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# The Environment Factors Analysis of Electronic Commerce Credit System in China

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## Abstract

This essay raises that the problem of credit lacking is the major reason which hinders the development of electronic commerce in China through investigating the existing environment in our electronic commerce. The credit problem of electronic commerce is showed in three aspects: the reliability of information flow, security of currency payment and the reliability of service and commodity delivery. From the practical environment of the Chinese cultural moral tradition, the planned economy transferring to the market economy and the analysis of the electronic commerce in social environmental system in which the China's government changes its duty, there are six key system factors will influence the credit environments: technological standardization, laws and regulations, cultural morality, property right institution, government, and information delivery and open scheme. This essay Sets up two models of structure model and dynamic model for electrical commercial credit system analysis. The focus is to discuss the effect of this system factors' relationship among laws and regulations, credit cultural morality's influence on electronic commerce, property rights institution and the functions government takes a role in setting up the credit system.

**Keywords:** electronic commerce environment factors credit system analysis

## 1. Introduction

Modern market economy is the production and exchanging system of society and the professional division supported by credit.

## 2. Analysis model of Electronic Commerce Credit System

### 2.1 The Structure Model and Electronic

## Commerce Credit System

Electronic commerce is the continuation of traditional commerce relationship and commerce activities. The traditional commerce relation needs a long period to be acknowledged and agreed in order to set up a trust. In the practice of electronic commerce, there is a strong virtuality in the net exchange. The biggest difference between net shopping and traditional shopping is that the buyers and sellers don't meet face to face. The effect of credit problem on the electronic is not only technology but all aspects of the social economy that is supporting the electronic commerce.

Comparing with the practical commerce activities, the basic factors of forming electronic commerce haven't been greatly changed<sup>[1]</sup>. The credit scheme between buyers and sellers, the choosing scheme of products, the payment scheme of currency, the transferring scheme of goods and service all make up the foundation of electronic commerce activities. Thus, three aspects are the most important in investigating the growing environment of electronic commerce.

First, providing the net station of product information and choice as the trading activity place on net to set up a link of the customers' net space with the indefinite physical place without planning so that the circulation of commerce information realizes.

Second, electronic payment can make customers to pay for their buying or flowing fund through banks or credit cards on net anywhere they are.

Third, product allotment on net can send the products to customers efficiently at a low cost in order to realize the flowing of service and goods in the geographical space.

From the basic procedure of the electronic commerce, its credit system is showed in three aspects: the trustworthiness of information flow, security of currency payment and the reliability of service and

commodity delivery. From the establishment of the credit system, these three parts can be divided into one foundation, one motivation, and three supporting layers :one is the technological standardization, the other two are the lawful and cultural moral standardizations. Property right institution is the base of credit system existence. Information spread and its open scheme are the motive power of credit system .The technological standardization includes the technology of information security, electronic currency system , and the technology and management of the service and commodity delivery. The lawful standardization includes two kinds: limits of the principal part involving the electronic commerce and the government administrative behavior mainly focusing on the security, privacy , protection of knowledge property and the lawful efficiency of electronic contracts

ect. which involving the benefits of the right protection of the country and consumers, and supervision of the commercial activities. Cultural moral standardization shows the moral sense and human sense attached to the market economy, respecting the private right and cooperation spirit including the rights of survival, property, free choice and so on . It reflects the foundation of linking and developing the whole market economical social association. The key problem of the credit in our country is the institution. So the main contents of building credit system are that to build credit information network, to improve the basic construction of property right institution, to improve the host of credit government, form, and citizen., to improve the three support systems of law, technological standardization , and cultural moral standardizations(figure .1).

