McKinsey&Company

McKinsey Corporate Banking

Disruption and Connection:
Cracking the Myths of China Internet Finance Innovation

McKinsey Greater China FIG Practice July, 2016

July, 2016

McKinsey Greater China FIG Practice

Disruption and Connection: Cracking the Myths of China Internet Finance Innovation

Joseph Luc Ngai | Hong Kong
John Qu | Hong Kong
Nicole Zhou | Shanghai
Xiao Liu | Beijing
Joshua Lan | Taipei
Xiyuan Fang | Hong Kong
Feng Han | Shanghai
Vera Chen | Beijing

CONTENTS

Executive Summary

China's Internet finance industry has developed robustly at an amazing pace in the past few years, with many key indicators leading the world, such as the number of users and the market size. Fintech start-ups, as innovative business models and solutions, are mushrooming. Meanwhile, China's Internet finance industry is greatly pursued by the capital market, and the valuation of related companies far exceeds other industries. In addition to the flourishing performance in the market, Internet finance is also having an overwhelming influence on people's lifestyles.

The rise of China's Internet finance is attributable to four external advantageous conditions:

1. An open, supportive regulatory environment
2. A highly developed Internet/e-Commerce business
3. Enormous demands for inclusive finance, which are not satisfied effectively yet, and
4. The trial-and-error capability built upon the long-term high profitability of traditional banking industry.

Seeing tremendous market opportunities, market players from different industries have swarmed into the Internet finance industry; their number has posted an explosive increase in a relatively loose environment. There are three categories of leading players, each with distinctive value propositions and key success factors:

1. **Internet attackers, who offer** innovative idea/product localization, quick scale-up with aggressive customer acquisition, customer experience enhancement with multiple scenarios, big data enabled customer insights, and entrepreneurial talent management
2. **Traditional financial institutions, with a legacy of** strategic partnerships, comprehensive product offerings, professional risk management expertise, and physical branches
3. **Non-financial core companies, bringing** low cost customer acquisition with massive offline traffic, strong industry expertise and advantageous positioning, data mining along the whole value chain, and a powerful offline network to enhance the customer experience.

On the horizon, the enormous potential of the following opportunities will be gradually unleashed alongside the dynamic development and maturity of the market: **Mobile payment and wealth management, Online consumer finance and SME, B2B Internet finance, Financial cloud and infrastructure, Big data application, and Disruptive technologies such as block chain.** As such, players in the industry should capture the time window quickly and firmly, and strengthen skills and capabilities to echo the development trends.

At the same time, some unexposed risks and uncertainties merit attention. These include consumer irrationality, product defects, and even fraudulent activity. Players should also cautiously deal with the implicit credit risk and liquidity risk. Additionally, China's regulatory authorities are determined to strengthen the management of internet finance, aiming at promoting the establishment of a good market order and the healthy development of the industry. Players are advised to take assessment carefully and keep an alert to the tightening signals of regulatory policies.

With the release of detailed laws and regulations and the increasing maturity/rationality of consumers, we believe China's internet finance industry will inevitably embrace fiercer competition and further industry integration, with the true winners emerging through selection and elimination. The players, no matter which industry they are in, and whatever their business models are, must further improve their core competencies on the strength of their own success factors, in order to survive amid China's fierce competitive environment, and realize sustainable growth connecting the future.

CHAPTER 1: Market Overview

China Internet finance rises to prominence swiftly

Over the past few years, Internet finance has put on a radical feast globally, with endless Fintech start-ups and innovative solutions emerging. In China, this feast is particularly eye-catching. By the end of 2015, the overall market size of China Internet finance has reached 12 to15 trillion RMB (nearly 20% of GDP), and user numbers, at~500 million, have reached number one in the world. The P2P lending transaction volume, at more than 500 million RMB, is the largest globally; third party payment transaction volume, at over >10 trillion RMB, easily overshadows US and EU leaders such as Paypal. In wealth management, Alibaba's Yu'e Bao reached 700 billion RMB AuM within just 2 years, to become the second largest money market fund globally.

Meanwhile, Internet finance has been well sought after by the capital market, with valuations much higher than other industries. Among the top 10 public Internet companies globally, China has taken up four key seats with Tencent, Alibaba, Baidu and JD. Further, China has 35 "unicorns" which is 20% of the global total of startup companies valued at over 1 billion USD. Internet finance companies keep refreshing the record of valuation, with Ant Financial (at 60 billion USD), Lufax (18.5 billion USD), and WeBank (5.5 billion USD), to name a few.

The year 2013 is widely regarded as Year One of China's Internet finance era, with a bunch of blockbuster activities such as the launch of Yu'ebao and WeChat payment. Among numerous innovations, there are now four major segments, each with distinctive leading players: 3rd party payment, wealth management, financing and "other", including insurance and cloud services (Exhibit 1).

3rd-party payment is the earliest, largest and most developed segment in China's Internet finance market. This segment is also the foundation on which many other financial applications build, with players fighting to win customers' affinity on their payment tools. Large companies and first movers dominate; Alibaba's Alipay takes about half the market, and Tencent's Caifutong takes nearly a fifth. Other forerunners include Yinshang and 99Bill.

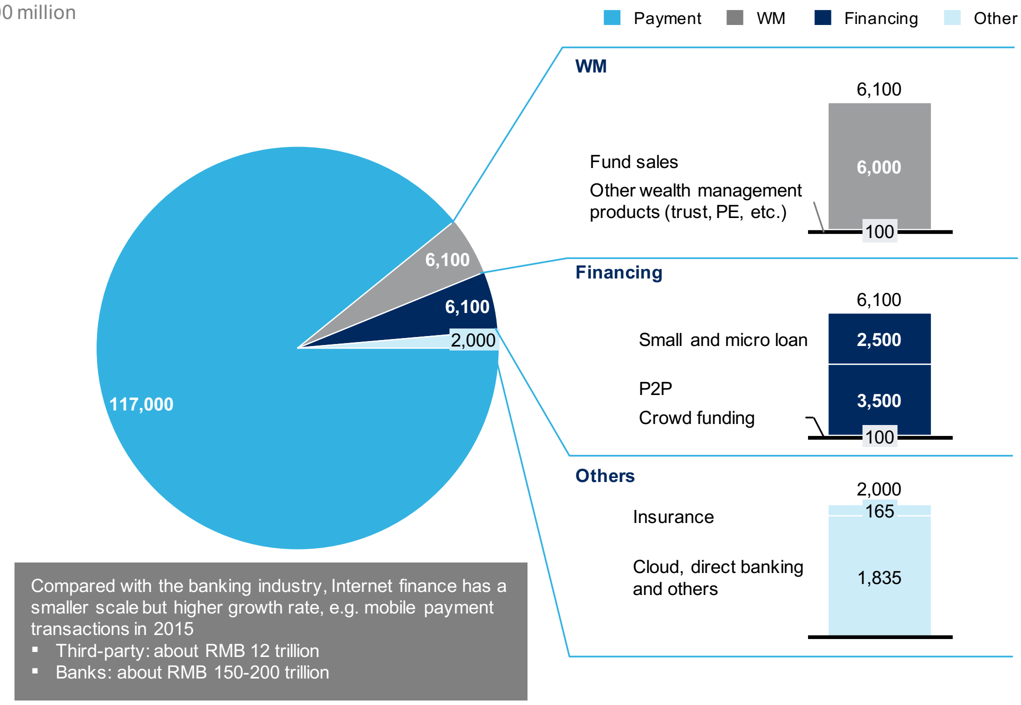
Wealth management is the second largest, where the sales of money market funds contributes a majority share. Other products (such as trusts, PE, mutual funds, etc.) have been introduced but are still a very small share. Similar to payment, wealth management has a very high penetration among all Internet and mobile users. Compared to wealth management products traditional banks offer, their Internet counterparts have higher returns, almost no entry barrier, and T+0 liquidity. Ali's Yu'e Bao and Tencent's Licaitong are leading players, as are specialized wealth management firms such as Noah and Hang Tang.

