

# A Study on the Application of Choosing Online Lending Platforms by the Grey Clustering Method-Based on the Sight of Investors

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**Abstract**—In recent years, online lending platforms grow explosively. Recently, the number of online lending platforms is above 500, online lending has become a measure for trendy to manage finances. The paper is based on 20 network lending companies from [www.wangdaizhijia.com](http://www.wangdaizhijia.com) for research, constructing a clustering index system with returns, liquidity and the popularity of nine indicators. And it is helpful for investors to rationally select network lending platform when we can know the level of every platform by analyzing each platform with grey clustering method. The study found that, in the financing Guarantee Corporation guarantee way, Lu Jin is the best choice for investors ; in the risk reserve guarantee way, Lego box, pleasant loan, red hill VC are good choices.

**Index Terms**—Online lending platform, the grey clustering method, operational models, investors.

## I. INTRODUCTION

The rise of online lending is not an accident, as early as 1976, Mohammed Yunus founded the Grameen Bank, the first rural bank in Bangladesh. Since the first online lending company, Zopa established in England in 2005, then truly opened the curtain of the development of online lending. This creation overturned the traditional lending model with the mediation of bank, under the traction of online platform, lending can be conducted directly between individuals. Soon after, this model is followed and varied by large numbers of countries in the world, and then large numbers of famous online lending companies appeared, whose form is diverse. Online lending entered China formally in 2007. PPDai is the first online lending company registered in China, CreditEase, HongLing Capital and other platforms appeared at the same time. However, because our market's condition is not mature, some relevant laws and statutes are not regular, credit system is not perfect and so on, the development of online lending is experiencing setbacks. For example, the setbacks consist of online lending sharper and collapse of some online lending companies.

Therefore, this paper expect to base on the sight of investors, put 20 online lending platforms like PPDai, Lufax as analysis purposes, analyze invest value of the platforms by using grey clustering method. According to the analyzing

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results, we can give advice for investors to choose an online lending platform.

## II. ONLINE LENDING PLATFORM

### A. Relevant Definition of Online Lending Platform

Online lending platform, we also call it P2P, is a kind of online lending platform for service between individuals. It mainly use online platform to collect, arrange and release demand information for borrowers, some individuals who have small cap holdings and ideas of investment can choose relevant demand to procedure according to the actual conditions. By using online lending platform, on one part, we can get financial support, on another part, we can get considerable interest income. During the lending process, online lending platform plays the role of the information mediator. It profits mainly by taking service fees and account management fees of borrowers, not by taking interest spreads. This is the biggest difference between online lending platforms and traditional financial institutions.

### B. Present Situation of Online Lending Platform at Home and Abroad

Currently, the market of lending platform is developing fast, it is becoming the competitor of traditional financial lending model. The largest is Prosper, built in America in 2006. Prosper, as the mediator of borrowing transaction, profits by taking service fees between traders. Apart from Prosper, there are several other companies for the purpose of loan and in the form of online lending in the area of online loan, like Leading Club, Zopa, and Kiva.

In our country, PPDai, Hongling Capital, and CreditEase is the examples of websites of small amount credit loans which were taking sharp and influential [1]. A miniature of platform has been built in online lending. Nevertheless, online lending platform in China is difficult to match the platforms in developed countries like Zopa, Prosper at present, but the online lending platforms in the form of innovative financing in credit markets began to search for perfect operational models in the early stage. It standardize in every area of qualification review, credit rating, risk avoidance and so on. The influence of online lending covers the whole country since it landed in Shanghai in 2007 [2].

