**Credit Policy for**

**Online P2P Market of China**

**Easy Launch**

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1. **Process Flow**
   1. **Application Flow**
   2. **Risk Process**
2. **Potential Risk Types & Mitigations**

| **Check Points** | **Type of Risk** | **Subtype of Risk** | **Tech/Data Proposal** | **Service Providers** |
| --- | --- | --- | --- | --- |
| Customer Enrollment & Identity Check | Identity Fraud | Stolen/Faked  ID card | * ID identification * Facial identification | * Minshi |
| Application Fraud | Blacklist & Multiple Debt | * Blacklist Union and Multiple Debt for P2P | * 91Credit * Tongdun |
| Falsified cell # | * Cell Phone * Alipay * Taobao & JD * Device Info (GPS Info) | * QuantGroup |
| Falsified Loan Contacts |
| Falsified Mailing/Residential Address |
| Credit Rules & Models | Bust out | * No intention to repay * Lost Contact | * Cell Phone * Alipay * Taobao |
| Credit Risk | Incapable of full repayment | * Cell Phone * Alipay * Taobao |

1. **Risk Policies & Strategies**
   1. **Constraints for Cell #s**

* Description
* The cell # must be unique in CRM, no duplication allowed.
* Cell #s provided by virtual vendors (beginning with 17) or Xiaolingtong(小灵通, appearing to be landline #s) are not accepted because the platform cannot get historical communication data for these numbers.
* In case of decline
* For duplicated cell #: The cell # already registered. Please try another one.
* For virtual or Xiaolingtong: Virtual or Xiaolingtong cell #s are not currently accepted for the present. Please try another one.
  1. **Internal Rules**
* Description

| **Rule #** | **Data Sources** | **Rule Descrption** | **Result** | **Comments** | **Easy launch – “PV” means manual check on Phone verification stage** |
| --- | --- | --- | --- | --- | --- |
| 1 | Internal | The applicant's cell # was declined by the platform in the past 1 month. | Decline |  | PV |
| 2 | Internal | The applicant's ID # was declined by the platform in the past 1 month. | Decline |  | PV |
| 3 | Internal | The applicant was once 7+ dpd on the platform. | Decline | Check both cell # and ID # | PV |
| 4 | Internal | The applicant's emergency contact(s) was once 7+ dpd on the platform. | Decline | Either the cell # or the ID # of the emergency contact(s) | PV |
| 6 | Internal | The applicant is younger than 22 or older than 50. | Decline | Age is extracted from verified ID #. | Site |
| 7 | Internal | The applicant runs his own business. | Decline | The product is only for customers living on salaries. | PV |
| 8 | Internal | The applicant works as salesman and has been working in the current institution for less than 9 months. | Decline |  | PV (add) |
| 9 | Internal | The applicant works as non-sales and has been working in the current institution for less than 6 months. | Decline |  | PV |
| 10 | Internal | The applicant is younger than 25 but is director or above. | Decline | Too young to be true. | PV |
| 11 | Internal | The applicant is younger than 25 but the monthly income is over 25,000RMB. | Decline | Too young to be true. | PV |
| 12 | Internal | The applicant works as {“私家侦探”、“保镖”、“三陪公关”、“刑警”、“缉毒警”、“防爆警”、“消防警”、“杂技演员”、“井下旷工”、“海上作业人员”、“高空作业人员”、“同业人员但非银行从业人员”、“商贩”} | Decline | Restricted works like porn, will be translated on week 22-25. | PV (add) |
| 13 | Internal | The applicant works in such industries as {“地下钱庄”、“非法传销”、“非法证券活动的信息咨询公司”、“荐股公司”、“国家安全局”、“军事保密机关及下属科研院所”、“野战部队”、“卡拉OK”、“夜总会”、“歌舞厅”、“桑拿按摩中心”、“足浴保健”、“游戏机中心”、“综合娱乐城”、“小型钢贸行业”、“小型木材行业”、“小型水泥行业”、“康乐中心”} | Decline | Restricted industries like porn, will be translated on week 22-25. | PV |
| 14 | Internal | The customer must have at least 2 emergency contacts, the primary of which must be spouse, parent or children (must be over 22 years old). | Suspend and require modification |  | PV |

* In case of decline

APP pushes decline message.

