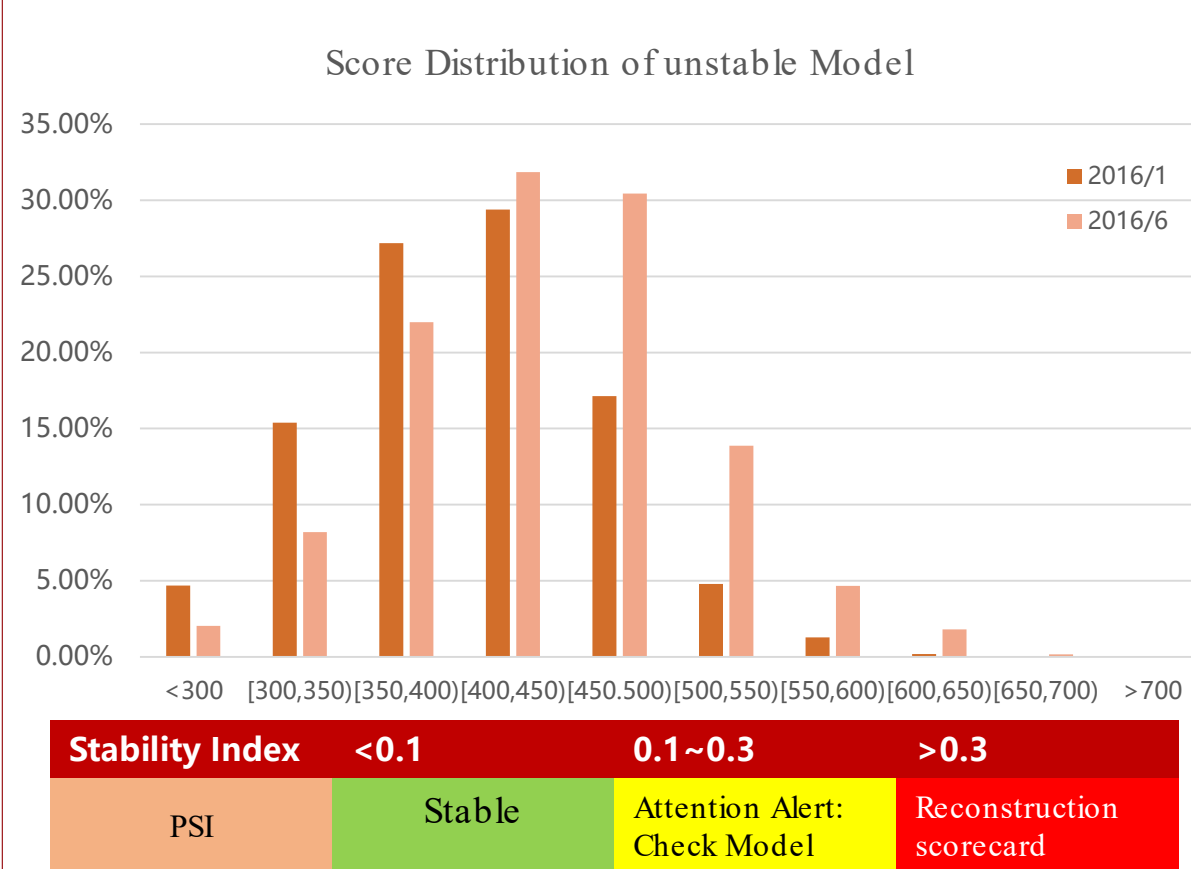