### C. Operational Models of Online Lending Platform at Home and Abroad

Numerous online lending platforms at home and abroad can be divided into the following kinds according to different

classifications. According to the interest rate of loan, it can be divided into for-profit and public online lending platforms. Presently, most of the online lending platforms in China belong to for-profit online lending platforms. According to different borrowing objects, it can be divided into farmers in rural areas, micro business, micro business credit, personal consumption credit, individuals or small businesses regionally or nationally [3]. According to degrees of relationship between business activities and network, online

lending platforms can be mainly divided into three models like offline, online and combining. At present, most of them are combining. It can be divided into unsecured and secured according to whether it is secured. According to different forms of security, it can be divided into forms of guarantor or enterprise guarantee, collateral and collateral guarantee. According to the difference of guarantor enterprises, it can be divided into guarantee by guarantee companies, small loan companies and risk deposit accounts.

TABLE I: CLASSIFICATION OF PLATFORM OPERATIONAL MODELS

Platform name	Established time	Registered capital(million yuan)	Whether secured and its form	Online or offline	For-profit or public	Borrowing objects
Lufax	2012	83667	financing guarantee companies	Combining	For-profit	Individuals, SMEs, non-bank financial institutions
Renrendai	2010	10000	platforms, risk deposits	combining	For-profit	Individuals, micro business
Yirendai	2012	1000	non-financing guarantee companies, risk deposits	Offline	For-profit	Individuals
PPDai	2007	1000	Unsecured	Online	For-profit	individuals
Zhao Cai Bao	2014	1000	financial institutions, large guarantee companies	Combining	For-profit	Individuals, SMEs, financial institutions
YOOLI	2013	1700	small loan companies, financing guarantee companies	Combining	For-profit	Individuals
Jimubox	2013	2400	financing guarantee companies, non-financing guarantee companies, risk deposits	Combining	For-profit	Individuals
Touna	2012	5000	financing guarantee companies, risk deposits	Combining	For-profit	Individuals
Weidai	2011	3100	risk deposits	Online	For-profit	Individuals, companies
HongLing Capital	2009	5000	risk deposits	Combining	For-profit	Individuals
Gkkxd	2012	1000	guarantee agencies, risk deposits	Combining	Public	Individuals, companies
Niwodai	2011	10500	non-financing guarantee companies, risk deposits	combining	For-profit	Individuals, micro business
Eloancn	2011	100	risk deposits	Combining	For-profit	Agriculture, rural areas and farmers
Xinhehui	2013	1000	Secured by financing guarantee companies	Combining	For-profit	Individuals, institutions, corporate investors
PPmoney	2012	3000	Secured by financing guarantee companies	Combining	For-profit	Individuals, companies, financial institutions
Edai	2013	10000	Secured by risk deposits	Combining	For-profit	Micro, small and medium enterprises
91 prosperous wealth	2014	5000	Secured by collateral	Combining	For-profit	Individuals, micro, small and medium enterprises
Hexindai	2013	10001	Secured by non-financing guarantee companies, risk deposits	Combining	For-profit	Individuals, micro businesses
CreditFinance	2012	5000	Secured by financing guarantee companies, risk deposits	Combining	For-profit	Individuals, companies, financial institutions
Xiaoniu88	2013	10000	Secured by risk mutual aid money, cooperations, risk deposits	Combining	For-profit	Individuals, companies, financial institutions

### III. APPLICATION OF CHOOSING ONLINE LENDING PLATFORMS BY THE GREY CLUSTERING METHOD

#### A. The Principle of Grey Clustering Method

In 1982, Chinese famous scholar Professor Deng Julong founded the grey system theory. The grey clustering analysis is one of the contents of the grey system theory and is based on grey albino function. According to the basic ideas of grey fixed weight clustering, it is a grey statistic that judges the type of Clustering objects by inducing and arranging whiting values of clustering objects to different indicators according

to N grey classes.

#### B. Sample Selection for Online Lending Platform

In order to make the sample data true and correct and the results of the analysis has certain reference significance for investors, we put forward the following principles to select the sample credit platforms:

- 1) The website must be true, and there is a higher trading volume [4]. The number of investors shall not be less than 100, while the number of borrowers shall not be less than 5 each month.

