# Innovative Research of Financial Model Based on Internet

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Abstract—China's economy has developed for 30 years. The traditional financial market efficiency decreases gradually that makes financial innovation become an inevitable trend, so the internet banking was born. Internet-based finance is an emerging finance, realizing financial accommodation, payment and infomediary and other businesses, based on payment, computer, social network and search engines and other internet tools. It mainly provides services for small and medium micro enterprises.

Keywords- P2P Loan; Balance Pay; Internet Finance; Innovation

#### I. INTRODUCTION

In 2013, the most popular concept in Chinese finance field must be "internet finance". Internet finance is not a new word but a new concept leading the era. Internet finance has close relationship with Balance Pay launched by Alibaba to become popular. It is Balance Pay pushing the new concept "internet finance" to the peak.

# II. ANALYSIS ON INTERNET FINANCE MODEL

Currently, internet finance in China is mainly divided into five categories: payment settlement model, internet financing model, virtual currency model, channel model and other models.

# A. Payment settlement model

The so-called payment settlement model refers to the third-party payment settlement, and third-party payment of narrow sense refers to the electronic payment model of non-bank institutions that have a certain strength and credibility of security, with the communications, computer and information security technology, using major banks contract way, to establish a link in the payment and settlement of the user and the bank.

1) Development status of payment settlement model Currently, the third-party payment service in China runs stably. The best third-party payment is Alipay of Alibaba.

According to the research of Iresearch as fig.3.1, Alipay takes the first place of third-party payment market in 2013, sharing 48.8% market. Tenpay takes up 18.7%, ranked the second. The others take up 10% below.

2) Classification of payment settlement model

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Currently, the operating models of the third-party payment companies are divided into two types.

The first type is independent third-party payment model. This type mainly refers to the third-party platform, independent of e-commence website, without bearing guarantee function. It only provides payment products and payment system solution. The main examples are: Quick Money, TeePay, ChinaPNR, LaCara and so on.

Another type is the model like TenPay of tencent and Alipay of Alibaba.

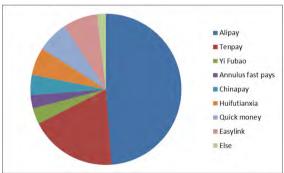


Figure 1. market share diagram of Q3 China third-party internet payment enterprises transaction scale in 2013

3) Financial innovation of the third-party payment Including the following aspects:

# a) Technical innovation

Third-party payment technical innovation is mainly reflected in ensuring the safety of user information and security of data transmission. For the user information protection, third-party payment uses encryption technology to encrypt users' information which needs to be transmitted. When the information is transmitted, decrypt it with corresponding decoding technology. To protect the security of information transmission, digital certificates and digital signature technology are also used, and these technological innovations can ensure that the risk of network transactions being greatly reduced.

# b) Payment channel innovation

The payment channels develop from the basic online payment, POS and ATM payment to today's mobile phones payment, etc., and on the basis of payments, expanding into more areas, such as electric charge, internet cost payment and other industries, making it get more applications and improve the operator's operational efficiency.

#### c) Generated credit innovation

The third-party payment platforms are equivalent to a credit bridge between businesses and consumers, and they do not participate in the trading business of both parties, remaining neutral and only providing a platform of knowledge. During the transactions, third-party payment will provide certain security for both parties and establish a database on the transaction credit of both parties. When the transaction is completed, the transaction will be recorded to enhance mutual evaluation or reduce credit rating. Such credit database is innovation to create credit.

#### B. Internet financing model

There are three kinds of internet financing: P2P loan, e-commence small loan and crowd funding.

#### 1) P2P loan

P2P loan is a more complete internet financial model, originated from the United Kingdom, and popular in United States and Europe, suitable for more developed personal credit system environment. In 2007, it entered China and fitted with China's specific national conditions currently, getting gradual localization. In 2012, although a number of P2P lending platforms appeared adverse events in succession, exposing the industry issues in the localization process, nevertheless, P2P lending is still showing the rapid development.

P2P loan risks analysis:

Lack of supervision: Iresearch analysis considers that P2P internet loan is in the intersection of internet, finance and other industries, not only easy to form a regulatory vacuum, but also convenient for vying market dominance and prone to create non-uniform industry standards, and chaos that multi-parties compete for dominance and unequal distribution of rights, not conducive to healthy development of the industry.

Credit risk: Credit risk is the risk of default. Because P2P lending companies only plays the role of intermediary in the transaction and do not participate in the transaction, in the network transactions, it is difficult to authenticate the borrower's real information. Although many companies are adopting the authentication and other ways to reduce risk, but they still cannot know the borrower's repayment ability well, and that information can easily be forged.