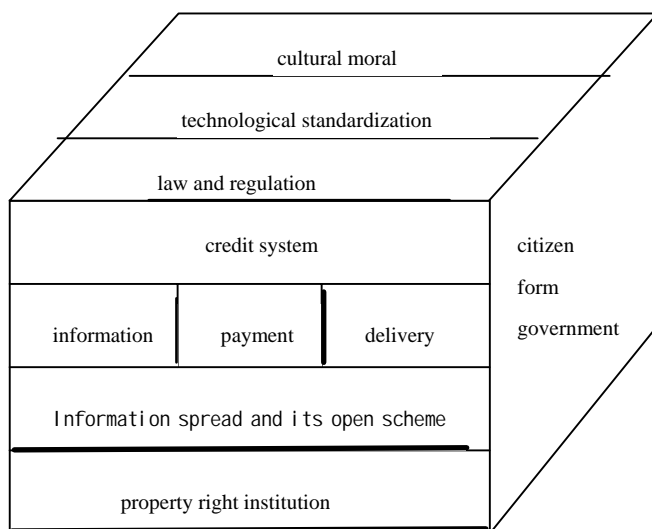


Figure.1 Structure model of the electronic commercial credit environment analysis

## 2.2 Dynamic Model of the Electronic Commercial Credit Environment Analysis

From the aspect of the credit environmental analysis of the electronic commerce, there are six key factors will influence the three aspects of environment: technological standardization, laws and regulations, cultural morality, government, property right institution, Information spread and its open scheme. The credit environments indicate the regulations in the activities of the market economy and a series of rules limiting the people’s behaviors. Their formal form includes laws, regulations, property right institution, related procedures and technical requirements.

The informal forms include culture, customs and morality, etc. It’s quite obvious and regular for the Technical regulation and laws and regulations to influence the electronic commercial credit problems (as illustrated in solid line) while the cultural morality, property right institution, and government’s influence on the electronic commercial credit problems is indirect and indefinite (as illustrated in break line). Cultural morality, property right institution, and government will have an effect on the credit problems through technical choice and setting up the laws and regulations. The information spread and its open scheme gives the relation for all this factors,

delivery the effect for each other( show as solid line and break line in figure2). Their relations between them can

be illustrated as figure 2.