- 2) Running steadily. Currently, online lending have sprung up in the Chinese market. The quality is spotty, among which there is no lack of the websites of vicious incidents like Voluming model and escaping. Therefore, sample platforms must be online more than 3 months and there are not any great Integrity problems in the past 2 years.
- 3) Representative websites. The chosen platforms should be the symbol of online platform. Its models, trading volume, popularity are representative.
- 4) The quantity of the samples should be appropriate. The less quantity of the samples, the results of the analysis is

more incomparable. As a result, we can't determine the availability of application methods.

Follow the principles above, we choose the following 20 online lending platforms as the sample. Their trading volumes are in front of all online lending platforms, and their overall levels are relatively well.

TABLE II: CLUSTERING OBJECTS (THE SAMPLES OF ONLINE LENDING PLATFORM)

	1	2	3	4	5	6	7	8	9	10
Platform name	Lufax	Renrendai	Yirendai	PPDai	Zhao Cai Bao	YOOLI	Jimubox	Touna	Eloancn	HongLing Capital
	11	12	13	14	15	16	17	18	19	20
Platform name	Gkxcd	Niwodai	Weidai	Xinhehu	PPmoney	Edai	91 Prosperous Wealth	Hexinda	CreditFinance	Xiaoni88

*C. The Construction of Gray Clustering Classes and Clustering Index System*

*1) The determination of grey clustering classes*

Grey clustering classes can be divided into three categories according to the grades of evaluation: Level 1, level 2, and level 3, corresponding to optimal, good and general platform.

*2) The choice of clustering index*

The selection of clustering index directly determines the result of the gray clustering evaluation. A reasonable selection of online lending platform evaluation can improve the scientification and accuracy of platform evaluation, and help investors to make the choice. Therefore, the selection of evaluation indexes should follow the following principles:

*a) Scientific principles*

The evaluation system of online lending platform should be able to reflect the platform objectively from the perspective of investors. The index system should widely covered and be able to reflect the strength of the various factors from online lending platform.

*b) Operability principles*

We should use existing statistical data as far as possible to set indicators. And it should be measurable and comparable, and also easy to quantify. It will substantially reduce the pressure of data processing by selecting operable indicators.

*c) Relative completeness principles*

As an organic whole, the indicator system should be able to reflect and measure the main conditions of evaluation platform comprehensively.

*d) Relative independence principles*

There is always overlap information between each index of the index system. Therefore, in the selection of indicators, we should select relative independent indicators as far as possible to improve the accuracy and scientification of evaluation.

Combining the investment behavior of investors and the evaluation system of Net Loan House Institute, we select income, liquidity and other 9 clustering indexes to construct the evaluation index system of gray clustering method. The

index value is based on the published information and data, a set of open and transparent approach and quantitative calculation. For quantitative indicators which data are available, we take the logarithm first, and then get scores by standardized method.

**Income Indexes**

Income indexes are concluded from the comprehensive rate of return of the platform, and deduce appropriately for not securing the principal and having interest management fees or other fees [5]. The higher the score of return is, the more income we may gain.

**Liquidity indicators**

Liquidity indicators are concluded from rapidity of withdrawing the principal and interest. According to the underlying average loan time limit and interest rate of platform and whether there is a circulation or an innovation of the debt, we can adjust appropriately. The higher the score of liquidity is, the faster we may withdraw the principal and interest.

**Risk indexes**

Risk indexes are composed of three clustering indexes, dispersions, uncollected leverage and transparency.

