The research of Online Transaction Risk in Service Provider to Consumer

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Abstract—Today, as the external environment of the internet tends to mature, the consuming service based on the family life will be the main part of the E-Commerce in China. It affects the development of the industry, and also changes and affects users' spending habits. This article investigates the transaction risk in the development of Service Provider to Consumer, and proposes appropriate risk control strategy through analyzing the risk.

Key Words-Service Provider to Consumer, Online Trading, Risk

I. Introduction

Service Provider to Consumer (P2C) is a new concept of E-Commerce following the B2B, B2C, C2C, and it is the product of the development of E-Commerce service. The Concept of Service Provider to Consumer was proposed earliest by Ma, Yun, the CEO of Alibaba. He put the Koubei network into the Taobao, implemented the "Big Taobao" strategy, and opened the prelude of Service Provider to Consumer.

Currently, the number of business about Service Provider to Consumer in China has exceeded 40 Million, and almost half of internet users are used to get the living service via network. Therefore, Service Provider to Consumer has great development potential. But so far, most of the living service websites is just an information release platform, and the buyers and sellers solve the exchanging and transaction offline which brings too much trouble. Meanwhile, the information of these living service websites is complex, uneven and is difficult to distinguish true and false. So this restricts the value of Service Provider to Consumer. Therefore, if the living service wants to be E-Commerce, we should reduce the transaction risk at first, and give users trust and confidence. The users here are not only internet consumers, but also stores included. So, pulling the third-party payment platform as the credit intermediaries into Service Provider to Consumer will raise its payment reliability greatly and attract users.

The third-party payment platform is a popular online payment pattern right now, and it can solve many problems of the capital flow E-Commerce in theory. However, the third-party payment platform is just in the infancy period, so that the platform system still needs to be improved constantly. Meanwhile, the relative policy and regulations are not perfect enough, and there are many unstable factors of the internet environment. All of above make the third-party payment

platform in risks when it is performed. If we use it in the process of Service Provider to Consumer, there are probably unexpected problems happen.

II. Analysis of payment risk in Service Provider to Consumer

A Reason of Risk

(1) The marketing competition of the third-party payment is intense

The third-party payment is a new thing, and there is no entry limit and no strict quality checking. Many small payment companies emerge constantly, and they have single type of products, the same service mode, compete between each other in the price war, so they are all deficit and become vicious competition. Therefore, some payment companies begin to take risk for living.

(2) The space of the company's profit is narrow

Many third-party payment companies take the way of no fees to get customers. Also, there is intense competition between the third-party payment companies and banks. The consumers can make the payment via online bank not via the third-party payment platform. The third-party payment platform gets the business by opening the payment channel of many banks based its technology advantages. So its space of the profit is narrow, and the developing space is limited. There is another source of profit is the interest income of customers' temporary funding, but its legality is suspected.

(3) The effort of supervision is not strong

In June, 2010, the central bank officially announced the "non-institution payment service management regulation" that it will implement supervision officially to the third-party payment industry. On May 26th, 2011, the central bank published the first "Payment Business License" to 27 units. The news made the third-party payment platform into the supervision. However, this kind of supervision is just in infancy period so that there are so many problems not solved completely yet. For example, funds sequestration and funds precipitation, there is hidden danger and problem of funds safety which may trigger payment risk and moral hazard; it easily become tools of illegal criminal activities like illegal funds transferring, cash and money laundering, etc

(4) Credit Fuzzy

Due to our current bad credit situation, the credit problem is particularly important to complete transferring of property rights and funds in the virtual space. Therefore, it is necessary to limit and control buyers and sellers' activities. Currently, Taobao established norms of buyers and sellers' credit in consumer portal, Taobao Mall and Koubei, and it contributed greatly to the increase in business volume and transaction amount. But the third-party payment institutions just take the responsibility of guarantee agent by their credit, and this kind of credit belongs to business credit so that its ability and effects are limit and weak. The risk of credit is big because it is lack of credit limit to the third-party payment institution.

B The Manifestation of Risk

Seen from internet transaction process of Service Provider to Consumer, the risk mainly shows in the following levels: the basic level of transaction, the application and operation level of transaction and the external environment level of transaction.

1) the basic risk

The basic risk is the risk faced by every user in the process of payment, and it is the basic risk involved by the process of the third-party payment. It mainly includes technology support risk and credit environment risk.

(1) technology support risk

Technology support risk is the risk brought by technology in the process of payment, for example, the problems of the computer hardware system, application system, safety technology or network operation lead to Data confidentiality, system and data integrity, customer authentication, data tampering, system reliability and other computer systems, database, network security, etc. The third-party payment platform has interface with many different banks, so it is huge impact to online bank system once the problems happened.