* 1. **Identity Verification**
* ID verification will be developed in website
* The customer uploads a picture of the ID card then the pattern recognition tool on the backend will extract the ID # and the name automatically.
* The customer is allowed to modify the ID # and the name manually if the recognition is not correct. When both info is right, submit.
* The customer is required to take picture with his ID card held beside his face and then submit it to the system.
* After submission, the system will make queries to NCIIC (National Citizen Identity Inquiry Center) data base to validate the ID #, name and the picture. The ID #, name and the real face will be automatically compared against the ID #, name and ID picture in NCIIC data base.
* The service returns similarity rate for customer’s photo and photo in database (range is 1-100%)
* If the similarity rate is below 90%, decline.
* In case of decline
* The customer cannot proceed the current application session until his identity is verified.
* Notification message: Your ID info failed to be verified. Please check your pictures and resubmit.
* If the customer fails for 3 times, terminate this application and add this ID info to the blacklist of the platform.
  1. **External Blacklist & Multiple Debt**
* Description

| **Rule #** | **Data Sources** | **Rule Descrption** | **Result** | **Comments** | **Easy launch– “PV” means manual check on Phone verification stage** |
| --- | --- | --- | --- | --- | --- |
| 1 | Tongdun | The applicant's cell # or ID # appears in the blacklist published by supreme courts. | Decline |  | PV (add) |
| 2 | Tongdun | The cell # of emergency contact(s) appears in the blacklist published by supreme courts. | Decline |  | PV (add) |
| 3 | Tongdun | The applicant's cell # or device is marked as stolen. | Decline |  | PV (add) |
| 4 | Tongdun | The applicant's device is marked as robot. | Decline |  | PV (add) |
| 5 | 91Credit | The applicant has applied for loans from 3+ platforms in the past 3 months. | Decline | Cell # or ID # of the applicant | PV (add) |
| 6 | 91Credit | The applicant has delinquent records on other platforms in the past 6 months. | Decline | Cell # or ID # of the applicant | PV (add) |
| 7 | 91Credit | The cell # of emergency contact(s) has delinquent records on other platforms in the past 6 months. | Decline |  | PV (add) |

* In case of decline

Phone verificator sends decline SMS message.

* 1. **Credit Rules Based on Compound Big Data Sources**
     1. **Credit Background**
* Description

| **Rule #** | **Data Sources** | **Rule Descrption** | **Result** | **Comments** | **Easy launch– “PV” means manual check on Phone verification stage** |
| --- | --- | --- | --- | --- | --- |
| 1 | Internal  Cell Data | The applicant's direct contact(s) was once 7+ dpd on the platform. | Decline | The applicant's direct contact(s) refers to the cell #s in the cell communication history of the applicant. | PV |
| 2 | Tongdun  Cell Data | The applicant's direct contact(s) appears in the blacklist published by supreme courts. | Decline | The applicant's direct contact(s) refers to the cell #s in the cell communication history of the applicant. | PV |
| 3 | 91Credit  Cell Data | The applicant's direct contact(s) has delinquent records on other platforms in the past 6 months. | Decline | The applicant's direct contact(s) refers to the cell #s in the cell communication history of the applicant. | PV |

* In case of decline

PV sends decline SMS

* + 1. **Falsified Cell #**
* Description

| **Rule #** | **Data Sources** | **Rule Descrption** | **Result** | **Comments** | **Easy launch** |
| --- | --- | --- | --- | --- | --- |
| 1 | Cell Data | The name and ID # provided in the application material do not match the ones bonded to the cell #. | Decline |  | PV |
| 2 | Cell Data | The earliest call to the top 10 contacts in history is later that 3 months before application date | Decline |  | PV |
| 5 | Cell Data | The latest call to the top 10 contacts in history is more than 7 days before application date | Decline |  | PV |
| 6 | Cell Data  Taobao | The cell # didn't show up in the online shipping records in the past 6 months. | Decline | . | PV |

* In case of decline

PV sends decline SMS to the customer

* + 1. **Falsified Emergency Contacts**
* Description

| **Rule #** | **Data Sources** | **Rule Descrption** | **Result** | **Comments** | **Easy launch– “PV” means manual check on Phone verification stage** |
| --- | --- | --- | --- | --- | --- |
| 1 | Cell Data | The urgent contact # is not in top 10 contacts in phone history | Decline |  | PV |

* In case of decline

PV sends decline SMS to the customer.