Financing is the field where most innovations have flourished. There are mainly four modes at current stage: supply chain financing, consumer financing, P2P lending, and crowd-funding. Of these, supply chain financing and consumer financing are currently the most explored by e-Commerce/retail giants, such as JD and Gome. China's Internet P2P lending started in 2007 with the launch of first P2P platform PPdai, and began to explode in 2013. However, the quality is quite a mix – risk control has long been a concern for P2P

Figure 1

The overall scale of China's Internet finance market has exceeded RMB 12 trillion, with third-party payment taking the largest share

RMB 100 million



SOURCE: CNNIC; iResearch; McKinsey analysis

players. Among them, Lufax is regarded as one of the best picks of P2P platforms.

Other segments such as insurance, cloud services, and currency, are relatively young and yet to develop a sizable market. Online insurance companies such as ZhongAn are using everyday scenarios to introduce the idea of insurance to a relatively immature market, where auto finance loans present a significant opportunity. Block chain technology has been hot spot recently, yet is still steps away from mature application.

Four factors have been critical in driving China's Internet finance boom

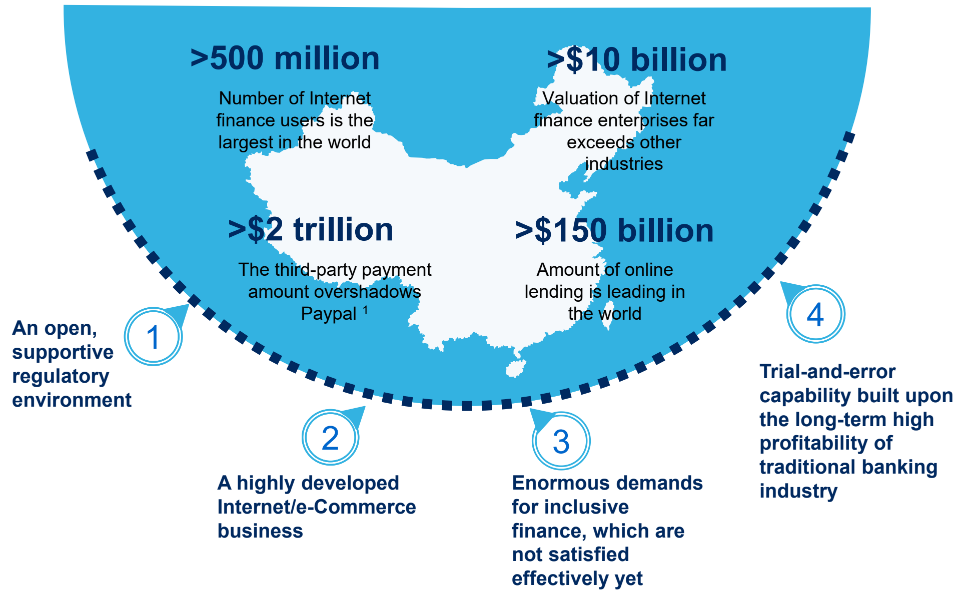
Four external factors that have been instrumental in driving the growth of China's Internet finance industry at an unparalleled speed: an open and supportive regulatory environment, a highly developed Internet/e-Commerce business changing lifestyle of China's digital population, enormous demands for inclusive finance from under-served segments, and the trial-and-error capability built upon the long-term high profitability of traditional banking industry. (Exhibit 2)

1. The regulatory environment has supported innovation

As early as in 2013, the People's Bank of China explicitly expressed support for tech companies to promote Internet finance. In recent years Chinese Premier Li Keqiang made multiple calls of support in the Report on the Work of the Government over 2014/15, stating that "Internet-based finance has swiftly risen to prominence", with the imperative "to encourage the healthy development of … Internet banking". Premier Li spoke further at Davos World Economic Forum in 2015, encouraging start-ups and innovations.

Figure 2

Four favorable factors benefit the rise of China's Internet finance market and facilitate its leading position in the world



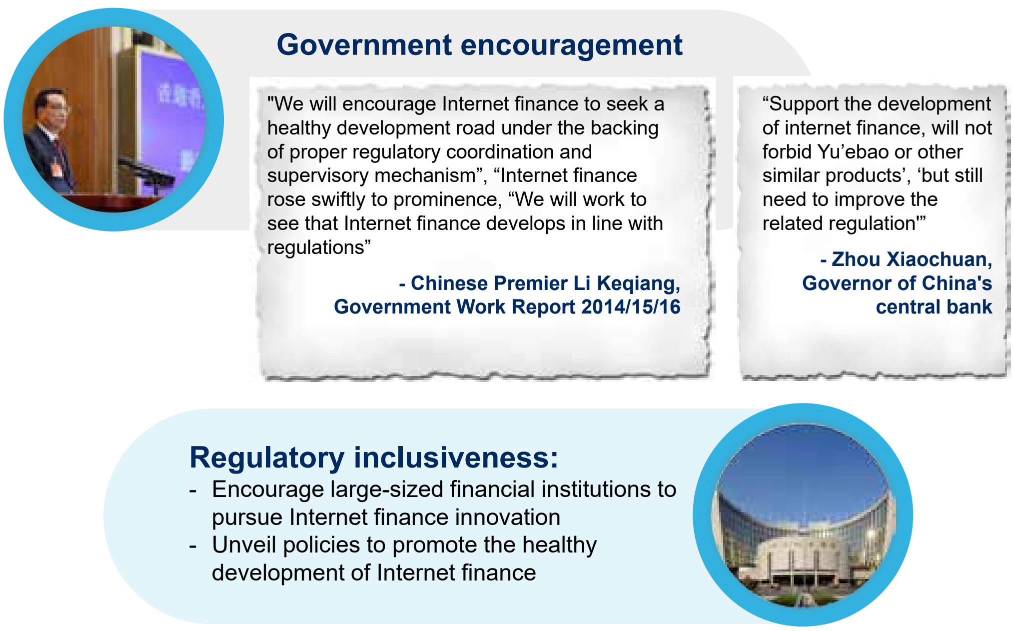
1 Transaction amount of Paypal in 2015 approximated to USD 282 billion

Source: iiMedia Research

This has clearly demonstrated Chinese authorities' encouragement and tolerance of the industry, and of companies (both financial and otherwise), to make Internet finance innovations. However, this encouragement and tolerance don't come with no limit. The government has published guiding opinions and policies to promote market order and healthy development. We expect the regulatory environment to be evolving in the near future. (Exhibit 3)