- 1) Dispersions: Comes from borrowing amount of a person, invest amount of a person, borrowing concentration and weigh of return of top10 borrowers taken in total return. At the same time, to the platforms secured by guarantee companies, we set the requisit that the largest percent to be collected should not be more than 10% of the registered capital of a guarantee company. The part above the percentage should be deduced. The high the score of the dispersions is, the more dispersing the investors of platforms are and the lower risk is.
- 2) Uncollected leverage: To platforms of promise to secure the principal, leverage points consist of uncollected leverage and regional leverage. Recently, we can difine uncollected leverage of the platform= $\frac{\text{to be collected of the platforms}}{\text{registered capital}} \times \text{sit compaction degree} + \text{risk deposits} + \text{registered capital of guarantee companies} \times 0.5\% \times \text{sit compaction degree}$ . To a part of borrowing comes from uncorrelated small loan

companies or guarantee companies the platforms themselves, we do some adjustments. For the platforms whose uncollected leverage is above 10 times, we deduce score, the higher times, the more deduction is. The higher the score of the leverage is, means that the smaller the leverage of capital may be, the lower operational risk will be undertaken.

- 3) Transparency: Give scores according to whether platforms announced company certificates, overdue records, photographs of borrowing data and mortgage data, operational data, basic information of borrowers and credit rating. Owing to the transparency of the information of platforms is controversy, we view that highest score of transparency integral is 80. The higher the score of transparency is, means that the more information of the platforms is and more transparent.
- 4) Operating income: Borrowing management fees of online lending platforms are one of the most major incomes [6]. Generally, borrowing management fees = borrowing amount × borrowing time × rate (always is 0.2% - 0.5%), so there has positive correlation between time weighted volume and borrowing management fees of platforms. Recently, we use time weighted volume to give score to operational index, and make adjustments

according to the models of platforms, whether having interest management fees, VIP annual fees or charging fees. The higher the score of time weighted volume is, the score the operational income is, the platform may gain more operational income. As a result, it reduces the risk of the platform, and it is benefit for investors.

**Popularity Index**

The value of popularity index is based on the number of borrowers, investors and the coefficient of risk. The score of popularity is higher, it shows that the number of borrowers and investors on the platform is more.

**Investment Scale**

Volume: it's based on the weight of actual volume and time-weighted volume during the month. The volume gets more scores, it shows that the volume is higher.

**Platform's Situation**

Brand image: get scores according some information of platform, such as money recognition, online time, the city of the headquarter, shareholders' background, team background, the mode of platform advance, events effect, risk actor and so on. Money recognition = time weighted volume (million) / comprehensive returns ratio (%). The score is higher, and the visibility of platform is higher. (The data is from the website: www.wangdaizhijia.com)

TABLE III: INDEX VALUE OF SAMPLE PLATFORMS

Number Platform		Investment scale	Popularity Return		Risk			Mobility	Platform's Situation	
		Volume	Popularity Index	Comprehensive ratio	returns	Lever	Dispersion	Operation income	Transparency	Liquidity
1	Lufax	98.72	100	34.42	37.67	82.92	92.74	26.03	45.8	88.57
2	Renrendai	88.57	82.56	44.45	41.07	83.03	79	51.09	46.73	82.14
3	Yirendai	82.47	79.81	46.41	75.34	77.51	72.46	29.76	45.68	77.81
4	PPdai	72.13	82.31	38.43	59.29	66.84	66.6	38.48	79.14	70.2
5	ZhaoCaiBao	82.97	93.06	17.77	64.38	40.54	92.54	25.39	58.16	74.5
6	YOOLI	84.04	86.38	40.58	54.67	55.78	58.48	40.72	55.37	74.41
7	Jimubox	81.71	87.2	39.64	47.87	39.19	56	61.63	67.04	72.75
8	Touna	71.95	72.66	46.85	54.83	48.99	53.9	59.71	91.19	70.24
9	Weidai	78.21	73.45	52.36	44.86	58.32	44.43	56.83	58.97	70.72
10	HongLing	87.22	80.82	44.63	14.84	32.82	78.5	51.76	100	68.68

**D. Determine the Weight**

We use the gray analysis method of fixed weight, because of different index and dimension. The weight is determined by the research institute of net credit home with AHP. First, set up the hierarchical structure like tree between level one and

level two. Then the experts score by comparing it, constructing judgment matrix, and check the consistency of judgment matrix. At last, they calculates the weight. Following is the proportion.