* + 1. **Falsified Mailing/Residential Address**
* Description

| **Rule #** | **Data Sources** | **Rule Descrption** | **Result** | **Comments** | **Easy launch** |
| --- | --- | --- | --- | --- | --- |
| 1 | Taobao  JD.com | Both Taobao and JD of the customer contains transactions shorter than 6 months. | Decline |  | PV |
| 2 | Taobao  JD.com | The address provided by the applicant never appeared in the shipping address of Taobao or JD. | Decline | Fuzzy match needed | PV |
| 3 | GPS info  Baidu map API | The APP GPS location at application is over 100 km away from residential address in the application material. | Decline | Requires API development with Baidu map | Site |

* In case of decline

PV sends decline SMS to the customer.

* 1. **Models**
     1. **Modeling for Repayment Willingness**

For micro loan within 30 days, the credit risk is more about repayment willingness than repayment capability, as long as the borrower is still being employed. Therefore, it’s very important to build specific models to detect this 1st-party fraud.

* Tagging on the historical data

The historical borrowers that are unwilling to repay can be tagged based on the performance data:

* The customer is 30+ dpd
* The net loss % is 90%+ after 3 months (after several rounds of internal and outsourced collections).

With 1 or more conditions as below:

* The customer no longer answered the collection calls after sometime.
* The customer’s cell phone goes blackout after he gets the money or after being delinquent.
* The customer’s cell # goes deactivated after he gets the money or after being delinquent.
* The customer’s emergency contacts cannot be communicated after the customer is delinquent.
* The customer’s emergency contacts deny the relationship with the customer that the customer claimed in the application.
* The customer refuses to repay directly on the collection calls.
* Independent variables

All the attributes derived from the external data sources can be utilized as the independent variables of modeling.

* + 1. **Modeling for Repayment Capability**

The model for repayment capability can be developed to predict the applicants that don’t have enough money to repay, with cooperative willingness though.

* Tagging on the historical data

The historical borrowers without sufficient repayment capability can be tagged based on the performance data:

* The customer is 30+ dpd, repaid nothing or less than full repayment.
* The net loss % is much lower (10-40%) after 3 months (after several rounds of internal and outsourced collections).

With 1 or more conditions as below:

* The customer is reachable on the collection calls.
* The customer’s emergency contacts are true and reachable.
* The customer promised to pay when he has sufficient money.
* The customer deposits some money from time to time to reduce the delinquent amount.
* The customer initiates negotiation with the company hoping to waive some of the fees to settle the loan.
* Independent variables

All the attributes derived from the external data sources can be utilized as the independent variables of modeling.

* + 1. **Generic/Bureau Scores**

The bureau scores provided by some credit service companies can be utilized as generic scores at early stage when historical data is insufficient for internal modeling, and as one of the independent variables of the internal models when internal data get mature.

There are some generic scores popular for online micro loans provided by:

* Credoo by Qianhai Credit, one subsidiary of Ping An Insurance Group.
* Sesame by Ant Financial Services.
* Application score by QuantGroup, the same provider of cell data, Taobao, Alipay, JD, etc.
  1. **First Loan**

For any new cell # that doesn’t exist in the company’s CRM, the customer is required to follow the process strictly from registration in Chapter 1.2.

Only the applications with new cell # and new ID # can be treated as first loan.

* 1. **Repeat Loan**

There are two conditions of application treated as repeat loan.

* The customers logon their existing accounts and the accounts have historical loans records.
* The customer logon with new cell # but the ID # already exists and there are historical loans associated with that ID #. Then these accounts with same ID # will be integrated on the backend and the new application from the new cell # will be treated as a repeat application.

The strategies for applications for repeat loans:

* If the cell # or ID # was once 7+ dpd on the platform, decline.
* The customer doesn’t have to update personal info or job info.
* For the 1st and 2nd repeat loan application, the authorized data (including cell data, Taobao, JD, etc.) that acquired over 14 days ago will not be accepted. To get more favorable approval probability for the repeat loan, the customer has to reauthorize the data sources.
* For the subsequent repeat loan applications, the acceptability duration for the external data can be 1 month, on the condition that the customer has non-delinquent repayment for the previous 3 loans(first, 1st repeat and 2nd repeat).
  1. **Phone verification.**
* Mobile phone verification check:

The essence – to verify customer’s contactability, ensure that the customer has income, is living at the appropriate address and confirm the absence of obvious signs of fraud.