Figure 3

Open, inclusive regulatory environment supports innovation of Internet finance



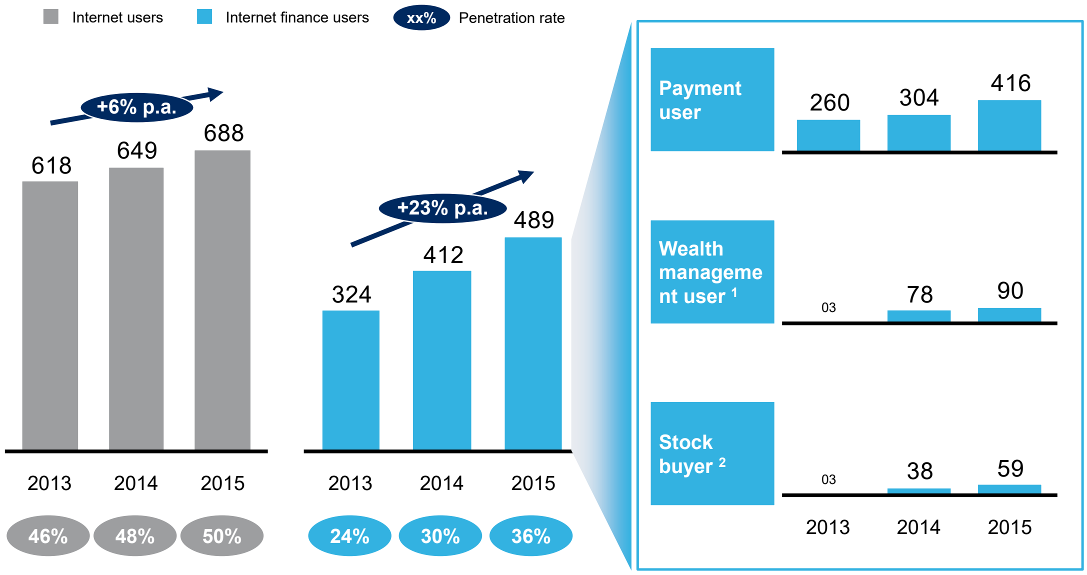
2. Thriving Internet/e-Commerce business is changing the lifestyle of China's large digital population

Internet economy has taken up 7% of China's GDP (versus 4 to 5% for the US, Japan and Germany), with a 50% growth rate over past 5 years. Smart phone penetration, at 72% of the population, also overshadows that of developed countries. Smart phones and social network have become an indispensable part of people's everyday life. More than 30% of the Chinese population are users of the Internet payment (including via mobile devices), which covers almost every scenario of daily life and helps generate the world's largest e-Commerce market – with16 trillion RMB worth of annual transactions . Internet wealth management and stock trading have also attracted nearly 100 million users. The penetration of Internet finance is expected to continue to rapidly rise and expand to more sub-segments, becoming an irreversible trend of consumer behavior (Exhibit 4).

Figure 4

Thriving Internet/e-Commerce business is changing consumers' lifestyle; Internet finance users' growth far outpaces that of other Internet users

Million users



1 Including money market funds
2 Including mutual funds
3 No statistics

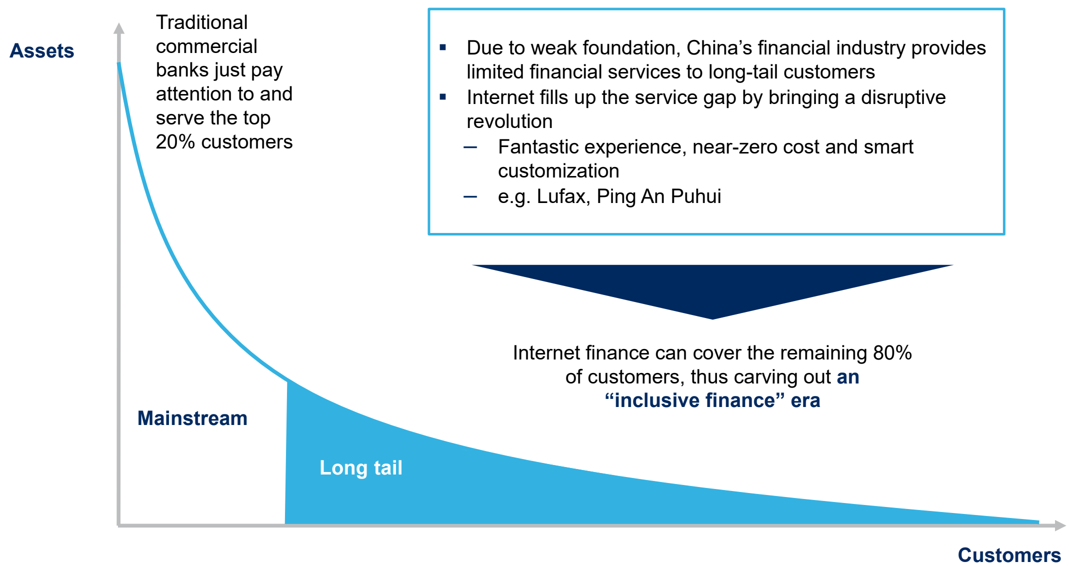
SOURCE: CNNIC; iResearch; McKinsey analysis

3. Limited financial services available for long-tail customers have created a considerably under-served market segment

Due to historical protection and strict regulation, traditional players are moving slowly with a continuing structural mismatch between supply and demand. This generates a very uncompetitive environment, with a large segment under-served. For a long time, the long-tail "grass roots" class have not been satisfied with their financial needs. Nearly half of China's households are "low-income" (defined as having an annual disposable income of less than 100,000 RMB). These customers are usually unable to meet the RMB 50,000 investment threshold for wealth management products offered by banks, and therefore are often under-banked. These under-served customers have created an eager appetite for Internet finance to realize a truly inclusive financial system (Exhibit 5).

Figure 5

Limited financial services available for long-tail "grass-roots" customers have created a considerably under-served market segment and an eager appetite for financial inclusion



4. Traditionally, high profitability in the China banking sector attracts and allows competition of Internet finance players

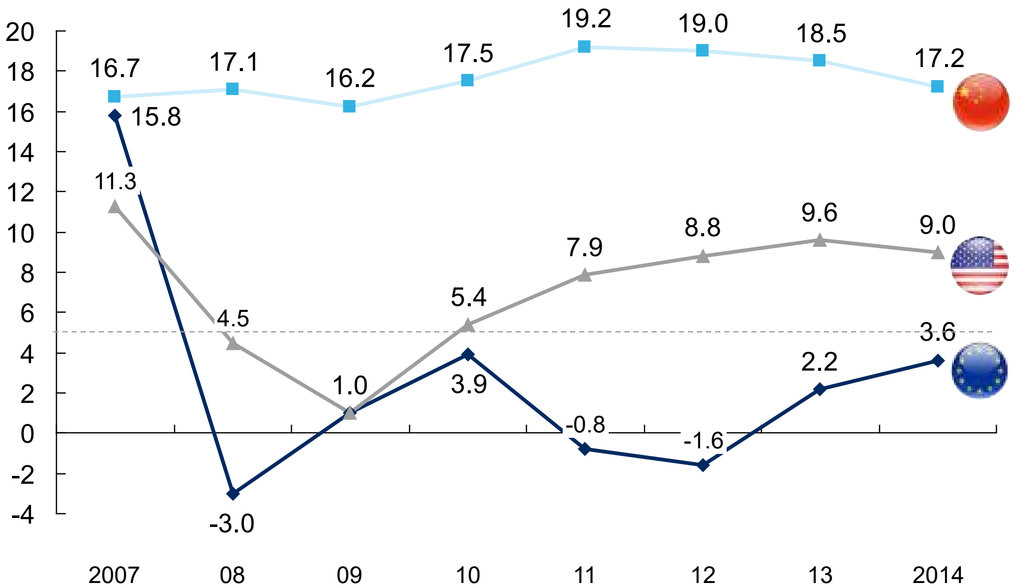
Incumbent financial institutions have enjoyed relatively easy, stable returns that are much higher than that of their foreign counterparts. This allows them to take the risk of trial-and-error and participate in the competition of Internet finance. Chinese banks have a consistent ROE of 15-20%, versus ~9% for US banks and ~3% for EU banks. With these generous profits, Chinese banks can afford aggressive investments in innovative digital attempts, which often offer low-price or even free services to win customers (Exhibit 6).