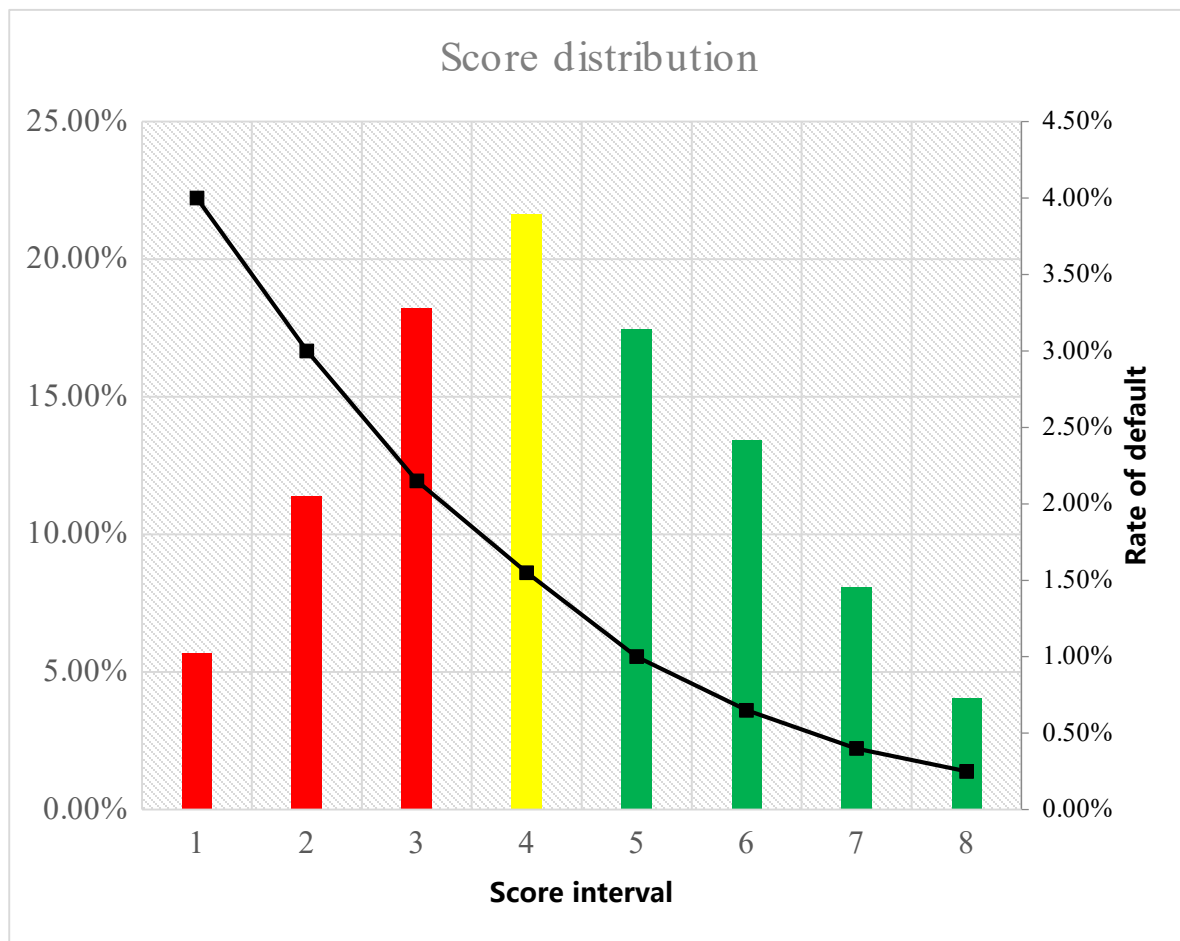
Example