Check is done by Phone verificator during outbound call to the potential customer. Results of the check should be put in CRM.

|  |  |  |
| --- | --- | --- |
| **Result** | **Logic** | **Comments** |
| Not called (default value) | New check is required |  |
| Customer is successfully contacted, there are no obvious signs of fraud | Continue |  |
| Customer doesn't pick up phone/is busy not available to have a conversation with PHV (after 4 tries during 2 days) | Decline |  |
| Not registered/not available/turn off | Decline |  |
| Customer doesn’t have need anymore | Decline |  |
| The mobile phone in application belongs third person, not Customer | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Occupation is not comply Credit Policy | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer is jobless/student/housewife/retired | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer age is not qualified | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer living place is out of service of MFI | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer working place is out of service of MFI | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Reject as request from Risk | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 180 days |
| Living address is in blacklist | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 180 days |
| Customer had problems with loan repayments earlier | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 180 days |
| Applicant applies loan for another person and isn't responsible to the loan | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Customer is directed to answer PHV by third party | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Customer can't confirm employment information (fails to describe the current job/contrast with the information provided by contact person/company) | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Customer can't confirm current living address (fails to describe/plan to leave the city/contrast with contact person description/etc.) | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Applicant can’t provide contact of reference (spouse/ siblings/ parents) | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer can't provide second contact person phone number | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Third person use real Customer data | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Negative information (detoxification/rehabilitation center/loan for gambling/illegal income) | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 720 days |
| Customer doesn't match with profile in social network AND fails identity cross-check | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Customer doesn't confirm agreement parameters | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |

In case of decline: send the decline SMS in 1 hour

* Work phone verification check:

The essence – to verify that the customer is working at appropriate place, identify obvious signs of fraud and check if there is negative information about the customer.

Check is done by Phone verificator during outbound call. Results of the check should be put in CRM.

|  |  |  |
| --- | --- | --- |
| **Result** | **Logic** | **Comments** |
| Not called (default value) | New check is required |  |
| Nobody has answered the call (after 4 tries during 2 working days). | Decline |  |
| Denies to provide information | Decline |  |
| Customer employment confirm | Continue |  |
| Occupation is not comply Credit Policy | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Phone number is not registered/not available/turn off | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Company is inactive/ no longer operated | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Company phone in application doesn't belongs to Customer employer | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Customer is/will be resigned | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Customer unknown at office/never work at company | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Fake company or receiver is directed to answer PHV by third party | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Company is in blacklist | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Not required | Continue |  |

In case of decline: send the decline SMS in 1 hour.

* Family member phone verification:

The essence – to verify contact person’s contactability and absence of the negative information about the customer.

Check is done by Phone verificator during outbound call to the potential customer’s contact person. Results of the check should be put in CRM.

|  |  |  |
| --- | --- | --- |
| **Result** | **Logic** | **Comments** |
| Not called (default value) | New check is required |  |
| Contact person is successfully contacted, there is no negative information about the potential customer. | Continue |  |
| Nobody has answered the call (after 4 tries during 2 days) | Decline |  |
| Contact person phone in application belongs third person, not contact person | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Contact person doesn't know Customer | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Not registered/not available/turn off | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Contact person does not comply Credit Policy | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer is unemployed/has no appropriate occupation | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 30 days |
| Customer had problems with loan repayments earlier | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Contact person is directed to answer PHV by third party | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Contact person cannot independently tell Customer addresses/provide different Customer current living address | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 360 days |
| Contact person provide negative information about Customer (alcohol/drugs addicted/gambling/illegal income/etc.). | Decline | Put Customer ID and cell # into “CRM” black list and the customer can apply again after 720 days |
| Not required | Continue |  |

In case of decline: send the decline SMS in 1 hour.

* 1. **Signing and Disbursement**
     1. **Signing the Agreement**

After phone verification PV asks customer to make voice agreement about the terms and conditions and records this.

The agreement is generated by the system and includes product pricing, repayment items, repayment bank account, delinquency policies as well as debit channel items.

In case the debit channel fails, the customer can also choose to transfer the repayment to the company’s Alipay account on the due day.

* + 1. **Disbursement**
* The signed agreement is sent to customer via email, all significant details is sent via SMS.
* The disbursement is proceeded by CAO, before disbursement the Risk Manager does final check of the disbursement list.