Whether the third-party payment platform is safe or not, it is mainly dependent on efficacy of the system platform hardware and maturity of the software system. Whether hardware systems can solve online payment needs in business peak hours or not, deal with emergencies to reduce the economic loss effectively and timely or not, the operating efficiency of the software system, business processing speed and reliability can meet third-party payment companies' business need or not, not to provide crime opportunities to the lawbreakers are the important criterion for the third-party payment platform security.

Right now, the security system established by most of third-party payment platform is not systematic and perfect. There is bug affecting operation in the system and loophole affecting system safety operation. The third-party payment platform is based on the internet, and it transfers and store data via internet. So the third-party payment platform is easily attacked by all kinds of computer viruses and hackers of the internet, and also the third-party payment platform and its account data are threatened and produce risk.

(2) credit environment risk

Credit risk is the risk that the parties involved in the third-party payment is unable or fails to fulfill the agreed contract obligations and causing economic losses. Parties here are mainly consumers, stores and the third-party payment companies and banks in transactions.

The consumers' credit risk mainly shows that the funds source of the transaction is legal or not, Consumer make transactions by using a false identity, money laundering and defrauding integral, credit card cashing, false account defrauding commission, transactions that consumers deny their own operation or authorizing others to do, installments, enterprise fund settlement to personal tax evasion, and fraud the platform credit.

Companies' credit risk is that companies can not offer goods that agreed with companies, and can not deliver goods to consumers on time. So it will make consumers' relative loss like return shipping fees, negotiation fees with the third-party payment companies and time cost, etc. At the same time, the third-party payment companies are also involved so that the operation cost and credit cost increase and credit loses.

The credit risk of the third-party payment companies is that the problems of using customers' funds by the third-party payment companies. The third-party payment platform generally promises that it can return the payment of goods if consumers return them. But now most of third-party payment platform take the way of returning payment to customers' electronic account in website automatically after making payment and returning goods. Customers need to call to apply if they want to the payment returned to their bank account, and then it will be into the account in a few working days. This kind of way obviously makes customers gotten crisis of confidence to the third-party payment companies.

The credit risk of banks is generally the flow risk that the banks delayed settlement and foreign card transactions as well as the non-payment delaying settlement.

2) The application level of transaction

The application level of transaction mainly comes from risk of business operation process. It is a kind of risk that users, bank employees or other operators make violations or improper operation in paying process, as well as the risk of poorly designed business processes.

(1) Operation risk

Consumers maybe meet all kinds of risk when they make transaction, for example, phishing sites scam, and bank account number was stolen. The risk when users make remittance include that cash operation, refund operation, verify operation, manually returning cash operation, Commission calculation and payment risk. The risk when receiving payment includes risk of payment platform getting payment from users, businesses receiving payment from payment platform, and payment operation risk when transferring funds between banks and payment platform.

(2) Risk of platform

There are all kinds of risks from payment platform

because of itself. For example, the system privileges mismanagement, business process designing is unreasonable, irrational internal audit.

In addition, seen from the operation of the third-party payment platform, the funds that buyers pay to sellers generally stop in the third-party for couple days, and in this period, the funds is dominated by the third-party. As long as there are a lot of transactions everyday, the third-party must collect a lot of stable funds. The interest ownership of the funds in the third-party payment platform, and the funds' security are also a problem worth thinking about seriously.

(3) Risk of settlement business

It is mainly risks produced by transaction settlement business between banks and payment platform. First, it is the settlement based on electronic transaction, and deal with a lot of funds transferring business, and problems of any link in the system will bring risk to settlement business. Meanwhile, banks and platform operators' false operation, unreasonable distribution, reconciliation permissions error will result in this potential risk. Second, after the third-party companies appear, the transaction process that banks knowing about well is divided into two transactions seems no relation. Customers' payment instructions are controlled by the third-party payment companies, and banks transfer funds from customers' accounts to payment intermediary's accounts in accordance with the instructions of the third-party payment companies included and transfer funds from payment intermediary's accounts to target accounts, so settlement operations are completed in the third-party payment companies' participation. Therefore, banks cannot grasp the complete line of the funds flow in the transaction process so that bringing convenience to the money laundering on the network and cash, and then result in money laundering risk and cash-out risk.

3) External risks

(1) Legal Risks

Though the People's Bank of China has made and published the "non-financial institution payment service management regulation", the regulation still leaves a lot of suspense, and the implementation difficulty is not small such as the regulation of customers' spare payment funds brings increased pressure and increased single management cost to companies.