# Modeling architecture

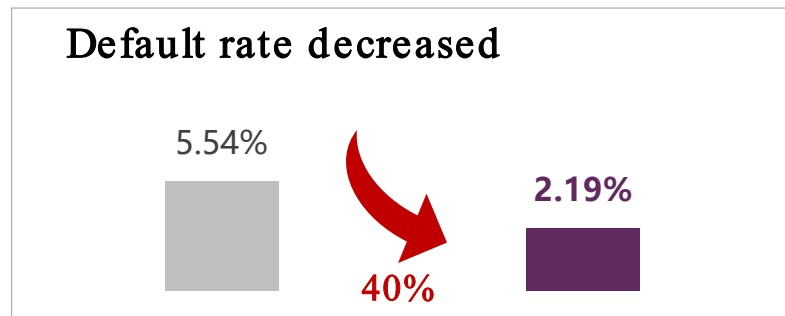
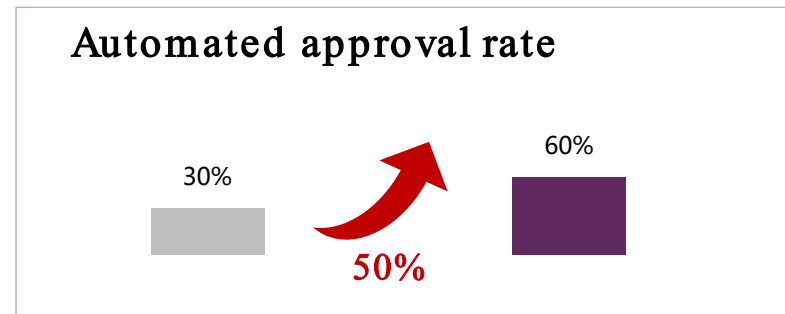
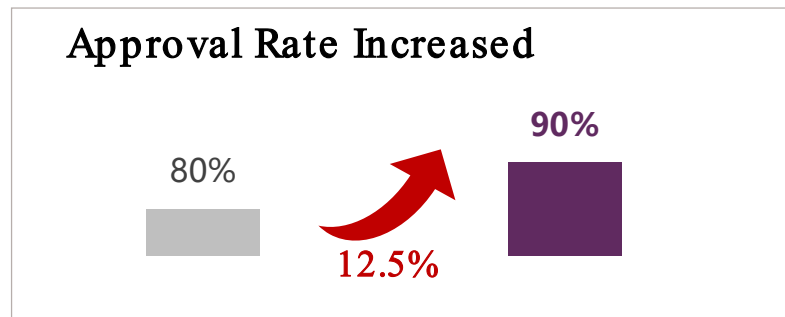
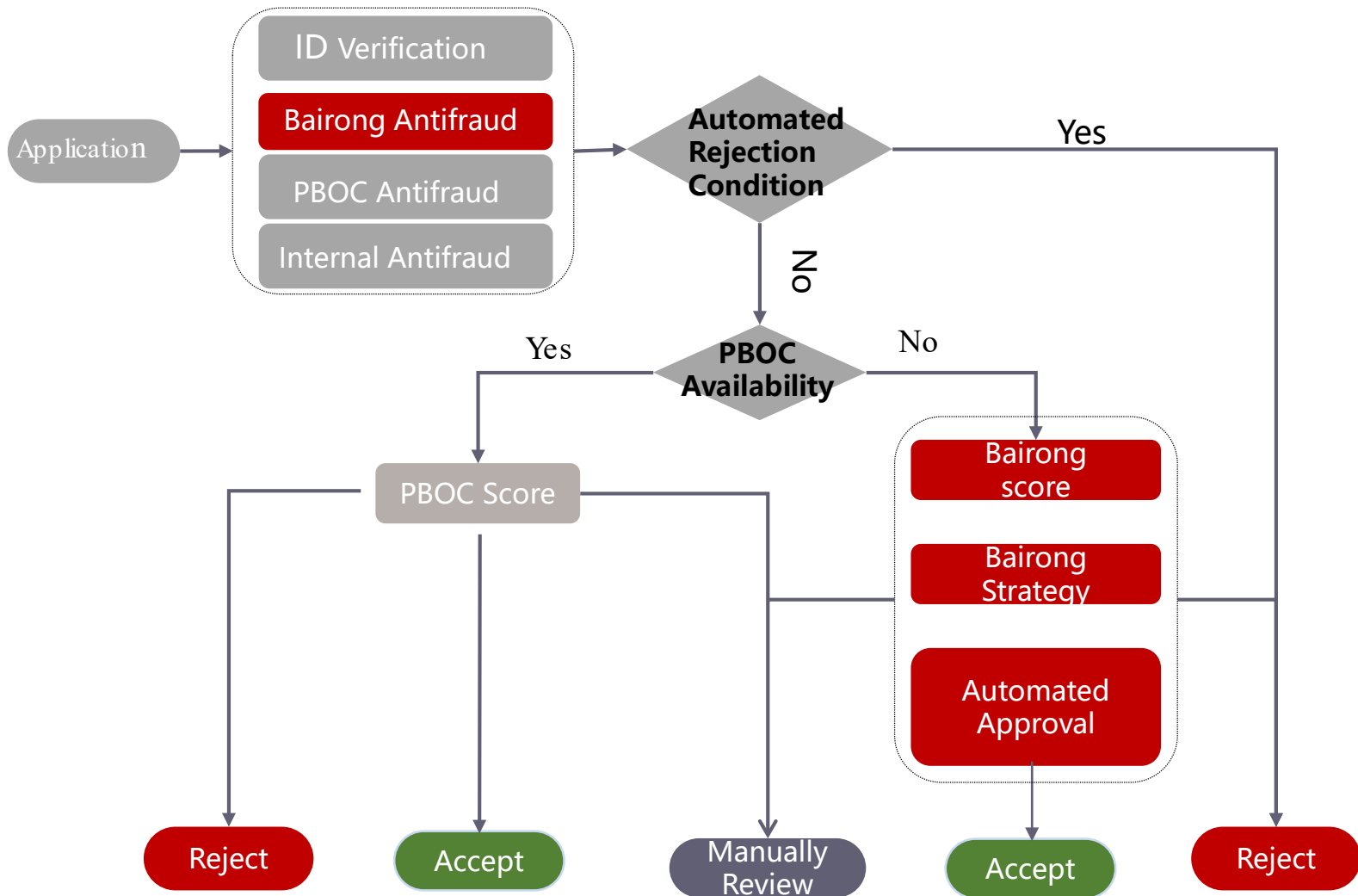