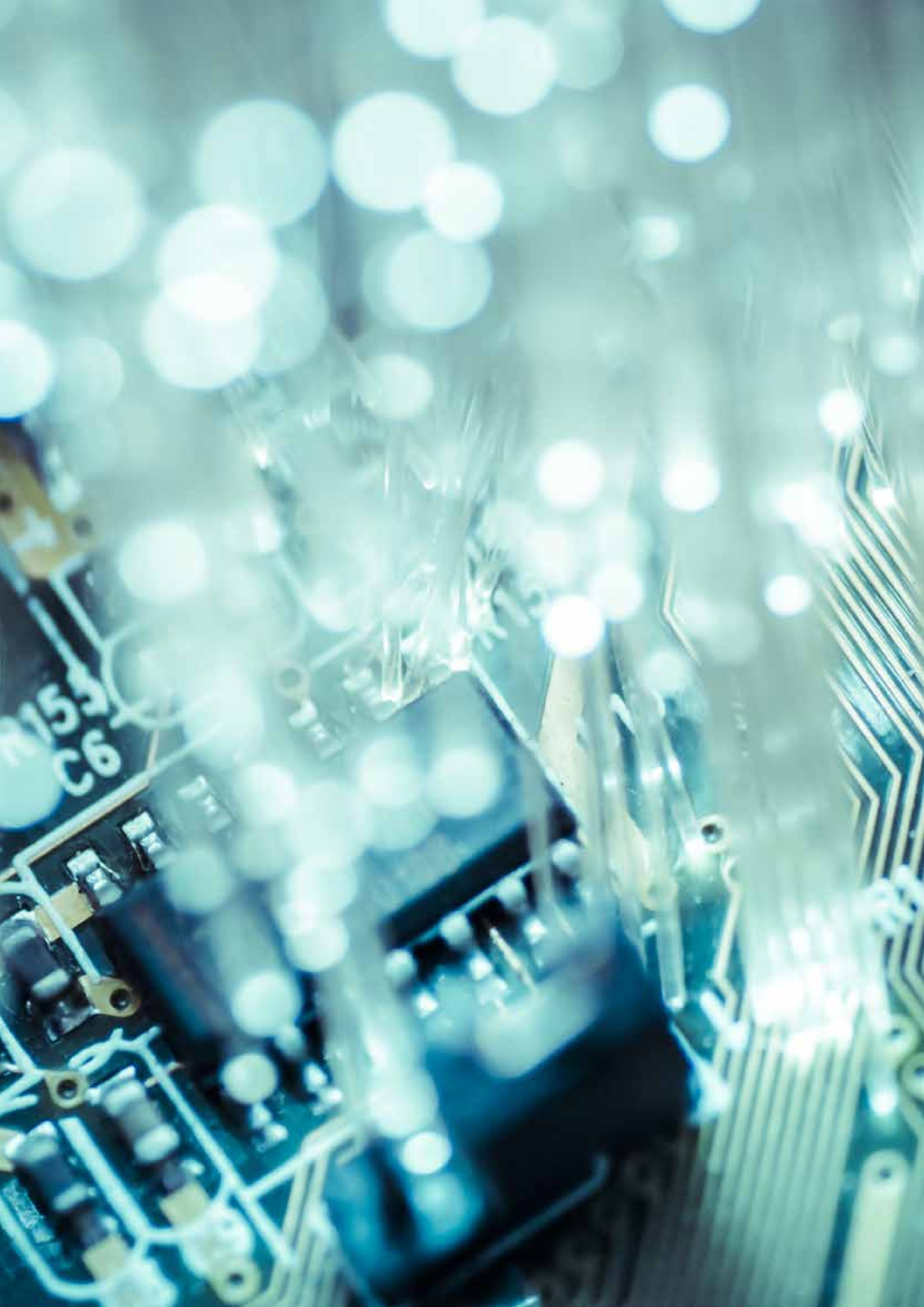
The four driving factors outlined above have fostered further opportunity in a market already experiencing fast-paced growth. Within this setting, three key types of successful players have emerged.

Figure 6

Traditionally, Chinese banks have earned handsome profits, which allow great trial-and-error room to compete with Internet players

Comparison of Return on Equity (ROE) among Chinese, American and European Banks





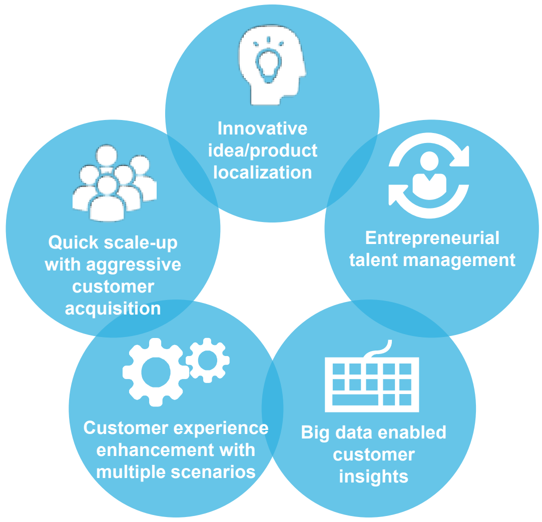
CHAPTER 2: Three Categories of Players Reign

Lured by this booming market and countless opportunities, numerous players from various industries have flocked to the feast of China Internet finance. They can be organized into the following categories, and have each established unique value propositions, and orchestrated distinctive success factors.

Figure 7

Internet attackers and their five key success factors

- "Barbarians from outside"
- Dominated by a few magnets who establish their comprehensive financial eco-systems with different focuses on core businesses (e-Commerce or social network) and target groups
- Numerous small-sized companies with specific positioning in a niche market, especially in wealth management and P2P sectors
- Grow rapidly relying on the huge user base



Category I: Internet attackers, "barbarians from outside"

This is the largest group in terms of player numbers and public attention. The so called "barbarians from outside" are where innovation is at its most prolific, and wildest.

China has a unique competitive landscape dominated by a few digital magnates. Over years, they have established comprehensive multi-licensed financial ecosystems, primarily leveraging the large customer base and low acquisition cost through Internet.

They differentiate from each other by focusing on different core businesses or target groups. For instance, as one of the largest e-Commerce company globally, Alibaba leverages its e-Commerce foundation to lay out its financial empire, first entering into payment and then into financing and wealth management, with a specific emphasis on hundreds of millions of individual and SME customers. Tencent takes another route – based on the powerful social nature of WeChat, Tencent builds it financial ecosystem upon various scenarios, which cover every aspect of daily life. JD positions its financial service as an enabler for its e-Commerce business and puts the main force on financing business, featuring B2B and trade finance products.