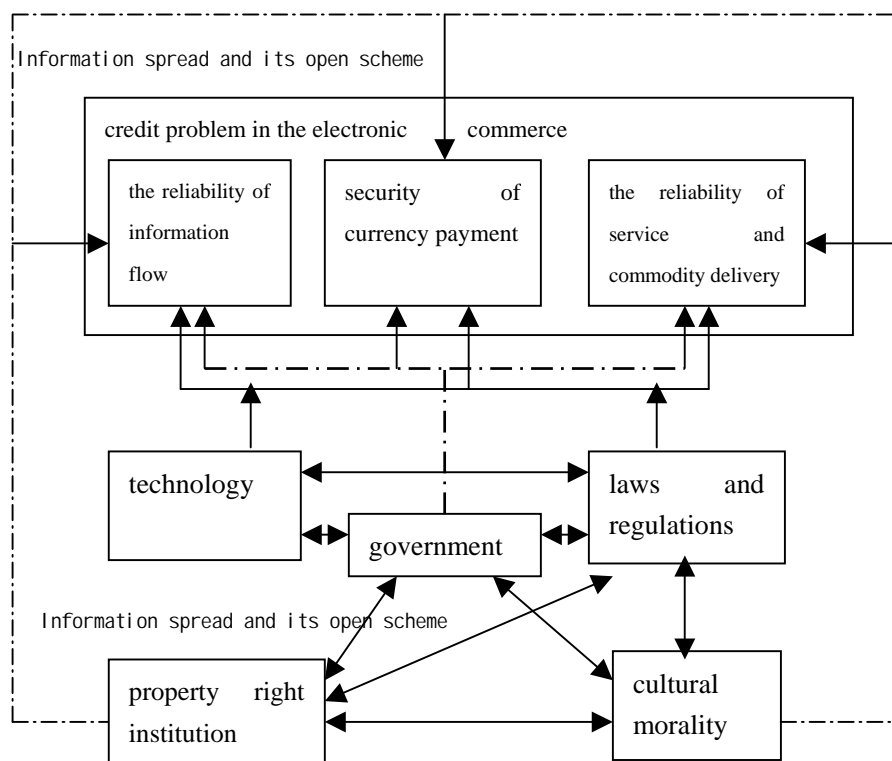


Figure.2 Dynamic model of the electronic commercial credit environment analysis

### 3. Analysis of the credit environment factors of electronic commerce

Credit problem is a question that every economic system should face. Individuals, society and government may all have the problems of credit losses. Serious credit problem widely exists in the economic lives and every field such as finance stock, contract, advertisement, medium, construction, statistics and so on. China has just its special situation of economic transfer. The credit problem of the electronic commerce should be paid more attention. Technology is always the major factor in its credit environment. Lots of economic issues and judicial cases involve the dependence on the technology for electronic commerce. Many of these have been deeply discussed in the aspect. Thus this essay will focus on the effect of the laws and regulations, cultural morality, property right institution, Information spread and its open scheme, and government on the electronic credit problem.

#### 3.1 Law system is the necessary assurance of

#### credit system evolution.

The law of the electronic commerce makes its credit perfect<sup>[2]</sup>. Electronic commerce's happening must bring the innovation of the trade ways, business model and administrative management ways also with a series of law problems. The fixed ones of the electronic information media cause the characteristics of electronic commerce's legislation. The internet has got rid of the traditional physical limits of the countries, which communicates rapidly and easily while electronic contracts and documents can be revised, copied and deleted without any mark. As for the traditional commercial activities, the electronic commerce based on the new media brings a series of new policy problems, mainly focusing on the law efficiency of the security, privacy, knowledge property right protection, and electronic contracts. Meanwhile it requires new demands for the country's power, consumers' right and interest protection, surveillance to the commercial activities and statistics and

etc.

Electronic commerce's legislation aims at setting up credit system, protecting property right institution, Information spread and its open scheme, credit morality, which can force all the social members follow. The premise and key rules of the designing the credit system are based on seeking for the own interest for all people legally. First of all, everyone is equal to have the right to ask for his or her legal interests. The idea of most important for the right and regulation from the market economy is the logical origin of electronic commerce's legislation.

### **3.2 Government credit is the core of the credit system evolution.**

Government credit is the major factor of setting up the social credit environment that electronic commerce needs<sup>[3]</sup>. The role of the government is great importance in the process of developing the credit environment construction of the electronic commerce. The largest challenge to the electronic commerce in China is not the problem of technology, but the arrangement of policy's consistence and institution frame. Electronic commerce is challenge with the traditional trading ways' laws and institutions in trade. The remains of the division of the administrative right lead to the policy frame which is hard to form an inter-department and consistence. The sense of lacking credit from institutions is the major factor damaging the existing environment of the electronic commerce.

It is not long for China to carry out the market economic institution while law system is not perfect. The enterprise as the "homo economicus" seeks for the largest revenue. It can hardly avoid hurting the social and public interests in order to obtain the revenue. Under such real social environment, the social credit should depend on the support of the administrative surveillance provided by the government. Without the government forcing management, the social credit will not set up. Without the government's support, the whole social credit system will degenerate and be destroyed.

Heightening the government' transparency is the effective method of ensuring government credit. The urgent thing to establish the credit system is setting up the

efficient surveillance and controlling system to the government behavior and building the policy credit of the government surveillance.