Under the high pressure that our laws prohibit nonfinancial institutions attracting deposit and lending, P2P platforms are easy to step on the red line of illegal fundraising. Although there are many risks, but no doubt that P2P lending is still a great potential for financial lending models, even more important for small businesses.

# 2) E-commerce small loan

In recent years, small micro-enterprises financing became more and more difficult because the small and micro enterprises have small scale, their financial system is not perfect, having low credit rating, while the traditional financial model can not effectively solve the problem of small and micro enterprises' difficulties, then a platform providing services for small and micro enterprises appear, this is the e-commerce small loan.

According to iResearch data, as of the first half of 2013, the major e-commerce provider platforms, Alibaba lent a total of 100 billion Yuan, Shanrong business lent 2.3 billion Yuan, HC360 lent 1 billion Yuan, and 460 million Yuan of Jingdong.

For the e-commerce small loan, risk control is mainly divided into three parts: before the loan, loan, and after the loan. Before the loan, the platform will rely on the e-commerce operating data and third-party data to analyze the business situation and know their business ability to repay debt. In the loan, provide risk warning by the e-commerce freed data analysis platform to monitor the trading conditions and cash flow. After the loan, monitor business operation dynamics and the behaviors that may affect the performance of performing the contract will be warned, to establish loan monitoring and internet shops closing mechanism after the loan.

# 3) Crowd funding

The so-called crowd funding refers to the financial model that crowd funding or public financing use the transmissibility of internet to raise funds from internet investors. Compared with the traditional way of financing, the crowd funding is more open. The standards to obtain funds are no longer whether the project has commercial value, as long as users like the project, you can get money through this way.

Advantages and disadvantages of crowd funding:

Advantages: Firstly, crowd funding is fast. Once the innovation is recognized, the funding is much more efficient than traditional channels. Secondly, the sense of participation is strengthened. Supporters of the project can complete this project in person, so they can gain a sense of accomplishment and pride. Finally, it's in favor of publicity and promotion. Good ideas can spread rapidly and get supporters, to expand its influence.

Disadvantages: Firstly, crowd funding is similar with group buying. Because the project crowd funding does not involve the public funds in return, this model has been out of the financial category. Secondly, it has legal risks. Equity and debt crowd funding faces enormous legal risk, so it is difficult to have a good solution before e relevant laws improvement in China. Finally is lack of service, although the crowd funding can help companies raise financing, but after the enterprise to obtain funds, they also need financial management, business operations and other issues, which can not be satisfied by crowd funding.

## C. Virtual currency model

The so-called virtual currency broadly refers to all non-entities currencies. It is issued and managed by the operator, and the majority of them are used to buy online game virtual props. For now, the virtual currency gradually replaces the role of traditional currency, virtual currency can be used to purchase many objects in real-life, and become more convenient.

Secondary currency: the currency has no formal status and can be got through electronic excavation or exchange with real money. They can participate in normal economic life. Typical representatives: Bitcoin, Litecoin, Ripple coin.

Commodity currencies: can be used internally in the issuer's platform through buying, similar with time cards,

can only be purchased with real money. Typical representatives: Q coin, various gaming platforms cards, mobile phone recharge cards.

Props Currency: moot props, points, etc., used to increase customer stickiness. Typical representatives: Forum coins, shopping points, the game's gold.

#### D. Channel business model

The so-called channel business is financial network marketing, which is the network marketing fund of funds, brokers and other financial products. Currently, in fund sales, Balance Pay can be described as dominate.

#### E. Other models

Other models of internet banking are mainly peripheral industries, including the financial search, financial calculation tools, financial advice, and legal assistance and so on.

# III. INTERNET FINANCE RISKS AND MANAGEMENT ANALYSIS

For the past two years, the rapid development of internet and the potential competition for financial banking business caused more and more people thinking on the internet finance industry. For our country, laws and regulatory efforts in this area are still not perfect, existing many loopholes. Internet banking still has no regulatory agencies, and the internet banking environment is relatively complex, so if relevant laws and regulations can not be perfect, then internet banking can not been well developed.

#### A. Internet finance risks

Internet banking is the combination of internet and finance, and internet finance core is finance. Essentially, internet finance is the same with traditional finance, and both are carrying out transactions of funds, so there are risks. Secondly, there is an insurmountable threshold for financial industry, that is, there must be specific licenses and access conditions, in such conditions, making the internet companies with free innovation subject to certain restrictions, which requires companies having good adaptability.