Besides the few magnates, there are also numerous smaller companies prospering with their specific positioning in a niche market, especially in the areas of wealth management and P2P. There are five key success factors these players share (Exhibit 7):

Innovative idea/product localization

At the inception stage of a business, taking a copycat approach quickly brings in customers and helps circumvent pitfalls. However, only innovative differentiation can help build sustainable success. A large quantity of homogeneous products (such as many financial products nowadays) will only bring fierce competition and margin shrinkage. Localization is particularly important for small companies, who have to distinguish themselves, without much room to over-stretch.

Tencent's "Lucky Money" is an excellent example. For a long time Tencent had been lagging Alibaba in the payment area until the launch of "Lucky Money" – a new WeChat function – during the Chinese New Year of 2014. It combined the Chinese tradition of "Red Pocket" with conventional peer-to-peer transaction, and achieved huge success by adding a fun flavor of luck into its payment function. During the New Year holiday of 2014, ~10 million users engaged and bundled their bank cards, and 40 million red pockets were dispatched. In 2016 these numbers further increased to 420 million, and reached a massive 8 billion that same year.

Alibaba's Yu'e Bao is another success story. It is by no means the first money-market-fund product; however, it has realized explosive growth by smart localization. Leveraging experiences and lessons from multiple products, Yu'e Bao has combined convenience (via e-Commerce channel, T+0), flexibility (no extra authentication, no entry barrier), high yield (no commission fee, 5% return in 2013) and strong guarantee (Ali's brand premium). Within a few months of its launch, Yu'e Bao had become the largest among its category in China. And by 2015, it had become one of the largest globally with AuM near 700 billion RMB.

Quick scale-up with aggressive customer acquisition

Competition in the Internet world is fast and furious, it is a matter of survive or die. It is critical to rapidly expand customer base and gain meaningful market share for a solid foothold, long before profit realization. Customer acquisition needs to be rolled out at an aggressive pace, because when market share reaches a significant level, the marginal cost of customer acquisition will decrease. Players move fast in order not to lose first-mover advantages.

Internet companies, especially the giants, are growing swiftly by leveraging their existing user base while investing a lot to attract new customers. An example of this is the subsidiary battle between Didi and Kuaidi, the largest two taxi-hailing APPs, before they merged to take 80% market share. For customer acquisition cost, when the user base of Yirendai (a leading Internet P2P lending company) exploded more than ten-fold in 2 years, the acquisition cost per capita decreased from 4000+ to 800+ RMB.

Customer experience enhancement with multiple scenarios

A "customer first" mindset has been a major driver of customer-oriented innovation in China Internet finance, as experience has more and more become a winning factor. For many financial products, how fast, convenient, and interesting the experience is greatly influences customers' choices and further shapes their habits. When customers engage financial products, they are not just simply satisfying financial needs, but more deeply, they are satisfying other needs, such as entertainment, communication, or safety. By leveraging extensive scenarios, players provide more personalized services and enhance the customer experience, with mobile ubiquity particularly.

For instance, Alipay cooperates with thousands of businesses and provides numerous online and offline application scenarios, which covers almost all aspects of daily life: transportation, travel, supermarkets and convenient stores, restaurants, entertainment, and utilities. This comprehensiveness and convenience have made Alipay extremely popular among various groups. On the contrary, Baidu is in a relatively disadvantaged position due to the lack of "scenarios", since its accounts system has little "daily life" or "personal" elements to boost the customer experience.

Big data enabled customer insights

Another core competitive advantage of Internet attackers is the pursuit of big data and advanced technologies. Data is never rare in financial world, but the full usage of unstructured data, especially from the Internet, brings more innovation in product and marketing design, as well as in risk control.

Internet attackers have explored using their massive online data (for example, by trading information, personal information, mobile usage), to evaluate individual credit ratings and risk. Alibaba has published "Sesame Credit" as one of the first Internet credit ratings in China to facilitate loan issuance. This kind of data-driven evaluation has an advantage over the traditional bank decision-making with data abundance and the elimination of human prejudice, although they still face the challenge of lacking core banking information such as payment history, outstanding balance.

Entrepreneurial talent management

Internet attackers usually adopt very aggressive talent management strategies, by offering high, above market premiums and stock options to attract talent. Meanwhile, business units are governed as profit centers, which further incentivizes employees' creativity and productivity.

That being said, we believe that a comprehensive and balanced talent pool is key: both Internet and finance talent are necessary. Lessons from many failed P2P platforms tell us that a savvy Internet mindset cannot succeed without professional industry knowledge and experience. Many Internet and technological companies have adopted an important mechanism for continuous innovation, which often consists of Chief Innovation Officer (CIO), incubator units, and an innovative investment team, combining the technical and the financial talent streams.

Category II: Financial institutions undergoing digitization

Traditional financial institutions are accelerating their digitization – they don't want to just witness this wave of Internet finance innovation but would rather ride it.

Ping An Group represents the financial control group players who have been marching on the digital journey in recent years. It has put Internet finance into strategic focus and implemented through multiple daughter companies such as Lufax, Pinganfang (housing) and Ping'an Puhui (consumer finance).

Large commercial banks are also moving: Industrial and Commercial Bank of China (ICBC) and China Construction Bank (CCB) published their Internet finance strategies last year and are now building their own platforms by tapping into e-Commerce. Many small banks (including city/regional commercial and rural banks) also want to catch the wave, by building direct banking and lending services, often through partnerships with tech companies.

Compared to the Internet players, strict regulations and relatively conservative mindsets are still affecting the pace of traditional players, making them followers in general. However, they are very eager to participate in the battle by harnessing a set of distinctive advantages (Exhibit 8):

Figure 8

Traditional financial institutions and their four key success factors

Strategic partnerships

Banks tend to partner with others, especially Internet companies, to form synergy and to quickly catch up. Transboundary collaboration has been widely adopted, with half of the 12 joint-stock banks in China establishing partnerships or collaborations with Internet companies such as BAT. All players are looking for a "1+1>2" opportunity.

China CITIC Bank has recently released an MOU with Baidu to build a full-coverage strategic partnership, including a co-branded credit card, e-Commerce, big data, cloud computing, payment, CRM, APP development, and location-based services. They together founded a direct bank – Baixin Bank ("Bai" from Baidu, and "xin" from CITIC's Chinese name) to provide Internet financial services. Similarly, Bank of Beijing has joined forces with Tencent, and Shanghai Pudong Development Bank (SPDB) with China Mobile, all collaborating with each other to achieve "1+1>2" synergy.

On one hand, banks can offer professional design and packaging for financial products, with low fund cost and robust risk management, as well as offline outlets. On the other hand, Internet players have massive online active user traffic and user data, as well as many lifecycle scenarios.

Comprehensive product offerings

Banks have an unparalleled advantage of offering comprehensive product and service portfolio. The portfolio is typically not just one or a very limited number of simple and standardized products as many Internet players provide today, but a set of differentiated and personalized products/services, such as savings and investment plans, tax and inheritance advisory services, and business financing tactics. Moreover, banks can help customers to implement them with professional customer relationship managers.

