

## On the Development of China's Online Banking

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### Abstract

**The macro-economic fluctuation intensifies, the financial market develops rapidly, the traditional bank faces the keen contentions is commercial. At present, the evolution of online banking is of essential stage in the transformation of traditional commercial banks. This paper mainly uses comparative analysis to analyze the present background and open issues of Internet banking. Online banks need to innovate continuously and meet the needs of users as the development goal, so that they can gain an absolute advantage in the competition with non-financial institutions and third-party payment platforms and stand firm in the new technology wave.**

### Keywords

**Online banking, competition, innovation.**

### 1. Introduction

Online banking refers to the traditional service items such as account opening, inquiry, reconciliation, intra-bank transfer, inter-bank transfer, credit, online securities, investment and financial management provided by banks to clients and they utilise web interpretation, so as to guarantee them on manage current and time deposits, cheques, credit cards and personal investments without contact and space restrictions. The online banking of this paper is only broadening the banking network. Even if the commercial bank is of the significance portion of our country's financial system and act a part in the community finance, in the sense of collision that comes from Internet finance, the commercial bank's online bank needs to innovate and realize the profit goal in theory of ensuring the security, so as to highlight its advantages in the competition.

Making a comparison with like Europe and America the developed countries, China's online banking started late, and in 1996, China began to explore the way of online banking. The emergence of online banking marks China's entering a new era of online business handling. In just a few years, it has basically covered all the business types of traditional banks from the related business with only capital transactions to today. The opening up of online banking greatly broadens the scope of users. Contrasted to conventional commercial banks, Internet banking has the below characteristics:

#### 1.1. Virtualization

Online banking is based on computer network and communication technology, realizing the virtualization of financial services, moving real banking to online operation;

#### 1.2. Convenience

Users can handle traditional business without leaving their home, and online banking is almost equal to the mobile counter open at any time, breaking the time limit of traditional banking, and implementing 24-hour zero-distance service;

### 1.3. High Efficiency

It is unnecessary for users queue in the troops to handle business, each user has their own palm business window;

### 1.4. Low Cost

For the user, through the online banking business can save traffic costs, for the commercial bank itself, the online banking no longer need physical stores and counter personnel, greatly save the commercial bank operating costs.

## 2. Development History and Current Situation of Online Banking

With the clipping blossom of modern mesh science and a popular style of smart phones, the demand of mobile phone users is also increasing. The mobile phone is no longer just a communication device, and has developed into a tool for mass entertainment, learning and payment. Third-party payment platforms such as Alipay and WeChat have now penetrated our lives. These platforms have continuously innovated and expanded their business scope, gradually becoming extremely influential Internet financial platforms. After entering the mobile payment field, they also launched financial services such as Yubao. Youbao already has the ability to break away from banks to form its own stored-value business. This has brought an intense influence to the traditional commercial banks and the single online banks, dividing up the market share of commercial banks, and more commercial banks take the construction of online banks as their development strategy. At present, China's online banking development is relatively optimistic. According to Internet-based banking, the data show that the number of mobile online banking users in China in the started quarter of last year is 382 million, aggrandizing 1.23 million contrastd to the terminus of 2017, accounting for 48.5% of the quantity of moving web clients. At the started quarter of last year, the quantity of clients utilising moving Internet banking reached 382 million, while the number of users using mobile online banking nationwide reached 417 million, accounting for 91.6%.

The number of online banking users has increased year by year from 2012 to 2018. there is taken stock in that the statistics will have a certain augment in the coming of 5G, indicating that the development of online banking is relatively stable. There is a typical example, network finance has formed a new growth point of agricultural bank. In the first half of 2019, net income from net financial contributions was 13.7 billion yuan, more than 4\*108 yuan, a 41% increase improvement. At the started quarter of 2019, the net income of handling charges and commissions was RMB 50,899 million, an increase of RMB 7,2620000, 16.6% improvement, of which the handling charges for settlement and liquidation increased 15.3%, as well as the contribution of the Internet earning of handling charges reached 22%.