TABLE IV: WEIGHT COEFFICIENT TABLE

Volume	Operation income	Popularity	Return ratio	Lever	Liquidity	Dispersion	Transparency	Brand
8%	10%	16%	4%	10%	5%	15%	14%	18%

**E. Determine the Critical Value of Sub Gray Class**

According to the need of research and the actual situation of qualitative analysis and various factors, we determine the

critical value from the investor point of view. The results are in Table V.

The three gray levels are numbered 1, 2, 3. The following is the typical definite weighted functions:  $f_{jk}[X_{jk}(1), X_{jk}(2), X_{jk}(3), X_{jk}(4)]$ .

TABLE V: THE GRAY TYPE TABLE OF INDEX

Number	Clustering index	Level one (very good)	Level two (good)	Level three (ordinary)
1	Volume	84-100	77-84	55-77
2	Popularity	86-100	76-86	52-76
3	Return ratio	52-60	44-52	17-44
4	Lever	60-91	44-60	11-44
5	Dispersion	68-84	40-68	25-40
6	Operation income	78-93	58-78	39-58
7	Transparency	56-62	48-56	25-48
8	Mobility	89-100	58-89	30-58
9	Brand	77-89	70.2-77	52-70.2

TABLE VI: GRAY FIXED WEIGHT CLUSTERING COEFFICIENT

Number	Platform	1	2	3	Number	Platform	1	2	3
1	Lufax	0.489541	0	0.268718	11	Gkkxd	0.174974	0	0.323893
2	Renrendai	0.197217	0.237875	0.059902	12	Niwodai	0	0.158228	0.244836
3	Yirendai	0.091382	0.296857	0.18055	13	Eloancn	0.08123	0.182155	0.231954
4	PPdai	0	0.279394	0.112805	14	Xinhehui	0.14	0.073193	0.282618
5	ZhaoCaiBao	0.104547	0.157638	0.30289	15	PPmoney	0	0.355073	0.116571
6	YOOLI	0.00291	0.242752	0.080893	16	Edai	0	0.227723	0.129279
7	Jimubox	0.00857	0.307504	0.036505	17	91 prosperous wealth	0.002032	0	0.286866
8	Touna	0.120619	0.22431	0.04311	18	Hexindai	0.256405	0	0.345293
9	Weidai	0.027945	0.158682	0.04634	19	CreditFinance	0.071008	0.137494	0.31515
10	HongLing	0.157769	0.27173	0.098244	20	Xiaoniu88	0	0.159727	0.351549

F. The Calculation of Gray Fixed Weight Clustering Coefficient

Calculate gray fixed weight clustering coefficient by using the definite weighted function and weight above determined [7].

According to the clustering coefficient, you can get followings.