# Case: Credit evaluation score

- Examples of different scoring ranges and credit risk levels are as follows:  
 [300,650) High risk, **Reject**;      [650,720) Medium risk **Pending**;      [720,1000] Low risk, **Pass**
- Due to changes in macroeconomics or marketing strategy, model deviations are possible, and model monitoring and model tuning are required.



# Case: Pre-Loan Approval Process Optimization



Old Strategy

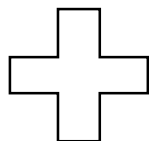
New Strategy

# Loan Monitoring –Strategy

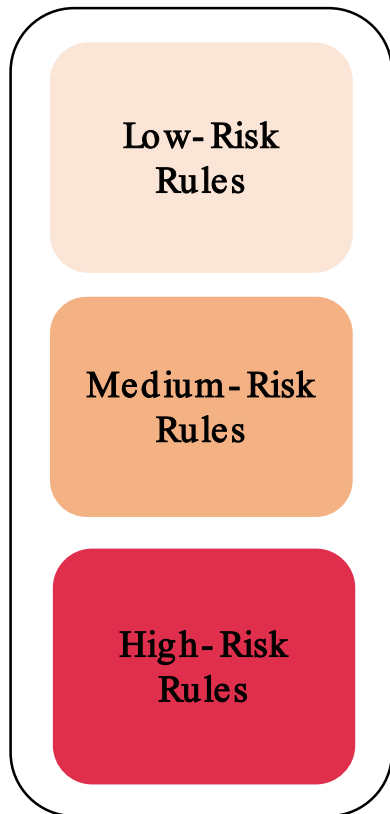
- Using the rules and scorecard , the customers can be divided into A~ D level. Grade A risk is relatively low, this part of customer can be transferred to cross-selling, Grade D risk is relatively high, early warning is needed in advance.
- The proportion of Grade D users is only 1.71% while the default ratio is **36.59%**
- Monitor the quality of existing customers in real time, identify and deal with potential risks early, effectively **reduce the monitoring cost**

## Behavior scorecard

Rank	Interval	Proportion
1	[0,400)	0.43%
2	[400,450)	1.22%
3	[450,500)	
4	[500,550)	5.96%
5	[550,600)	
6	[600,650)	9.78%
7	[650,750)	
8	[750,825)	83.63%
9	[825,875)	
10	>875	



