Research on the business model of Internet finance

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Abstract. In recent years, the development of Internet finance has gained momentum, from barbaric development to gradual regulation, not only Internet companies are penetrating the financial business, but traditional finance is also pursuing the road of Internet transformation, and the trend of further deep integration of traditional finance and the Internet has become irreversible. Internet finance has reconstructed the business model of finance, and as a new thing, the development of Internet finance urgently needs the support of business models. And the exploration of business models can also find a feasible path for the Internalization of traditional finance and make an outlook on the development of Internet finance.

Keywords: internet finance; business models; review.

1. Introduction

BAT has led the wave of Chinese Internet companies entering the financial sector, and various forms of Internet finance are blossoming everywhere, but Internet finance has seen a lot of chaos along with the spurt of development. By the end of 2016, there were 2,456 problematic online lending platforms nationwide, accounting for 58.45% of the total number of platforms nationwide. With the successive outbreaks of risky events such as the E Leibao investigation and the Facelift incident, the Internet finance industry has been pushed into the limelight, greatly undermining investors' confidence in the industry. After the industry experienced several years of brutal development, the national regulatory authorities began to take action to regulate and introduced many regulatory measures and regulations to regulate the industry, and the responsibility for the regulation of the Internet finance business was gradually clarified. Since 2014, the term Internet finance has been mentioned in government reports for three consecutive years. From 2014, Premier Li Keqiang proposed to promote the healthy development of Internet finance, in 2015, the use of the keyword "emergence", and then in 2016, it is clear that the government is supportive of the development of Internet finance. At present, not only Internet companies are involved in the financial industry, but traditional financial institutions have also begun to use Internet technology to transform, the integration of traditional finance and Internet finance has been the general trend, whether passive transformation or active integration, the traditional financial industry can not avoid involving in the blue sea of Internet finance.

The intervention of Internet technology has reconstructed the business concept and business model of traditional finance. The only way for the traditional finance industry to survive this flood is to combine its advantages in risk control and asset side, continuously innovate business models, and enhance its core competitiveness with the help of big data, cloud computing, and other Internet technologies. The integration process of the Internet and finance is dynamic, and new business models will emerge in the competition between all parties. Therefore, it is of practical significance to study the core and logic of the business model of Internet finance for both traditional finance and Internet enterprises.

2. Review of the literature

Internet finance has emerged along with the development of the Internet. As the birthplace of Internet finance, the United States is more mature than other countries in the world in terms of integrating traditional finance with the Internet.

With the continuous innovation of Internet financial models, the development of Internet finance continues to deepen. Bachmann(2011) believes that the Internet finance models in Europe and the

United States can be divided into two main categories, the financialization of Internet enterprises and the Internalization of financial institutions, specifically including seven types of network finance, third-party payments, network financing, credit card services, financial services platforms, Internet exchanges, Internet brokerage. More and more scholars have started to study the emerging Internet financial models. Houston(2006) studied that P2P online lending has facilitated SME financing, with more transparent transactions between borrowers and lenders, and also reduced borrowing costs for borrowers. De Buysere et al.(2013) argue that the crowdfunding model is an innovative model for raising development funds for several creative and small and medium-sized enterprises, which helps promote economic growth, create employment, and open up new investment channels for investors, with unlimited future potential.

Devashis Mitra(2012) argues that the Internetization of financial firms optimizes the original processes on the one hand and generates new profit sectors, on the other hand, prompting the transfer of value creation within the firm. Despina et al.(2008) feel that Internet insurance is the application of Internet and information technology in the process of developing and selling insurance products, and the main advantage is overcoming the limitations of time and space of traditional insurance, while the disadvantage is the need for strong technical skills, perfect operational processes and data security issues, arguing that low Internet penetration, low cost awareness of enterprises and low website security are the main reasons for the lack of development of Internet insurance in Greece. Hong-JenLin et al.(2012) based on cost efficiency theory and using the Durbin model proved that Solow's paradox hypothesis does not hold in insurance companies in developed countries, and Internet technology can improve the return on investment in developed countries, so the use of Internet technology in insurance companies can effectively reduce costs.

Stijn Claessens et al.(2002) argue that Internet finance poses challenges to financial security and stability, competition policy, consumer and investor protection policy, and global public policy, and that policy reformulation is particularly urgent in developing countries and developed emerging markets. Kogilah Narayanasamy et al.(2011) analyze the misconceptions about Internet finance, arguing that while it can reduce transaction costs, it can also reduce the cost of financial services. Internet finance can reduce transaction costs, but there are still significant technology costs; Internet finance cannot be completely disintermediated because a large amount of data and customer relationships still require the presence of intermediaries. Internet finance has not subverted traditional finance, and traditional finance can integrate well with the Internet in the future.