$$\begin{array}{llllll}
 \max_{1 \leq k < s} \{\delta_1^k\} = \delta_1^1 = 0.489541 & \max_{1 \leq k < s} \{\delta_2^k\} = \delta_2^2 = 0.237875 & \max_{1 \leq k < s} \{\delta_3^k\} = \delta_3^2 = 0.296857 & \max_{1 \leq k < s} \{\delta_4^k\} = \delta_4^2 = 0.279394 & \max_{1 \leq k < s} \{\delta_5^k\} = \delta_5^3 = 0.30289 \\
 \max_{1 \leq k < s} \{\delta_6^k\} = \delta_6^2 = 0.242752 & \max_{1 \leq k < s} \{\delta_7^k\} = \delta_7^2 = 0.307504 & \max_{1 \leq k < s} \{\delta_8^k\} = \delta_8^3 = 0.22431 & \max_{1 \leq k < s} \{\delta_9^k\} = \delta_9^2 = 0.158682 & \max_{1 \leq k < s} \{\delta_{10}^k\} = \delta_{10}^2 = 0.27173 \\
 \max_{1 \leq k < s} \{\delta_{11}^k\} = \delta_{11}^3 = 0.323893 & \max_{1 \leq k < s} \{\delta_{12}^k\} = \delta_{12}^3 = 0.244836 & \max_{1 \leq k < s} \{\delta_{13}^k\} = \delta_{13}^3 = 0.231954 & \max_{1 \leq k < s} \{\delta_{14}^k\} = \delta_{14}^3 = 0.282618 & \max_{1 \leq k < s} \{\delta_{15}^k\} = \delta_{15}^3 = 0.355073 \\
 \max_{1 \leq k < s} \{\delta_{16}^k\} = \delta_{16}^2 = 0.227723 & \max_{1 \leq k < s} \{\delta_{17}^k\} = \delta_{17}^3 = 0.286866 & \max_{1 \leq k < s} \{\delta_{18}^k\} = \delta_{18}^3 = 0.345293 & \max_{1 \leq k < s} \{\delta_{19}^k\} = \delta_{19}^3 = 0.31515 & \max_{1 \leq k < s} \{\delta_{20}^k\} = \delta_{20}^3 = 0.351549
 \end{array}$$

The following is the result of platform classification. (The order in the same level is in accordance with the size of clustering coefficient.)

- Level1: Lufax
- Level2: Jimubox, Yirenda, PPdai, HongLing, YOOLI, Renrendai, Edai, Touna, Weidai
- Level3: PPMoney, Xiaoniu88, Hexindai, Gkkxd, CreditFinance, ZhaoCaiBao, 91 prosperous wealth, Xinhehui, Niwodai, Eloancn

IV. ANALYSIS OF THE GREY CLUSTERING'S RESULT

According to the classification results, Lufax is belonging to the level 1 exclusively in the 20 sample platforms. The platform in the volume, popularity, liquidity and other aspects

are relatively good, and it is popular with investors. Nine platforms including PPdai, HongLing, YOOLI, and Renrendai are belong to level 2, because the development of indexes are not their indexes are comprehensive. For example, PPdai's indexes are relatively balanced, but each index is almost belonging to level 2. Although the liquidity of HongLing is best in all sample platforms, the lever level is ordinary. In addition, the remaining 10 platforms are belonging to level 3.

The classification results are based on all platforms, but investors tend to choose platform from a kind of platforms. Therefore, the further analysis will continue in accordance with the different classifications.

A. Results Analysis in Accordance with Network Connection Extent

TABLE VII: THE CLASSIFICATION TABLE OF ONLINE AND OFFLINE

Classify method	Online	Offline	Combination
Name	PPdai, Weidai	Yirenda	Lufax, Renrendai, ZhaoCaiBao, YOOLI, Jimubox, Touna, HongLing, Gkkxd, Niwodai, Eloancn, Xinhehui, PPMoney, Edai, 91 prosperous wealth, Hexindai, CreditFinance, Xiaoniu88

According to the connection extent between network and platforms, the network lending platforms are divided into three categories. At present, online platform and offline platform is few, because the online platforms have higher risk, and the offline platforms have more procedures. So, most of them use the mode that is combined with two modes. In the 20 sample platforms, there are PPda and Weidai using online mode, Yirenda using offline mode and rest using the combined mode. According to the analysis results, the Weidai and PPdai are belong to level 2, but the clustering coefficient,

0.279394, of PPdai is higher than the clustering coefficient, 0.158682, of Weidai. It shows PPdai has more investment value. In fact, the index value except comprehensive income and transparency index are better than Weidai. In the Other 17 platforms which use combined mode, Lufaxis the best platform, and Jimubox, HongLing, YOOLI, Renrendai, Edai, Touna are belong to the level 2 platform. Relatively speaking, Jimubox and HongLing have better investment's value than other platforms. In the left platforms that they are belong to level 3 platform, the best is PPMoney.