The development of online banking injects fresh blood to the traditional commercial banks and shows the vitality of online banking. In an attempt to make the online banking put full measure to its advantages as the new darling of the Internet era, we also need to analyze the existing problems and deficiencies of online banking, and put forward constructive measures to solve the problems so that it can occupy a favorable position in competition with other financial instruments.

## 3. Defects in China's Online Banking

Taken fundamental thing to the clients experience and comparison with the third-party payment platform, there are many defects in China's online banking:

### 3.1. Inadequate Innovation

China's online banks only move the traditional banking business online, and China's commercial banks have been implementing the American-style functional banking system, can only operate the traditional over-the-counter deposit loan banking business, can not carry out

securities underwriting business, do not design more personalized products according to the characteristics of the Internet + banks, the audience group of online banks should be located in the early youth group, but according to the feedback of young people online banking services and product innovation, this is compared with some innovative third-party settlement APP shows a significant disadvantage, customer groups are difficult to be these traditional banks can handle business attraction, The business model of online banking is also lack of innovation, and it does not apply the Internet element to the financial field in real time. It is useful to help the entity entrepreneurs than the foreign Internet banks. The service projects of online banking in China are too single, and the service field needs to be broadened.

### 3.2. Increased Risks

With the augment of competition between banks, banks and Internet web traditional bank, online banks, in order to encourage credit loans for individuals and small and micro enterprises, constantly reduce the threshold of loans, so that the bank's non-performing loans increase, the ratio of bad debts increases rapidly, the bank's loan funds can not be recovered on schedule, resulting in problems in the bank's capital flow and capital turnover. By the end of 2018, the non-performing loan rate of micro banks was 0.51%, and the non-performing loan rate of online merchant banks was 1.3%, which is still within the scope of benign development. This will shake the confidence of deposit users in the bank, the banks serious impress the credibworthiness, make the bank's ability to absorb the idle funds of the society decline, and even threaten the bank's pillar in the financial system. Online banks have used the concept of the Internet, and the operability behind the Internet is strong that might pave the way for worsening a risk who is called credit risk. For the financing party, there is the market risk of interest rate instability and volatility of market price, there also be the credit risk of the capital supply volume of the financing party. For the financing party, online banks have serious information asymmetry, and the financing party can not fully obtain the information of the financing party. Therefore, it is inaccurate and subjective in measuring the breaking a contract possibility of the counterparty. When the counterparty defaults, if the financing party can not to cope greatly in the financial risk management plan, it will directly cause the internal financial risk and operational risk. Even when a congregate defense occurs, there is a mobility pitch dark, leading to a direct bankruptcy of the financing party. On the one hand, the asymmetry of information leads to default risk, but also indirectly leads to liquidity risk.

### 3.3. Low Safety

The support of Internet technology has brought a positive impact on the efficiency of online banks. At the same time, in addition to the liquidity risk, interest rate risk, credit risk, investment risk, conversing a kind to other kinds risk and capital risk of the real commercial banks, the online banks also face the risk of network hackers, viruses and other intrusions into the online banks to form security risks. Nowadays, In today's era of completely mature electric network science, to establish the firewall of online banks is very important. Once a virus or illegal domestic and foreign hackers intrude into the online banks, the September 2019" Computer virus and mobile terminal virus outbreak investigation report "shows, In 2018,64.59 % of computers in China were infected by virus, twice as much as in 2017.Meanwhile, Tencent Security Center has monitored that at the started quarter of 2019 alone, the quantity of catawampus software aimed to mobile phone banks will add by 50% over the whole year of 2018. These software will hack into APP's back office to obtain user's transaction information and even the password of user's account, resulting in huge security risks. A large number of user information gathered in the Internet, in the process of network programming, there will be coding, such as the traditional network crawler technology can get the information of users behind the network, not to mention when the professional illegal hackers in the Internet web operation will bring safety that is of the entire online banking threat. The mobile payment

terminals of Alipay and WeChat also have some security problems, however not only giant companies have invested abundant money in security maintenance. So far, no large-scale network financial security problems have occurred, laying a foundation for gaining the favor and trust of users.