Industrial and Commercial Bank of China is a great example of offering professional and comprehensive products to win customers through Internet channels. Under the "e-ICBC" Internet finance strategy, the world's largest bank offers three product lines consisting of payment, financing and wealth management. Its financing products include consumer loans, SME revolving loans, and various supply chain and trade financing products, which easily overshadows Internet counterparts. Wealth management products include foreign exchange, crude oil, and precious metals, versus a heavy focus in money market funds as many Internet attackers do. Besides an abundant product selection, it has built the first mobile communication platform among large banks, which serves as an advisory and social platform, and a 24/7 specialized service center with exclusive professionals.

Professional risk management expertise

Since mid-2015, we are hearing more and more about the runaway and collapse of Internet P2P platforms. Risk control has increasingly become the central concern of investors. Traditional financial institutions are better positioned, with more experience in mechanisms, team and models, and can take advantage of this position to set up a comprehensive risk management system that is propitious to the development of Internet finance.

Compared with aggressive Internet players, traditional banks adopt a prudent practice, effectively preventing them from blindly trusting borrowers and the third-party assessment, and enabling them to perform due diligence and credit rating properly. Further, banks attach more importance to the establishment of a comprehensive risk management and risk-adjusted pricing systems, while a scientific, reasonable system could increase the sensitivity and deepen the understanding of investors and borrowers to funding price. Therefore, although the investment return of banks may be lower than that of P2P platforms over a short period, banks can stand the test of time with transparent, precise and sound risk control.

However to keep up with the play, traditional financial institutions will need to actively apply prospective Internet technologies and introduce Internet big data into traditional risk control systems.

Physical branches as experience centers

With the disruptive impact of Internet, banks are gradually changing the physical branches back to its essence of an experience center, rather than a transaction and sales channel. An advantage of physical branches is to address more complicated and personalized financial needs, while representing a robust brand image. Research shows that the majority of Chinese customers still choose physical branches during purchase decision-making, and for after-sales services. Well positioned physical branches will significantly enhance this virtue to provide an intimate and personalized experience.

Category III: Non-financial core companies expanding into finance

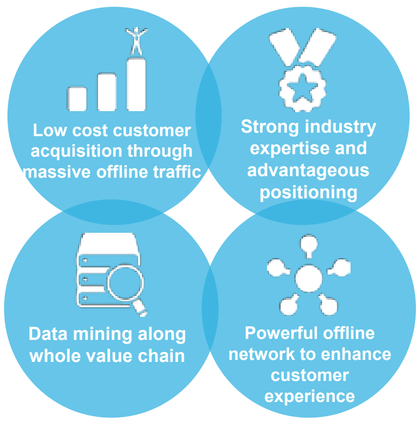
A third category of players are flocking in from traditional industries that have previously had little or no connection with Internet or finance, such as retail (represented by Gome and Suning) and real estate (represented by Wanda). They are shaping a new business format of "offline resources + online platform + financial services", and acquiring multiple licenses.

Although the number of players in this category is not very large yet, they have formed a significant threat to the other two categories. Different from Internet attackers, this 3-in-1 business model takes advantage of extensive offline resources (such as customer leads and data/information along whole value chain) to undermine the banks' control over key business customers, and further drive SME and retail customers upstream and downstream (Exhibit 9). Their four key success factors are:

Figure 9

Non-financial core companies and their four key success factors

- Actively construct the 3-in-1 model of "offline resources + online platform + financial services"
- Led by retail and real estate tycoons with multiple licenses
- Leverage extensive offline customer leads and their dominating position along the whole industrial value chain



苏宁金融 国美金融

万达集团 WANDA GROUP

Low cost customer acquisition through mass offline traffic

In contrast with pure Internet companies, non-financial core companies all have an extensive base of offline merchants/customers and a footprint over multiple application scenarios. This enables them to gain a larger number of reliable customer resources at a low cost.

For instance, the real estate giant Wanda Group had an offline customer visits of over 4.6 billion in 2015 – and this figure is set to reach 10 billion in 2016 – for shopping, movies, dining, karaoke, and other entertainment. While many Internet players are fighting to win customers, Wanda has already infiltrated to multiple scenarios in consumers' daily life, which can be linked to multiple online applications, such as payments and credit ratings.

Strong industry expertise and advantageous positioning

Core companies, represented by retail tycoons like Suning and Gome, boast the natural advantageous position and can lead the organic integration of participants along the whole industrial value chain. Take supply chain financing for example, SMEs (including suppliers, merchants and distributors) at both upstream and downstream of the retail chain usually have urgent demands for operating capital. Core retailers such as Gome and Suning are quite familiar with the operation of those companies, and have dominance over pricing through negotiations, which, no doubt, will facilitate risk assessment and management. In contrast, industry outsiders such as traditional banks and Internet players have no position or knowledge of this kind. What's more, core companies are usually granted with good credit ratings, securing them a better position to obtain handsome funds at low cost, and thus making them capable of offering competitive prices to SMEs they know, understand and trust.

Data mining along whole value chain

Compared to big data owned by Internet attackers and banks, core companies have a different angle of data mining and customer insights. They possess extensive consumer and merchant data, which is often from offline behaviors and purchases collected from internal ERP systems – rather than from canvassing opinions or intentions on Internet, or financial and accounting information from banks. By analyzing this data, core companies are able to design financial products from the perspective of the demand side and form a unique edge with appropriate pricing and risk evaluation.

Powerful offline network to enhance customer experience

Strong, efficient offline logistics and warehousing networks have supported core companies in their endeavors to improve customer experience and increase customer loyalty. Timely delivery, wide covering logistics networks and flexibility of goods pickup are key factors when consumers choose to go shopping online, particularly when they buy big items. Just like the move that aggressive Internet players take to actively deploy multiple scenarios, core companies make great efforts to improve user experience in order to lock in customers, which becomes a direct customer source for their financial businesses.

Many core companies are now actively carrying forward the integration of online and offline services. The new O2O service (such as after-sales self-service and self-pickup) has greatly enhanced the offline network and continued to create a brand new experience for consumers through further raising the digitalization efficiency of core processes, as well as cutting down cost.

CHAPTER 3: Looking Forward

Six trends on the horizon

In near future, China's Internet finance will enter a "warring stage" and integrate. Current businesses will be gradually incorporated into regulations. Growth will be more orderly with new technologies and applications keep emerging. In next 5 years, we urge the players to capture the following six opportunities (Exhibit 10):

Figure 10

There are six trends on the horizon to capture over the next five years

1 **Mobile payment and wealth management:** smart phone-based mobile payment featured with online/offline integration creates the next hotspot. Wealth management will rapidly grow further

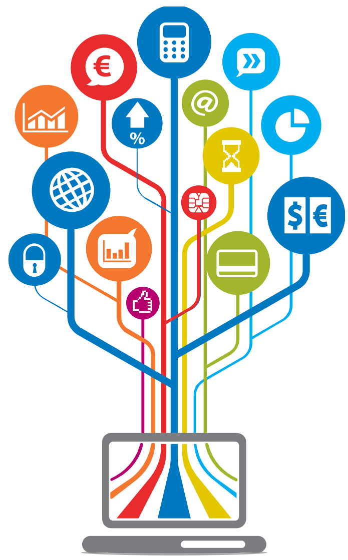
2 **Online consumer and SME finance:** traditional consumer loans, credit cards and other inclusive finance will be rolled out online

3 **B2B Internet finance:** as corporate banking demand becomes more complicated and tailor-made, Internet promotes more efficient transaction banking and asset management businesses

4 **Financial cloud and infrastructure:** low cost and flexible infrastructure will specifically benefit a large number of small-sized business and non-financial enterprises

5 **Big data application:** Commercialization stage is coming, with precise consumer behavior forecast, and real-time, low-cost risk management system

6 **Disruptive technology:** decentralized and requiring no intermediary, block chain is used in a variety of sectors, e.g. payment, clearing and trading, etc.