(2) External environment risk

Risks that are due to natural disasters, accidents and political changes include power outages, static electricity, dust, humidity, temperature, electromagnetic interference, floods, fires, earthquakes, and the war, etc.

(3) Market factors changing risk

It mainly includes risks caused by the changes of bank rates, interest rates and margin ratio.

(4) The competition institution risk

Currently, due to the survival rules of the third-party payment companies in the network are collecting a large number of users' resources to build influence mainly and use the interest of funds on the way of some users as income and management fee, thus increasing users' transactions becomes the source of the enterprise surviving. It is probably for the third-party payment companies to take ways of unfair competition in order to attract enough users. So the vicious competition is difficult to be avoided, and the vicious competition between enterprises must bring a series of problems such as integrity crisis, etc. At the same time, these risks will affect users more or less.

III. Online payment risk control strategies of Service Provider to Consumer

A risk control strategies of the basic level

- 1) Improve the technical level, develop diversified products
 - (1) Improve the technical level, Guarantee system security

We will create a reliable online transaction environment by using the advanced security technology, and make the third-party payment has elements of validity, authenticity, integrity, confidentiality, irrevocable, non-repudiation and authentication, etc.

(2) Develop diversified terminal products, and strengthen the advantages of localization services

Third-party payment companies should strengthen cooperation with financial institutions, and establish business cooperation relationship with many banks. It should explore cooperation with logistics, communications and other related agencies to provide users with a variety of terminal products and services, for example, providing mobile payment, telephone payment and other electronic means of payment, and form a three-dimensional payment system.

Meanwhile, third-party payment companies should seize the strong regional characteristic of the life service industry, and meet the needs of local payment, provide payment platform for local Service Provider to Consumer businesses. For example, water, electricity, gas and cable TV fees; fees of exam training and school; local tourism industry charges, etc.

(3) Industry market subdivision and profit channels expanding

Living services industry subdivides many markets, every industry has its own characteristics to the demand for electronic payment, so the third party payment companies can carry out targeted value-added business in providing solutions, provide differentiated and personalized services to effectively meet the needs of every industry market, and avoid the homogeneous competition.

For example, third party payment companies can rely on their powerful financial and consulting professionals to provide users (including consumers and businesses) value-added services such as financial statements, data analysis and management consulting analysis, etc. that banks are unwilling or not able to provide. They should try to get increased profit from expanding value-added services. For example, the choice of the logistics, the certification of the integrity, credit guarantees and a variety of after-sales service and coordination. Thus it can broaden its own path of profitability. Due to the trade secrets of life services provider

businesses, the third-party payment companies can not effectively use the form of charging an annual service fee and transaction fees to get profit (such as the difficulties relying on a commission earnings in the corporation process with the life services industry such as catering, aviation), but this problem is solved, and attract more users.

- 2) Consciously establish and maintain trusted trading environment
- (1) Businesses should comply with professional ethics, ensure quality of service, and choose a reputable third-party payment platform

The transaction like online life services has the characteristic of Virtual, and it is invisible, only knowing the quality of the merchandise after receiving the service. So for consumers, the service providers' ethics is very important. Merchants must strictly abide professional ethics to avoid offering substandard service or low quality goods to consumers because of their advantages of covert action, so that it will not damage consumers' benefit. Merchants have responsibility of confidentiality of customers' data, and merchants can not offer customers' data to the third-party without customers' permission or law enforcement requirements of the particular law enforcement agencies. Meanwhile, life service website should open customer's feedback to merchants' services, and thus it plays a supervisory role to the merchants and help merchants build credibility.

When merchants are in cooperation with the third-party payment companies, they should select the third-party payment agencies which have high degree of credibility, trustworthiness and reliability, not only concerned the level of payment procedure fee. Reputable payment service providers have a lot of customers and significant scale economies, and they have abundant resources so that they can provide stable service. The profitability point is diversified, the technology is more advanced, and safety is guaranteed. There is mature and effective risk prevention system so these can also enhance merchant's online reputation and attract consumers booking online.

(2) Consumers should enhance the security sense of online transactions, and consciously maintain network moral

Consumers should strengthen their own sense of secure payment. Consumers should be aware that the risk of online transactions is an objective reality, but it can be prevented and controlled. Consumers should know about that stolen user accounts are from the client mostly. Therefore, enhancing their awareness of security is the best security guarantee.

Meanwhile, with the carrying out of the Network Real Name System, most consumers have a higher level of self-discipline so that benefiting consumers consciously abide the network code of ethics, and maintaining network ethics order.

(3) The third-party payment platform should support building perfect credit evaluation system

The third-party payment enterprises should not only strengthen their own credit, but also maintain the user's credit.