## Rules



The overall bad debt rate of sample was **5.5%**

## Distribution

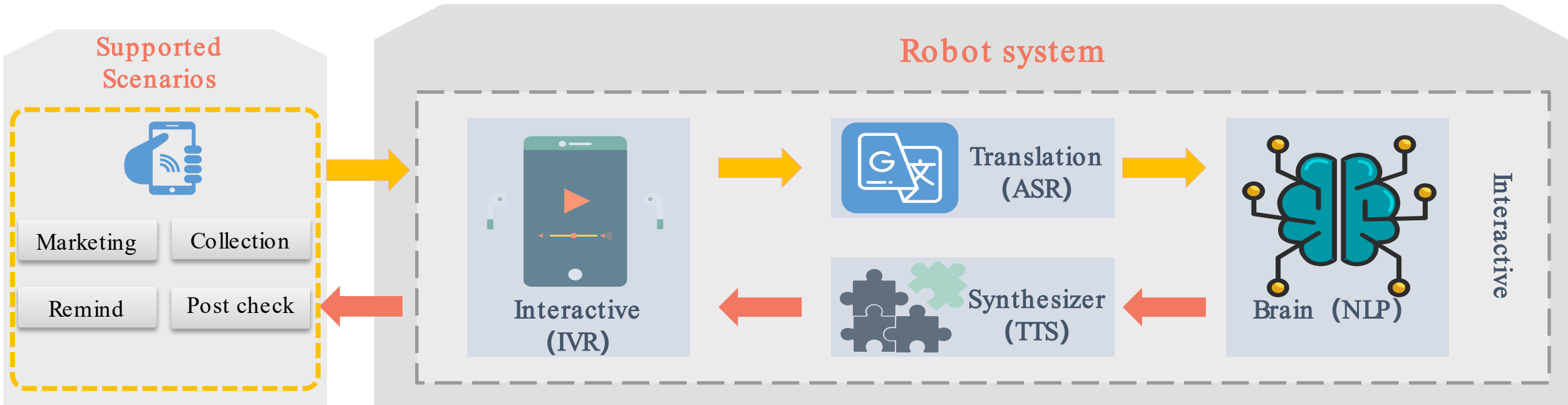
Level	Proportion	Bad rate	Lifting rate
A	54.85%	3.26%	
B	32.16%	5.31%	
C	11.28%	12.18%	221%
D	1.71%	36.59%	660%

# Post-loan management - strategy

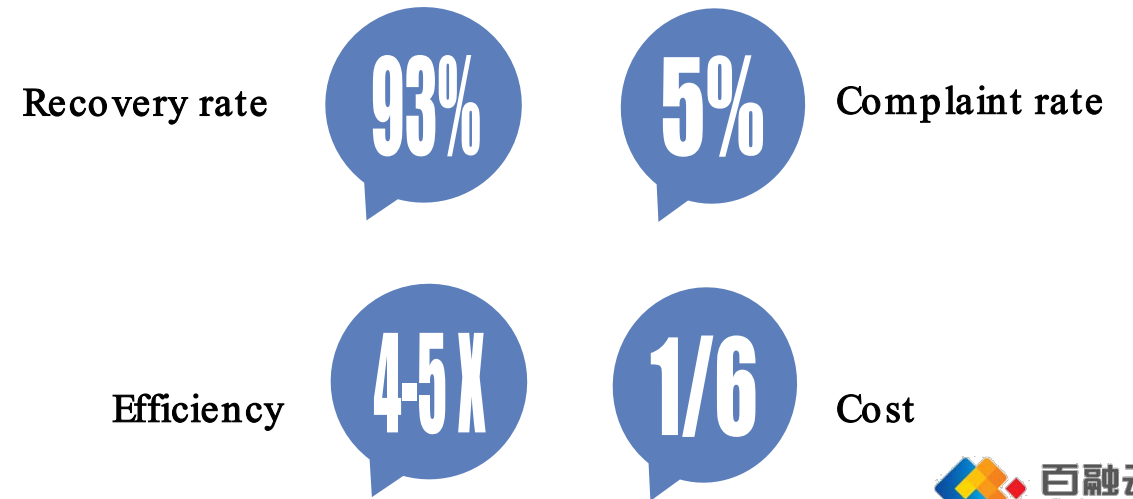
Internal			Internal + External	Professional team
Pre-collection	Early collection	Mid-collection	Late-collection	Asset disposal
1 week before	M1	M2-M3	M4-M6	M6+
IVR/SMS	IVR SMS/Call/ Collection Robot	C card+customer profile/SMS/Call/ Collection Robot	External methods/Legal action/Asset sale	
Guide to prepayment	The combination of manual phone call and voice bot, timely locked the payment	adopt different collection methods on ccustomers with different repayment ability/willingness and rationally allocate resources	Mainly solve high risk customers, within the scope of compliance, use various means to recover the loss	

Differentiated collection strategies can be formulated to improve the overall collection efficiency

# Post Loan Collection– Bai Xiaorong Collection Robot



	Voice bot	Manual
Answering rate	61.1%	57.7%
Complete answering rate	69.0%	72.5%
Commitment to repay	66.8%	75.1%
<b>Recovery rate</b>	<b>47.79%</b>	51.13%







Thanks for watching!