Niu Ming(2012) concluded that the risks such as P2P credit are mainly the security of funds, the uncertainty of the true use of funds, the confidentiality of personal information, and lack of supervision, and made corresponding suggestions for these risks. Ye Xiangrong(2014) divided China's P2P business models into the pure platform, guaranteed principal(interest), credit asset securitization, and debt transfer models, analyzed the common risks and characteristic risks of the four models, and finally put forward recommendations for the regulatory level. Liu Jingjing(2014) combined the generation background and operation mode to divide P2P network loans into three categories: those initiated by enterprises outside the industry switching to the industry, those initiated by Internet enterprises, and P2P platforms initiated by financial enterprises, arguing that although the current third-party guarantee is one of the development models suitable for the current P2P lending platforms in China, in the long run, the P2P network lending industry will gradually develop towards a purely online platform model in the future.

Hu Jixiang(2013) pointed out that the risks of the crowdfunding financing model mainly lie in the aspects of financiers using the platform to fraudulently cheat money, imperfect credit monitoring mechanism, and possible suspicion of illegal fundraising activities, so there is a need to strengthen regulation, improve investors' risk identification ability, and guide the healthy development of the industry. Huang Ling and Zhou Qin(2014) used naming time transaction data for empirical analysis to verify that creative projects with smaller capital needs tend to choose the crowdfunding model and that effective quality signals can induce investment incentives under the condition of satisfying investor preference types, and spread rapidly through the crowdfunding community feedback channel to promote the success of creative projects, forming an effective crowdfunding self-feedback effect. The conclusion is that crowdfunding development must have a good institutional design, and that positive incentives from participants can be used to form a positive interaction, and suggestions are made accordingly. Fan(2014) analyzes the business model of crowdfunding from three aspects: value discovery, value capture, and value matching, and concludes that its advantages lie in promoting micro-entrepreneurship and stimulating "grassroots" innovation while making suggestions to avoid and prevent the legal risks that may arise in the crowdfunding model.

In addition to the research on the emerging Internet finance industry, scholars have also begun to study the mode of traditional finance developing Internet finance. Song Weidong(2014) points out that Internet finance has caused a certain impact on the traditional securities industry, and the current Internet finance models in the securities industry mainly include financial business carried out by Internet enterprises, cross-border cooperation between small and medium-sized brokerage firms and Internet platforms, and three kinds of financial management platforms created independently by large brokerage firms, and the traditional securities industry has to make efforts in products and services in order to win. He Dexu(2015) divides the development mode of Internet insurance in China into the third-party e-commerce platform mode, the official website mode and the professional Internet insurance company mode, analyzes the characteristics of each, points out the impact on the insurance industry and the risks brought about, and puts forward the corresponding regulatory suggestions.

Liu Liang(2013) summarized the three levels of replacement, optimization, and innovation of Internet finance to conclude that the main direction of future Internet finance development is mobile, e-commerce, and self-financing. Tan Tiantian and Lu Nan(2013) obtained the advantages and disadvantages of Internet finance and traditional financial models in terms of participants, operating platforms, credit systems, information processing, payment methods, etc. Internet finance has the advantages of reducing costs, strong information processing capacity, and reducing the risk of information asymmetry, but at the same time, there are also problems of policy, lack of regulation, and imperfect credit system, and relevant laws should be introduced as soon as possible in the future In the future, relevant laws should be introduced as soon as possible to improve the regulation and credit system, and strengthen industry self-regulation to promote its healthy development. Sun Juan(2014) points out that P2P, crowdfunding, and other emerging Internet financial models will bring a non-disruptive impact on traditional finance, they are only development and supplement to finance and do not change the dynamic of traditional financial models dominate. Sun Shengxue(2015) discusses the future development trend of Internet finance from a historical perspective through a comparative analysis of Internet finance and traditional finance and believes that the two will be integrated into three aspects: business philosophy on, business methods, and business system.

3. Internet Finance Business Model

3.1 Connotation of Internet Finance Business Model

The term Internet finance started to be a big hit in 2014, and there are different understandings of Internet finance in academic circles, and there are big differences between these understandings. Some people think that Internet finance is a third financing mode different from direct financing and indirect financing, and some people think that Internet finance has two levels of concepts: in a broad sense, Internet finance refers to the Internetization of financial business, and in a narrow sense, Internet finance is a new financial industry with a corresponding financial function chain built on the Internet as a platform and based on cloud data integration. Although the understanding of Internet finance varies, the so-called Internet finance is still essentially inseparable from the functions of finance, financial markets, financial products, and financial instruments, and the Internet cannot develop on its own in isolation from finance. Therefore, this paper believes that Internet finance is not a simple fusion of the Internet and the financial industry, but the Internet technology infiltrates into the financial function, and Internet finance relies on big data and cloud computing to establish an open platform, which can realize the financial function and financial service system: financial service system, financial organization system, financial product system, a financial market system based on the network platform and Internet financial regulatory system, etc. Internet finance is the trend of future development, with radical changes in financial products, services, business, and organizational awards.

3.2 Characteristics of the Internet finance business model

Based on the previous overview of theoretical studies on Internet finance business models, it can be concluded that Internet finance business models have the following characteristics.