In addition to the same risks with traditional finance, internet finance also exists many other risks.

Firstly, internet finance risk spreading speed is fast. Because internet finance is based on high tech. High technology brings convenience but also increases the financial risks, because high tech is likely to accelerate the rate of diffusion of payment settlement and financial risks.

Secondly, relevant regulatory, legal norms and industry self-regulation are not enough. Because China's relevant laws on internet finance is imperfect, resulting in some sectors unsupervised or regulatory authorities is not clear.

Thirdly, the exchange of credit information is relatively difficult. Currently, internet financial companies can not access the People's Bank credit system, so credit information companies do not exist sharing mechanism, which enables companies can only review the borrower through its own mechanisms, increasing risks.

Fourthly, platforms have security risks. Although internet-based financial services has brought us greater convenience, they also brings more prominent information and funds security problems, even the mature internet finance platforms also have many technical risks.

# B. Management suggestions of internet finance

As an innovative financial model that was just developed, internet finance, a new thing often bring us new problems and changes, of course, so does the internet financial times.

Firstly, financial innovation of internet must comply with the essence of financial services real economy, and grasp innovation boundaries reasonably. Internet financial innovation should take improving the efficiency of financial services and serving the real economy as purpose and keep financial regulation. For example, P2P and crowd funding should adhere to the platform function, without illegal fund-raising and deposits.

Secondly, the entire industry should establish self-discipline convention, handle the relationship between government regulation and industry self-regulation well, promote the establishment of "China Internet Finance Association", strictly fulfill "China Internet Finance Industry Self-Regulation Convention", consciously guard against and control the management risk, accept social supervision, and promote the healthy development of internet finance industry.

Thirdly, our country should give internet finance a clear legal delimitation and clear regulatory body from the law level, giving internet finance more support in policy and personnel training.

Fourthly, build credit platforms. Now that P2P lending companies cannot get the central banks' support in credit rating, so the credit rating methodology they built and the data collected are also the shortages of central bank. At this level, the central bank should adopt a positive attitude, choose a reputable business or industry alliances, and dock with their credit database so as to reduce the risk of credit.

Fifthly, the internet finance industry needs to active supervision and classification regulation. Internet finance is a very wide field, including many models like the third-party payment, P2P loan, crowd funding, etc., so the supervision should be treated differently.

Based on the above points, the internet finance opportunities should be taken proper supervision, which could be neither too tight nor laissez-faire and should provide sufficient space for the internet finance innovation and development in order to promote rapid and healthy development of China's internet finance.

## C. Internet Finance Future Tendency

China's current internet finance is in the period of rapid development, in my opinion, the internet finance will have the following trends:

Firstly, with internet technology becoming mature gradually, traditional finance is no longer rest on its laurels. It will use cloud computing, online payment, search engines and other technologies to improve their online business short board, to achieve more efficient

internet-based finance transactions; more efficient capital allocation; best match of supply and demand.

Secondly, the traditional finance will be more closely linked with internet finance. Faced with the impact of internet finance services, traditional finance can only use the internet financial innovation to meet the challenge.

Thirdly, internet finance will emphasize personalized service more and pay attention to the long tail effect.

Fourthly, use digital technology to achieve automatic investment and financing docking, thereby reducing labor costs.

Fifthly, services and pricing will be more marketoriented, the user changed from passive receiving to initiative learning. You can learn more about financial products through internet users and select the desired; the price must be more open and transparent.

Sixthly, with the further integration of future internet user data by internet finance, the data will be shared between each other to form a unified and clear credit environment that allows users to enjoy better services, but also exists less platform visible risks and these credit data will become the core competitiveness of internet finance enterprises.

#### IV. CONCLUSION

Internet finance development has become an inevitable choice for us in this internet era. The internet finance is the product of this era, is an innovative finance model for adapting this era. Faced with a number of Chinese small and medium micro enterprises emerged, the traditional finance sector can not give more attention to such enterprises, and in this context, inspiring the emergence of more internet finance. The finance industry taking such enterprises as the main service target is rising rapidly, and taking challenges to the traditional industries.

There is always a reason for each new thing existence; we have an open mind to deal with it. For internet finance, this is an innovative model and should be guided more to make it move towards to healthy development road. The emergence of internet finance not only solve the financing problem of small and medium micro enterprises, while its development makes

the traditional financial sectors see their own shortcomings, promote continuous improvement of its short boar and provide better serve for people.

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