1. Mobile payment and wealth management

As the earliest and most mature sector in Internet finance, payment is being applied in diversified scenarios. Consumer engagement and affinity are also increasing. Although the market concentration of third-party online payment has already taken an initial shape with several leading players, mobile payment via smart phones which is connected to offline has become a new battlefield, as the foundation of many other financial applications. The market landscape features uncertainties and potential opportunities.

Mobile payment is a key link in the closed loop of O2O and may emerge as another hotspot of Internet finance. It involves multiple parties, and has a long value chain, and consumers have not yet developed a stable using habit. Therefore, all relevant parties are fiercely competing with one another for more market share. Besides online-to-offline models such as QR code scanning offered by many Internet players, traditional financial institutions are adopting Near Field Communication (NFC) payment, in cooperation with mobile hardware manufacturers (for example, the release of Apple Pay in China in March 2016). This has dealt a big shock to the sector. Mobile payment is usually in small-amount and very frequent in nature, and consumers regard convenience, safety and personality as the most important factors. Business models and players that have differentiated advantages in these factors will become mainstream.

At the same time, China's capital market is opening up, leading to richer business models and product types. In recent years, China's asset/wealth management market has been developing dramatically. As they become more mature and accumulate more wealth, Chinese consumers hunt for a higher investment return. Consequently, almost all investment products, except savings, are expected to maintain rapid growth – providing a good opportunity for further growth of Internet-based wealth management business.

2. Online consumer and SME finance

On 2C end, Internet finance will continue to tap its potential with the increase of Chinese consumer needs. China's consumer spending has been falling short in terms of GDP contribution over the last decade. As China's economy enters the "new normal", a purely investment-led economy is not sustainable and consumer spending is becoming a pivotal driver for the transformation under way. Chinese household consumption is now growing rapidly and generating more financial demands.

Generations of the 1980s/90s are now the mainstream of consumption. As the generation of Internet and e-Commerce, they are both early adopters and keen drivers of innovation, with a higher propensity to consume and a higher tolerance of financial risk. They will be more open to online personal financing products, such as e-Commerce merchandise installment for home appliance, apparel, and travel.

At the same time, the more advanced application of data enables quick and remote decision-making, to support offering the full range of conventional consumer financing products online, such as credit cards and consumer loans.

Further, there is a large gap of SME needs currently unfilled by traditional banking. SMEs in China are generating a significant share of GDP and employment contribution (nearly 80% and 60% respectively). However, the development of SMEs has been beset by a shortage of funds. With an economy downturn, banks are becoming more reluctant and this has created a vicious cycle, which gives a huge opportunity for Internet finance to address the issue with its high efficiency and low cost, under the trend of financial inclusion.

3. B2B Internet finance

Internet finance has been developing quite a lot on 2C end. However, attempts at the 2B end so far are only in a limited number of areas, from a limited number of players. In the next 5 years, corporate business will still contribute the majority share of banking revenue in China, especially during the large-scale industry transformation and upgrade. The long value chain of B2B business will generate more opportunities and more innovations in Internet finance.

Chinese corporates are shifting from simply borrowing to more complicated needs such as transaction banking and asset management. In transaction banking, Internet finance would be able to provide time-effective supply chain financing solutions, which can better accommodate corporates' business models to coordinate the streaming of capital, cargo and invoices. It also offers digitized cash management systems to support high-quality management of corporate finance and capitals for large companies.

In asset management, Internet finance would serve as a better platform for search and match-making. As the complexity of customer needs increases, it is more critical to possess the ability to provide quick, customized and differentiated matches, especially when high quality assets are difficult to find in today's China market. Internet channels are also advantageous at marketing and customer expansion.

4. Financial cloud and infrastructure

Unlike the traditional model where every financial institution builds and operates its own data/IT center on premise, financial cloud serves its customers (typically various financial/non-financial institutions, especially the smaller players) remotely based on demand, and customers pay for the usage. Reduced total cost and a flexible infrastructure are two key reasons for cloud adoption.

Cost effectiveness is a major advantage. The financial cloud allows customers to easily access information with minimal upfront and overhead spending, and avoids regular spending for replacing and upgrading. Customers can pay-as-you-go based on demand, and therefore may be able to move faster and meet demand proactively.

Customers can also keep a flexible infrastructure, which can be quickly scaled up or scaled down. Since cloud services can better respond to expected shifts in user load, customers can add and subtract capacity as needed. This is particularly important for small players (even those who have never set foot into finance), who need to quickly build IT capability to serve their explosively growing user base and fluctuating volume.

Thousands of regional/rural banks and other non-financial players in China have formed a strong demand for cloud computing and storage. Many IT companies, such as Alibaba, IBM and Huawei, are already leveraging their technical expertise to provide cloud solutions and platforms. As more and more players tap into Internet finance, we will see more vivid finance innovations enabled by cloud service.

5. Big data application

Big data is now viewed as a strategic asset in Internet finance, pivotal to innovation of financial products and services, as well as risk management.

Predicting how customers will behave and how that behavior will change is critical to tailoring and pricing products. Big data allows financial institutions to collect and analyze customer data, and thereby provide more tailored products and services through a personalized marketing experience.

In risk management, big data helps understand the correlation between factors and risks, based on both internal and external data, with advanced statistical models. Combining with cloud service, big data further facilitates real-time credit investigation and decision making at a low cost. Financial institutions that master these data-driven advantages will enjoy increased operational efficiency and business performance.

All these advantages have given rise to a remarkable unmet need for big data analytics, which will realize commercialization. More and more data analytics companies are now emerging to serve financial institutions who are not able to build this capability in house. They provide prompt solutions for lead generation, precision marketing, customer segmentation, risk management, post-loan management, and more. Similar to cloud services, commercialized big data analytics services will greatly benefit thousands of small and medium players who cannot afford self-built data capability.

6. Disruptive technology (block chain)

Lately, block chain and related disruptive technologies have drawn close attention in the financial industry, and start-ups in this field are much favored by investors. Block chain technology, based on the distributed storage and point-to-point transfer of data, has shifted away from the centric data transfer mode of using an intermediary, and is characterized with being safe, transparent and un-modifiable. Block chain serves as the technological base of Bitcoin trading and circulation. Nevertheless, block chain can be used in a much bigger range of other sectors and has much greater potential than digital currency alone.

Block chain is applicable to payment and clearing, among other financial service scenarios. With a simple system, it can set up a direct process between payer and beneficiary, and help banks perform the core functions of value storage and asset transfer at a low cost but high speed. In trading, block chain enables point-to-point transactions and requires no clearing intermediary, thereby substantially reducing transaction time and cost. Further, if combined with smart contracts, block chain makes it possible to automatically issue digital securities and trade over financial derivatives. Looking more broadly, the insurance sector will also provide new opportunities for the application of block chain.