Effectiveness. Companies can use the business model as a tool to integrate their resources and enhance their capabilities, thereby bringing certain economic benefits to the company, maximizing its value, and creating value for its stakeholders.

Differentiation. Differentiation of business models is an advantage for enterprises in fierce competition. Only with a unique set of business models can they not be imitated by competitors and be in the leading position in the industry. At the same time, differentiation requires companies to have keen insight and constantly improve their business models to adapt to changes in the market.

Systemic. A functioning business model should be composed of different elements that form a whole, and these elements form an agricultural cycle through internal linkages.

Adaptability. As various factors in a business change(customer needs, external environment), the business model also changes, so it is a dynamic concept with a process of growth, maturity, and decline. A business model that enables a company to be core competitive must remain flexible and resilient.

3.3 Types of Internet finance

From the domestic situation, Xie Ping pointed out the three pillars of giant Internet finance, namely payment services, for the processing of information and resource allocation. By distinguishing the differences between Internet finance business forms in these three aspects, Internet finance is divided into seven main types, such as financial Internetization, third-party payment platforms, virtual currency, big data credit collection, P2P network loans, and online crowdfunding.

First, is the Internetization of traditional finance. The Internalization of finance refers to the Internet-enabled financial institutions, i.e. the latest use of the Internet is added to the traditional financial business to realize the electronification of the traditional business. By transforming the traditional financial business operationally, the operation and management of traditional finance are optimized. The Internalization of finance has led to the gradual replacement of traditional financial markets and financial intermediaries with physical outlets and low-end manual services by the Internet. Examples include internet banking, mobile banking, online payments, online insurance companies, sales of financial products through the internet, etc.

Second, third-party payment platforms. Third-party payment in a narrow sense refers to several non-bank institutions, that have the strong financial strength and good reputation, and with the help of Internet technology, cooperate with banks to establish a mode of payment and settlement intermediary between banks and users, such as PayPal in the United States, Alipay in China, WeChat Pay and so on. At present, there are two modes of third-party payment platforms in the market: one is a completely independent third-party payment platform that does not depend on other platforms and provides payment services for e-commerce alone, and does not have a guarantee function; the second is a third-party payment platform supported by B2C, C2C and other network platforms, such as Alipay, CaiPay, etc.

Third, Internet currencies. Internet currency refers to the impact of the Internet on the form of money, most typically such as Q-coin, Bitcoin, etc.

Fourth, big data-based credit collection. Big data refers to the collection of massive amounts of data and its collation and analysis as a way to provide valuable information to Internet users, and also to provide data to financial institutions and risk control by analyzing and mining information on customers' transaction services on financial platforms.

Fifth, Internet money market funds. Money market funds are those investment funds that invest in the money market(with an average maturity of 120 days and no more than one year). They mainly invest in short-term monetary instruments, such as treasury bonds and large negotiable bank certificates of deposit. Balance funds are the most prominent representatives of these.

Sixth, P2P network loans. P2P network loans refer to small credit loans between individuals based on the internet platform. The borrowers and lenders of funds post information on the P2P network loan e-commerce platform, and through the third-party Internet platform, the supply and demand of funds are matched, and the borrowers and lenders can complete the transactions and procedures related to the loan on the platform, and the borrowers can obtain corresponding benefits and complete the allocation of funds or diversify risks. Represented by Lending Club, Yixin, and Lufax.

Seventh, crowdfunding financing. Crowdfunding, or mass funding, refers to promoters who publish their projects to raise funds from the public through Internet platforms to receive financial support, usually from businesses or individuals who are starting their businesses. The public decides the amount to invest by learning about their public projects.

These seven classifications of giant connected finance business types are all based on a specific business, for example, mobile banking when banking is moved to the Internet, Alipay and CaiPay in the third-party payment field monopolizing the market, P2P in the personal loan business, crowdfunding in the small and micro-enterprise loan business, etc. The Internet finance model used in one business field may not be applicable in another connected financial field, and there is a lack of unified theory and analytical tools to study the Internet finance, business model.

4. Recommendations for Internet finance business models

Internet finance has both Internet and financial attributes, so the genes determine that the business model within the field is dominated by the bilateral platform business model, and the positive feedback effect of the bilateral platform and the mutual promotion of the network effect will create great value and wealth.

Future innovation in Internet finance business models should proceed in two major directions.

A general direction is to further optimize the operational efficiency of the business model. Continuing to deeply optimize the relevant value chain within the platform, pursuing lower operating costs and higher operational efficiency, and meeting the changing desires and needs of stakeholders by selecting stakeholders and adding or reducing business systems.

Another broad direction is to develop into a higher-level ecosystem. This can be achieved by creating a new value concept and thus recreating a platform outside the platform, which can also be a bilateral platform business model, but the two platforms must be interdependent and mutually reinforcing, with a positive feedback effect on the platform and platform level, thus creating more wealth and ultimately maximizing the total value of society. Or take the initiative to dovetail with other bilateral platform business models of complementary nature in the industry, which can also achieve the above-mentioned effect.

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