### **3.3 Moral environment is the support of credit system evolution**

Credit culture and credit morality are the basic support of electronic commerce<sup>[2]</sup>. For two thousand years, the moral theory in the society of China has been the theory of Confusion and Meng(孔孟学说), that is the basic of the Chinese moral instruction. The new moral instructions have been brought since the New China was founded. The communist morality is to think of others first, devote all to the society, and be unselfish; all these provide the moral rules for the effective social operation. As the transfer from the planned economy to the market economy gradually, the economical activities have surpassed people's relation of the traditional natural economy and planned economy, at the same time, the adaptable credit moral regulation falls behind clearly. The market economy requires the related support of the credit moral regulation, but the market economy itself cannot produce the adaptable credit moral regulation. According to the principle of economics, we can predict the establishment of the credit moral regulation is based on the Cost- Revenue Principle, which ensures the credit cost of breaking contracts higher than the revenue of breaking contracts during using the credit. Any reasonable people may compare the cost and revenue to make a sensitive choice between the short-term revenue of breaking contracts and long-term credit loses and limits their own behavior to keep promise for a very long time. If the credit devalue in social opinion occurs, and related laws and regulations are not established, the risk of the credit and cost is less than the revenue. Credit morality will develop as an evolution process of "bad money drives out good". Once the credit social value gets into process of devalue, it will encourage more and more people to destroy credit. It goes on and on , at last becomes the great increase of the trading cost and the social economy may be destroyed. The electronic commerce will also lose the base of existence.

The credit morality is the base to promote market resource allocation efficiency. The support of the law

relies on punishment while morality on criticism. It is the high cost to keep the social credit by laws, such as lawsuit, judicature and enforcing the law. It may cost a lot to ensure the fair judgment. But the judgment of morality is quite different. Its social cost is very low, to get the same result as the law punishment. Therefore, it is the most effective method to get the social total utility by the moral limit.

### **3.4 Property right institution is the base of credit system existence**

The base of credit system evolution originates from the long-term expectation for the social members to the social economic developing environment. In the market economic activities<sup>[4]</sup>, the distinct property right is the motive force seeking for long-term benefits that makes people have a stable expectation for the future. Meanwhile it will make the once game behavior change into a repeated long-term game behavior. In Hayek's viewpoint, the market economy itself is an increasing expanding of the cooperation rules between people. The base of this rule regards property right as the core labor cooperation relationship. Credit will be followed only by seeking for long-term benefit. Distinct property right will ensure to form a scheme of keeping credit and protecting its own right to punish other's cheat for long-term benefit. Property right institution keeps a long-term expectation for every market agent to exist and grow in a transparent and expectable environment that protects the social credit system. The problems about credit in China are brought out because of imperfect property right institution, which causes short-term behavior and breaking credit to occur again and again.

### **3.5 Information spread and information open scheme are the motive power of credit system evolution.**

The wide revelation of credit information is the necessary motivation of the credit system evolution. One important character of electronic commerce is the expanding of credit trading area to every way of the social lives. Under the closed natural economy, the people involving the trades come from relatively closed natural

areas. They can support and protect their credits by the relationship of religion, neighborhood and social public opinions. Therefore, they can't find who will make a trade with if lacking of the credit. In the open electronic commerce market, it is becoming more and more complicated about the trading objects, trading varieties, trading amounts, trading places and trading ways. The initial information communicating ways and moral binding of the two trading objects cannot meet the needs of the electronic commerce. Especially for China in the period of transferring market economy, the wide revelation of credit information is an effective binding force. The wholly open information helps to reduce the credit shortage caused by information non-symmetry. By the government credit and law authority, the supplies of low-cost increasing information through modern information spreading way will help to prompt social credit system evolution. The inter-department management under the government, including the credit information of banks, business management, public security, taxation, helps improve the condition of information non-symmetry so as to set up the confidence of electronic commerce. This will make a decisive affect on our present credit system construction.

## **4. Conclusion**

In the world, the development of the electronic commerce is growing faster than the social culture, and establishment, revising and perfecting the government policies, standards, and laws. In China, although the electronic commerce lies in the very initial period of introduction, the credit problem is seriously obvious because of our traditional natural economy and planned economy and its related moral principles, imperfect laws and regulations and the vague location of the government's role in the process of the economic transfer. The provisions of the electronic commerce rely on the building and perfecting the whole social information infrastructure, the form of the credit culture and moral regulations, and the support and cooperation of the country's laws and regulations and etc. Government can take a great important role in the building process of the credit environment that the electronic commerce needs. The choice and innovation of the institution are the most

important factors involving the credit problems in China's electronic commerce.

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