TABLE VIII: CLASSIFICATION WITH GUARANTEED WAYS

Classify method	Guarantee with risk reserve	Guarantee with the financing guarantee corporation	Guarantee with the non financing guarantee corporation
Name	Renrendai, Yirenda, Jimubox, Touna, Weidai, HongLing, Gkkxd, Niwodai, Eloancn, Edai, Hexindai, CreditFinance, Xiaoniu88	Lufax, YOOLI, Jimubox, Touna, Xinhehui, PPMoney, CreditFinance	Yirendai, Jimubox, Niwodai, Hexindai

*B. The Results Analysis under Different Guaranteed Ways*

According to the connection extent between network and platforms, the network lending platforms are divided into three categories. At present, online platform and offline platform is few, because the online platforms have higher risk, and the offline platforms have more procedures. So, most of them use the mode that is combined with two modes. In the 20 sample platforms, there are PPda and Weidai using online mode, Yirenda using offline mode and rest using the combined mode. According to the analysis results, the Weidai and PPdai are belong to level 2, but the clustering coefficient, 0.279394, of PPdai is higher than the clustering coefficient, 0.158682, of Weidai. It shows PPdai has more investment value. In fact, the index value except comprehensive income and transparency index are better than Weidai. In the Other 17 platforms which use combined mode, Lufaxis the best platform, and Jimubox, HongLing, YOOLI, Renrendai, Edai, Touna are belong to the level 2 platform. Relatively speaking, Jimubox and HongLing have better investment's value than other platforms. In the left platforms that they are belong to level 3 platform, the best is PPMoney.

*C. The Results Analysis under Different Management Time*

The management time is longer, which shows it has the ability of sustainable development and is stable [8]. So, classified according to the operation time, It is useful for investors to make a better choice from the similar operation time platform. 3 platforms including PPdai, HongLin, and Renrendai were founded before 2010, which have different operating model. Now, it has been proved that the platform develops well, and they are belong to level 2 with high popularity with investors; the three platforms was established in 2011, which are level 3 platform and need to improve; Another six platform were founded after 2012, and, the development is not balanced. There are Lufax, which is a level 1 platform, Yirend and Touna which are level 2 platform, and the another three platforms which are level 3 platform, and each has features. Some platforms are newly established, but they develop well. For example, Jimubox was founded in 2013, but it is a level 2 platform, which has the highest clustering coefficient. The second is YOOLI, and another platforms are level 3 platform.

TABLE IX: CLASSIFICATION WITH MANAGEMENT TIME

Founding time	2007	2009	2010	2011	2012	2013	2014
Name	PPdai	HongLing	Renrendai	Weidai, Niwodai, Eloancn	Lufax, Yirenda, Touna, Gkkxd, PPMoney, CreditFinance	YOOLI, Jimubox, Xinhehui, Edai, Hexindai, Xiaoniu88	ZhaoCaiBao, 91 prosperous wealth

V. CONCLUSION

In this paper, choosing scientific and independent nine indexes make a comprehensive strength assessment from the perspective of investors for network lending platform. Then, construct the gray cluster analysis model with scientific evaluation results and scientific quantitative index weigh by

AHP. At last, getting the clustering vector and making sure the category of 20 platforms, it is helpful for investors to make investment choices. Taking into account the needs of investors, classify twenty platforms according to different ways (network connection extent, guarantee way and management time ), and analyse deeply how to choose a better platform for investors under different classification. If the

investors are favor of guaranteeing with a financing Guarantee Corporation, Lufax is a better choice. If they tend to choose some platforms which use risk reserve as guarantee, I will suggest they choose Jimubox, Yirenda, and HongLing. According to the evaluation results, investors can make a more rational choice. Network lending platforms also can improve the relevant aspects based on their own situation, which is conducive to the future survival and development.

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