

# Problems and Countermeasures of Mobile Payment Development in

#### China

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Abstract: With the popularization of e-commerce applications and the continuous progress and development of communication technology, mobile Payment methods have developed rapidly all over the world. As a new bright spot in China's e-commerce field, mobile payment, Compared with the traditional payment method, it can break through the restrictions of time and place, and has the advantages of concealment, quickness and high payment frequency and miniaturization have become important means of payment in people's daily life, but it also has some defects while playing the convenience. This paper mainly expounds the development status of mobile payment and analyzes the possible problems in use, and put forward relevant countermeasures for reference.

Keywords: Mobile Payment; Payment System; Risk Monitoring; Laws and Regulations

#### 1. Introduction

With the advent of the Internet era, there have been "four new inventions" - online shopping, high-speed rail and sharing single car and mobile payment. Among them, mobile payment breaks the time and space limitations of traditional payment, provides necessary conditions for the development of e-commerce, and provides a variety of services for people's life. Although mobile payment has brought great convenience to people due to its convenience and many other advantages, its decentralized transaction data and process fragmentation and other factors greatly increase the difficulty of supervision. Nowadays, in reality, the system of financial separate supervision has been very difficult to adapt to the various complex characteristics of mobile payment fund transfer. The degree of supervision of China's mobile payment institutions is obviously weaker than that of traditional financial institutions such as banks and securities. The potential safety problems, industry norms and supervision problems of mobile payment technology are the bottleneck problems that need to be solved urgently in China's mobile payment development.

#### 2. Development status of mobile payment

Mobile payment refers to the payment of electronic money by mobile client using mobile phone and other electronic products. It is a payment method in which any party in the settlement of capital debt and bonds uses mobile access to pay off. According to the definition of mobile payment, the parties involved in mobile payment can be divided into mobile payment transaction participants and payment service providers. Mobile payment transaction participants are usually consumers and merchants, and mobile payment service providers at the present stage include financial institutions, third-party institutions providing mobile payment and telecom operators.

# 2.1 The operation mode is dominated by financial institutions

Payment service providers are banks and other financial institutions. Mobile phones are the payment media, and mobile phone information is transmitted through mobile phone operators, who are not involved in operation management but only responsible for providing information channels in advance.

## 2.2 A model dominated by mobile operators

The operation mode dominated by mobile operators depends on its agent charging business, and banks do not participate in it. In the process of mobile payment, the phone account is usually regarded as the payment account, and the user can buy the electronic money issued by the mobile operator to top up the phone fee or deposit it into the phone account. When users purchase products and services through mobile payment mode, transaction fees will be directly deducted from their phone account.

## 2.3 Third party payment service provider based model

The third-party payment service provider is independent of banks, operators and UnionPay institutions. It carries out payment identity authentication and payment confirmation through mobile communication network resources and bank payment settlement resources. This is a payment institution that has obtained the payment business license issued by the People's Bank of China in accordance with relevant regulations, which extends its payment business by using mobile payment.

## 3. Problems in mobile payment

## 3.1 Imperfect mobile payment system

At present, China's mobile payment field is in the development stage, which not only lacks management and payment mode, but also has certain problems in integrating mobile payment system. Usually mobile payment is mainly composed of unionpay, alipay, WeChat has pioneered the new payment channel, only a tiny part is created specifically for mobile payment pay channels, which makes the management in the mobile payment will appear serious problems, it will not only for the security and efficiency of China's mobile payment caused serious influence, At the same time, it will also have a serious impact on the integrated modern mobile payment system.

## 3.2 Insufficient third-party support

Since most modern mobile payment methods need to be completed through TWO-DIMENSIONAL code scanning, and third-party payment enterprises and relevant departments are also required to improve the payment efficiency. However, in the process of innovating their own payment methods, some of China's mobile payment platforms may lack of cooperation or refuse to cooperate with third-party technical support or for some reasons.