Three risks and uncertainties to look out for

Despite the unprecedented boom of Internet finance and all sorts of innovative models, there are still a few non-exposed risks and uncertainties ahead, which need to be carefully maneuvered through (Exhibit 11):

1. Individual irrationality

This is a common risk, especially for seniors and less educated citizens, who happen to be the “long-tail” customers targeted by Internet finance. In China, these unsophisticated individual investors are used to explicit or implicit guarantees, and may be easily attracted by “high yield” and unable to recognize the underlying risks and impacts. The size of China Internet finance is big enough to have systematic contagion. If there were a huge fluctuation in market or a loss of confidence, a run to the money market fund would be fatal.

Figure 11

Three categories of risks and uncertainties need to be cautiously handled

- **Individual irrationality:**
  - Common risk for seniors and less-educated citizens, who are long-tail customers targeted by Internet finance
  - Unsophisticated investors are used to explicit or implicit guarantees
  - Often easily attracted by "high yield" and lack the capability to identify underlying risks and impacts
- **Fraud and flawed design:**
  - Mostly alarming in P2P sector. Many platforms fail to perform due diligence thoroughly, and even forge portfolios or establish illegal capital pool
  - Also seen in online fund sales, insurance and trust businesses
- **Regulatory evolvement:**
  - China's regulators are determined to build market order and promote healthy development of the industry
  - The overarching "guideline" has been issued, and detailed laws and regulations are to be unveiled successively

2. Fraud and flawed design

This risk is particularly alarming in P2P lending companies. Following the P2P fever in 2014/2015, many platforms actually went to bankruptcy, such as the notorious E'Zubao case, a Ponzi scheme with over 50 billion RMB illegally raised funds and nearly 1 million investor victims. Many P2P companies are lured by profit and might not fulfil their due diligence obligations, or sometimes even forge portfolios. Some might even set up capital pool through illegal 3rd-party trust companies. For Internet fund sales, insurance and trust companies, there also exist risks of fraud, information asymmetry and compliance.

3. Regulatory evolvement

Another critical uncertainty is the tightening trend of the regulatory environment, although overall it has been very supportive. Regulations on China Internet finance have not kept up with the development of Internet finance itself. Until 2015 there existed a legal vacuum, at which point Chinese authorities issued "Guidelines on Internet Finance Development". More detailed rules from various regulatory bodies are expected to be published soon, such as the recent release of a draft regarding Internet lending agency activities by China Banking Regulatory Commission.

Chinese regulators are determined to tighten their grip on Internet finance, in order to build market order and promote healthy development. We expect there to be significant and far-reaching impacts on players. Companies intending to participate in the Internet finance industry in China should evaluate it carefully, and watch out for further regulatory developments in this sector.

Four future models for incumbent players

As Internet finance demonstrates the potential to fundamentally disrupt the existing financial landscape, incumbent players could move in one of four models (Exhibit 12):

Figure 12

Looking forward, a new future business and positioning model is required for incumbent players

1 Full spectrum of core banking business lines (e.g. current accounts, deposit-taking, consumer finance, mortgages, straight corporate loans and cash management)
2 With or without corporate and investment banking

SOURCE: McKinsey Panorama

1. Fully digitized universal bank

Universal banks provide a great variety of financial services covering traditional commercial banking, investment banking and sometimes even an insurance business. Their business size is large and the scope is wide. Through the digital transformation of front, middle and back offices, universal banks provide conventional financial services by leveraging various excellent digital capabilities. These can include data-based insight and analysis, digital marketing skills, simple and efficient digital processes, and matching organizational structure and cultural atmosphere. However, under this model, banks must have versatile and powerful professional competencies, with the ability to realize full digitalization quickly. For example, Lloyds Bank of the UK launched a digital makeover that has turned its business around to become one of the leading banks in Europe, through re-designing ten major customer journeys, based on customer demands to improve their banking.

2. Ecosystem orchestrator

Focusing on customers, this type of player will rapidly embrace digital technologies and broaden their scope of business to meet the needs of their customers beyond traditional banking. This is done by smart partnerships to build and orchestrate a large ecosystem. The businesses of the ecosystem orchestrator cover every aspect of daily life, providing a “one-stop” service for customers but retaining the role of financial intermediary as the major revenue pool. This model may have a higher ROE, as well as a higher risk. Typical examples include Ant Financial and Ping An Group.

3. White label balance sheet operator

Another direction is to become a white label balance sheet provider, focusing on balance sheet provisioning and operations. Banks under severe regulations can embrace commoditization, to drive costs down aggressively and rapidly scale up to ensure reasonable profits in the long term, similar to large-scale utility companies. Non-banks funded by investors that provide a loans only service can also transition into this mode. The focus is on operations and services in the middle and back offices, with relatively low ROE and risk.

4. Niche player

This kind of player tends to focus on a specific segment to provide highly simplified and differentiated products and services. For instance, Air Bank of Czech upholds minimalism and offers its customers just three services: conventional demand deposits (linked to credit cards), savings, and cash loans. All of the three businesses are available at mobile terminals.

Looking forward, we expect that China's Internet finance will continue to prosper with profound influence on the financial service sector. However, the fast and furious growth will slow down to a more reasonable level, with more mature regulations and industry integration from intensified competition.

The successful players of the future will be those that smartly orchestrate their advantages of customer experience, data capability, risk management and cost effectiveness. Their status in the future will be decided by their relationship with innovation and digitization. The players, no matter which industries they are in and whatever their business models are, must further improve their core competence on the strength of own success factors, to survive amid China's fierce competitive environment and realize sustainable growth connecting the future.

About GC FIG Practice of McKinsey

McKinsey is a global management consulting firm, providing consulting and other services related to strategy, organization, operation, technology, and other critical areas for companies and public institutions. We have more than 8,000 consultants based in more than 100 offices in 60 countries. The Greater China Office comprises Beijing, Hong Kong, Shanghai, Shenzhen and Taipei.

McKinsey's Greater China Financial Institutions Practice ("GC FIG Practice") serves leading banks, securities & trust companies, wealth & asset management companies, insurance and other financial institutions throughout the Greater China. The Practice assists clients on a broad range of topics including transformation and innovation, internet finance, globalization, strategy, corporate finance, sales and marketing, operations, digital and technology, risk and capital, organization, leadership development and culture transformation. We have more than 100 dedicated consultants across the region, who have deep experience in financial institutions topics. We draw on McKinsey's extended network of global financial institutions consultants and research analysts to deliver service to clients.

About Author

Joseph Luc Ngai

Senior Partner
Hong Kong office
Joseph_Luc_Ngai@mckinsey.com

John Qu

Senior Partner
Hong Kong office
John_Qu@mckinsey.com

Nicole Zhou

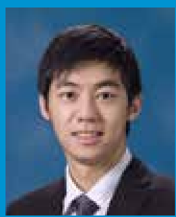
Associate Partner
Shanghai office
Nicole_Zhou@mckinsey.com

Xiao Liu

Associate
Beijing office
Xiao_Liu@mckinsey.com

Xiyuan Fang

Partner
Hong Kong office
Xiyuan_Fang@mckinsey.com



Joshua Lan

Associate Partner
Taipei office
Joshua_Lan@mckinsey.com

Feng Han

Associate Partner
Shanghai office
Feng_Han@mckinsey.com

Vera Chen

Associate
Beijing office
Vera_Chen@mckinsey.com

McKinsey Greater China FIG Practice
July, 2016

Design contact: GCO NewMedia
www.mckinseychina.com