### **3.4. Uneven Permeability of Clients**

There are relevant data that shows: the users of online banking are mainly the people with higher education, some potential users with lower education think that the threshold of online banking is higher, risk averse investors are not willing to try new things, indicating that online banking is not friendly to the users, its early propaganda strength is not enough, there is no different degree of interpretation and publicity according to the acceptance level differentiation of potential users; the penetration rate of urban users is higher than that of rural areas, which is tightly connected with the popularity of the network; the quantity of clients is mainly concentrated in the post-70-90s, the penetration rate of minors and old people without smart phones and without network knowledge is low, The audience group is relatively limited, the publicity for young people still needs to be strengthened, the way that we can decide to further promote online banking among the elderly people has a major issue that is essential to pay attention to. The fundamental problem is that social groups lack the concept of internet finance, which is a mix of finance

### **3.5. Poor User Experience**

According to the survey results of the client exploration of ABC Internet web banking, the quantity of clients that are generally and unsatisfied with the experience of online banking navigation and interface settings accounts for 47.57% and 29.13% of the total number; the interaction of intelligent customer service is not professional, most users reflect that ABC online banking customer service is in short supply, often facing the situation of online queuing consultation, customer service itself is not professional enough to satisfy the wants of clients. There are also good examples: the interface of the Internet Bank of Communications is more beautiful and clear compared with other Internet Bank interfaces. Depending on the client's exploration couple back, the information of the Internet Bank of Communications is updated in a way without delay and provides 24-hour online service for customer service. In terms of product development, financial products meeting the needs of different customer groups are unceasingly developed. However, other online banks have a long way to go in improving the sense of user experience. The operation of online banks not only requires the development and maintenance of hardware systems, but also the project and the best result of software is essential. Both page design and page fluency need to be improved.

## **4. Suggestions on Tomorrow Progress of Online Banking**

### **4.1. Strengthening Personal Financial Business Innovation**

Although in the wake of progress in technology and Internet, more diversified palm services and the gradual popularization of smart phones, the actual personal finance users of online banking are not optimistic. According to the special research report published jointly by Yi Guan and Handy Records on the Special Analysis of 2017 Popular Financial Cognition and Behavior Index, the investigation and analysis report in 2017 shows that the financial cognition and financial mobility index of the Chinese public are at the lower-middle level, indicating that most residents do not know enough about financial management, and 41.6% of users tend to use online channels for financial management and investment, particularly utilised to moving banking management, which shows that moving banking platform provides convenience for users in need, which also fully illustrates the necessity and feasibility of online bank to carry out and innovate personal financial business. 61.3% Of the repliers expressed mightily that they had never learned financial management knowledge. While bringing forth new individual

banking administration business, online banks can provide users with more accurate financial management knowledge based on the investment risk preference measured by clients. The inquiry as well manifest that merely 9.2% of the respondents believed that they did not need financial management, indicating that the future potential of personal financial management is very large, and banks provide more specialized services to users according to their perceptions and needs, which will convert possible users into actual users.

The user's personal finance business is equal to the personal asset allocation: combining the user's risk appetite, the user is provided with various product combinations, and the user's assets are maintained or even increased. Advantages of this innovative business: select the group with rich assets and stable income, combine with the user's own needs, and provide the client with all the better banking services by asset allocation and professional personal financial management, so that the online bank can penetrate into the user's life.