# 3.3 Imperfect industry system and relevant laws and regulations

Although mobile payment has broad development prospects, the corresponding laws and regulations in China have not been improved. Has been formulated in China, including the electronic banking business management method ", "non-financial payment services management method", "electronic signature law of the People's Republic of China" and other relevant laws and regulations, but these laws and regulations are too general, not for mobile payment put forward the concrete operation standard, lack of practical guiding significance for the mobile payment.

# 3.4 The traditional concept of payment has a great impact

China has a huge population, but according to statistics, the number of mobile payment users in China is only 566 million, the scale of online payment users is 569 million. Generally speaking, the scale of both are relatively low. This also shows that although some Chinese consumers trust mobile payment which brings convenience to their life,however, a large part of consumers retain the traditional habit of cash payment instead of mobile payment means for settlement and payment. It can be concluded that the concept and habit of consumers play a restrictive role in the development of mobile payment.

#### 4. Countermeasures

## 4.1 Strengthen the security construction of mobile payment

Mobile payment platforms store every user's private information, so it is important to strengthen the security of mobile payment. Firstly, users' awareness of network and mobile payment platform security should be improved. Secondly, the security performance of mobile payment platform should be strengthened.

In mobile payment mode, the impact on users can be solved by improving the technical security level of mobile payment system. In addition, mobile payment operators need to help merchants improve the security of payment terminal equipment and related software, and invite independent security assessment companies to test products. Furthermore, communication security measures between mobile payment users and banks are the key to payment security prevention and control. In the process of designing the data link between the user and the bank payment platform, mobile payment operators need to ensure that the password link between the merchant and the bank payment platform is secure, so as to avoid economic losses due to the loss of ciphertext during data transmission.

## 4.2 Establish and improve the legal guarantee system for mobile payment

China lacks legal policies for mobile payment, so China needs to establish and improve relevant legal policies for mobile payment. Improving the payment law of users' rights and interests can guarantee the users' legal rights under e-commerce. At present, China needs to integrate the actual situation of the domestic electronic payment market. First of all, relevant legislative bodies should take the initiative to learn from the new international legal experience of electronic payment, and accelerate the process of formulating and promulgating laws and regulations on electronic payment. At the same time, the international electronic payment law community communication and cooperation, to ensure the domestic mobile payment legislation and international legal system integration, promote mobile payment business in line with the international.

# 4.3 Improve the system for monitoring payment risks

We should gradually improve the supervision system and formulate sound industry norms. Regulatory departments should clarify their responsibilities and perform their respective duties to avoid duplication of supervision or absence of supervision. First of all, mobile payment operators need to integrate merchant credit evaluation system into the construction of mobile payment system from the beginning of the establishment of mobile payment merchant nodes. Secondly, mobile payment operators can strengthen the dynamic monitoring of the payment transaction link, and find the abnormal movement of funds in the transaction link in the first time, so as to avoid the laundering of illegal funds through payment channels. Moreover, mobile payment telecom operators should improve the monitoring data analysis and processing of the transaction process, so as to dig out dangerous signals of mobile payment faithless, pay close attention to the development of the faithless crisis, timely clear out unqualified merchants from the payment market, and effectively solve the problem of the impact of mobile payment network reputation.

# 4.4 Cultivate consumers' habit of using mobile payment

Compared with traditional cash payment, mobile payment is more convenient for people's life. Mobile payment has no time and space limit, a mobile phone can meet the payment conditions, and mobile payment service range is relatively wide. We need to cultivate consumers' payment habits. First of all, we need to publicize mobile payment so that more consumers can understand it. Secondly, attract consumers to participate in offline activities, and teach consumers to use mobile payment methods through activities; Finally, improve consumers' trust in mobile payment.

#### 5. Conclusion

Mobile payment is based on the innovation of Internet technology. With the rapid development of Internet technology, mobile payment has been deeply involved in every aspect of people's life. However, every coin has two sides. Mobile payment not only brings great convenience to people, but also has a large risk, which will cause certain problems to people. Therefore, when we use mobile

payment, we should enhance security awareness to protect our information and property security. The country should also strengthen management system construction and provide effective rules and regulations for the development of mobile payment.

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