The parties to the transaction can be considered for credit evaluation, according to the transactions' condition, we can provide and publish fair credit assessment methods, constraints sense of integrity of buyers and sellers within a certain range. At the same time, we establish third-party rating agencies of multi-party co-operation, increased constraints on online transactions, promote the third party payment companies to do technological innovation, reduce transaction risk and improve service quality.

B Risk control strategies of the application level

(1) Increase publicity and education efforts, establish safety awareness

Third-party payment platform should focus on the user's public education efforts in user registration, strengthen the user's security awareness, tell the users how to operate correctly, and how to prevent risks, while taking the technical means to put an end to the misuse of the user. For employees of the third-party payment companies, it is necessary to develop their IT sensitivity, while to train them the relative knowledge of the traditional financial services industry, so that make them pay attention to risk controlling. In addition, you should also cultivate their skills of keeping abreast of market demand condition and knowing about industry characteristics and process of different industries. Meanwhile, you should also continue to improve the moral quality of the employees in the third party payment companies and to enhance corporate culture, to strengthen staff's awareness of risk prevention, then to make them fully recognize that the enterprise has unshirkable preventive obligations and responsibilities for money laundering, cash, and other acts of fraudulent transactions, to train the staff honesty and self-awareness, and make them recognize the legal consequences that misappropriation of users' funds brings to themselves and the economic and credit losses brings to the enterprise.

(2) Standard third-party payment companies' behavior, and establish the sense of companies' social responsibility

The third-party payment enterprises should be intensified supervision, and comply with the relevant laws strictly. We should prevent the payment risk and credit risk of the third-party payment companies, and strengthen the supervision of third-party payment platform's accounts precipitation funds, regulate the use of virtual currency.

(3) Strictly supervise the settlement business

We must regulate appropriate upper limit for the billing cycle of the third-party payment to improve high-speed operation of the payment system as a whole. Third-party payment platform is just as an agent of the virtual account funds, and it doesn't have rights to use stranded funds for venture investment or company operation. While the payment institution shall record in the payment instructions initiated by the client: payer's name, determined amount, payee's name, the name of the payer's bank accounts or payment agency, the name of the payee's bank accounts or payment agency, date of payment instruction's initiation.

C External risk control strategies

(1) Establish complete legal link

Currently, the legal construction of e-commerce is far behind the development of e-commerce, which requires continuously pushing forward the construction of laws and regulations system of the e-commerce, and perfects the standards of e-commerce. We should avoid non-banking institutions making use of information and technology, and business advantages to damage the users' benefit, maintain fair trade and ensure data privacy and information security. At the same time, the law should have some restrictions and regulations for contract entry and content that the third-party payment platform cooperate with users to ensure the peer-to-peer of both parties' benefit, and offer reasons of dealing with in order to solve economic disputes of both parties, and also play a positive role in healthy and good development of the network integrity environment. The network criminals should be punished legally sanctions for money laundering, credit card, cash, fraud, etc. In addition, we should make tax supervision law of the third-party payment, and severely punish tax evasion.

(2) Establish consumers' rights protection system in network transaction

Consumers are vulnerable groups in the network transactions, so this requires strengthening market supervision for Service Provider to Consumer, in particular, establishing consumers' rights protection system in network transaction, strengthening the system construction of e-commerce dispute mediation, protecting cooperation rights and benefit of e-commerce participants.

IV. Conclusion

E-commerce is not only shopping, and the life services market will be broader. Today, as the internet external environment matures, consumer services based on the family life will become the mainstream of China's e-commerce, at the same time of impacting industrial development; it also changes and affect the user's spending habits. Field of Service Provider to Consumer has been the focus of attention of the industry. For "female", Service Provider to Consumer will be more diversified involving segments of clothing, jewelry, food, underwear, red wine, mother and child, catering, tourism, cosmetics and group shopping. As the proportion of network consumption accounts the overall retail market is increasing, and continue to excavate the market of second and third tier cities, the e-commerce industry will have a huge space for growth.

Seen from the current development condition of Service Provider to Consumer, the risk is mainly concentrated on the third-party payment. The third-party payment development is not mature enough, and there are many questions, and there are more risks when it is applied to new areas, and the risks are in different transaction process. Technical support and trading credit as the basis and prerequisite of the transactions, operations, system platform and business settlement process in the transactions' operation process, and external environment of transactions operating system platform, business billing processes, as well as the external environment of the transaction like policy and regulations, are factors that affecting the development of third-party payment in life service transaction. We should take different controlling strategies to protect development of Service Provider to Consumer according to risks of different levels in transaction process.

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