#### **4.2. Establishing a Secure Electric Network Environment**

So as to enhance the management of bank payment information authentication, all online payment services should introduce PKI/CA (public key infrastructure/certification center), enforce the real name authentication mechanism, screen the user's identity and handle the payment information data safely. In addition, you need to connect the power of the user. The Bank can cooperate with schools and communities to strengthen the network security guidance for holders, improve the awareness of the prevention of the network security for holder, and make all customers consciously standardize the use of online banking and use of online banking safely, especially if they do not log in to online banking under the unsafe network environment, do not browse the unsafe website, and do not download the unauthenticated software. To create a secure electric network environment, from the perspective of horizon of the country, we need to strengthen the implementation and implementation of laws in the process of financial supervision, improve related legislations and administrations, standardize network operation from the legal level, both the investor and the financing party must achieve the basic behavior standard. From the perspective of banks, we ought to keep the base line that no systemic financial risks occur, and then make good use of big data analysis and financial risk analysis to minimize the risks caused by information asymmetry. From the point of view of users to do a good job of revealing own information, advance their reputation.

#### **4.3. Providing Professional Financial Services**

Online banks need to conduct big data analysis according to the needs of different user groups to achieve accurate services, for example, the users who analyze Internet finance according to big data are mainly post-90s, and APP needs more new financial products such as subscription of new debt in the service of post-90s; the users who analyze big data after 80 are mostly risk averse, so when providing personal finance products to such new users, they can provide purchase reminders of bond funds in the newly downloaded APP interface, and match the professional customer service of bond funds to provide professional consulting services for such users. It can make users better experience the convenience of online banking and provide entirely act to the character of online banking. Taking best of the advantages of plentiful data analysis, take specialized customer service as the highlight, attract more potential customers and build deep-level customer relationship. Online banks are encouraged in order to implement the margin trading. Margin trading depends on the act of clients offering bail bond to securities companies with the qualification of margin trading, loaning to purchase securities or loaning securities and selling them. Double margin trading has the characteristics of short selling mechanism and leveraged trading. The majority of the literature on the margin trading system is mainly derived from the short selling mechanism of margin trading to study the influence of double margin trading on market participants. Short selling mechanism refers to the process of borrowing securities to sell when the market will fall, and then returning the securities to the

borrower to close the position for profit, including short selling of cash deposit transaction and financing buying. The financing and securities business can make better use of the Internet plus concept and promote popular financial business.

#### 4.4. Optimize Interface Design of Online Banking

Online silver page design is the user's first feeling, if can attract the client in the starting feeling, can keep the user's footsteps. Why Alipay can stand out from many third-party payment platforms, not only because of its powerful e-commerce user market, but also worth learning from the online bank is its APP page design, extremely diversified factors, so as to offering clients with payment, taxi, personal finance aspects of small program services, but also combined with the hinterland of green development concept, designed Ant Forest small program, adding the coordination of APP interface, providing users with a comfortable experience.

In the future page display, online banking should not only guarantee the mellifluous and efficient interface, but also strengthen the layout design, enhance the overall coordination of the interface and provide more diversified services for users. In terms of user experience, we need to start standing at the client's perspective of angle and take the user's real experience as the guide. Each big online bank can use big data technology to obtain the data of the business with high user clicks and ask the user's real experience in the taking shape of questionnaire survey. We might put forward the activities of rewarding and painful points and encourage the user to give suggestions on page experience. Each big online bank can improve the page of the online bank according to the user's effective suggestions and strive to meet the user's experience needs.

### 5. Conclusion

Bill Gates had predicted that commercial banks would be the last dinosaurs to perish in the 21st century. This sentence brings a warning to the traditional commercial banks and today's online banks. Under the tide of technology, without reform and innovation, the traditional offline financial services industry of commercial banks will be abandoned by the masses today because they can not satisfy the wants of clients. The development of online banking is the general trend of the development of banks today, and the fast progress of other non-bank financial institutions and various third-party payment platforms brings the pressure of online banking. It should also be the driving force for the reform and innovation of online banking. Only by providing unlimited service to satisfy the wants of clients can commercial banks consolidate their position in the financial system. It is not so much that the internet has brought a crisis to the traditional commercial banks as it has brought new opportunities to them. On account of all-pervading internet, the notion of Internet+ has been pushed to a climax again and again. The situation of online banks in recent years is not optimistic, so we need to find out the gap of online banks and grasp the opportunity.

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