The Dilemma and Countermeasures of the Judicial Application of Electronic Contracts in the Digital Age

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Abstract: Like everything else in the digital age, sacred handwritten and signed documents are becoming relics. Nowadays, Electronic transactions have become the norm rather than the exception. Almost any type of contract is drafted and executed electronically. In the conduct of this transaction, frequent transaction information is recorded electronically, Transaction subject is virtualized, at the same time, it also brings the double legal dilemma of contracting subject and electronic contract error to the current legal system construction of electronic contract. The characteristics of the conclusion and execution of electronic contracts in the digital age are obviously different from those of traditional contracts. Therefore, According to the important characteristics of the electronic contract itself, we should formulate the corresponding judicial practice norms, only in this way can we better regulate the contracting behavior of electronic contracts, So as to ensure the effective and healthy implementation of electronic contracts. Finally, it will promote the benign development of China's unified market.

1. Introduction

The use of e-commerce and E-contract in the digital era is increasing, its transactions can be completed without being restricted by geographical boundaries. Therefore, people have raised some concerns about the enforceability of electronic contracts. [1] E-commerce does not change the essence of commercial contract, but changes the process of agreement. For example, a magazine subscription purchase agreement will have the same terms whether it is on a note, over the phone, or over the Internet. The real question is whether contract law will recognize that every process produces equally enforceable agreements. In other words, whether agreements concluded through the Internet will be protected by commercial law and contract law like other types of agreements. The key solution is to determine how the process of the electronic trading business operates and how to finalize the agreement formed through the electronic exchange. At present, the academic research on electronic contract in the digital era is mainly reflected in the connotation of electronic contract, electronic agent, electronic signature and electronic authentication, electronic error and other four aspects so on. [2-5] Few of the electronic contract elements from the macro perspective of systematic and standardized regulation review. Based on the distinctive characteristics of electronic contract, electronic contract brings about double dilemmas to the construction of legal system: first, the subject of contract; Secondly, the meaning in the contract is wrong. In the face of the increasing frequency of electronic contract behaviour in the digital era,
corresponding to the lack of specific rules of Chinese e-commerce legislation. Although China has promulgated the Law of E-commerce in 2018, the content of the law is relatively too general and abstract, which cannot effectively solve the increasingly prominent contradictions in judicial practice. In the following part, it is intended to analyse the particularity of the electronic contract, which is different from the traditional contract, we will find out the key points in electronic contract which cannot be stipulated by traditional contract law and further propose solutions to the problems.

2. General Definition of Electronic Contract in the Digital Era

2.1. Definition of Concepts

The civil code has adjusted the electronic expression of will correspondingly, such an expanded interpretation is only an extension of the scope of the written form and is not a reasonable normative interpretation of the reasons why the data message belongs in that form. Therefore, we need to make a deeper analysis of the definition rules of electronic expression of will, and thus evaluate the definition of the concept of electronic contract. As Digital Technology and Internet related electronic contract Technology, It is a technology of interconnection of everything and human-computer interaction. Among them, digital electronics has multiple connotations: first of all, it is a form of production factors. Secondly, it is the product of power operation; Finally, as an important object of power. According to the relevant knowledge of jurisprudence, we can know that legal provisions are often slower than real life. Therefore, the relevant legal regulation must establish a dynamic updating mechanism, constantly updating the inherent provisions, so as to better serve the needs of real life. Such updates and changes must be based on the development and change of current real life rather than blind changes. In this paper, the particularity of electronic contract compared with traditional contract is the primary problem to be faced and adjusted by e-commerce law. "The so-called electronic contract refers to the contract made through Electronic Data Interchange in a non-paper-based digital form". That is to say, only the contract made by the contracting party using the data information system of a specific technical organization can be called an electronic contract, while the contract made by telex and other relatively old means of signing the system cannot be called an electronic contract. According to the definition of contract in the current Civil Code, written form refers to the form of letter, contract and data message that can show the content in a tangible way. Therefore, the object of this paper belongs to all the contracts presented in the form of data message, including electronic data interchange system, But not limited to contracts concluded by telephone, Internet platform, telex, telegram, etc.

2.2. Feature Description

It is based on the unique characteristics of electronic contract compared with traditional paper contract, therefore, the conclusion of electronic contracts cannot be generalized with ordinary contracts. To begin with, the virtuality of the subject. The contracting parties of electronic contract have broken the time and space limitation of traditional contract, which not only improves the efficiency of contract transaction, but also brings the problem that both parties can not directly contact with the transaction in a specific environment. Contracting double at the location of the respective trading terminal by manipulating electronic trading system to complete the contract concluded, It is impossible to know the actual situation of the behaviour responsibility and behaviour age of the counterparty subjectively and directly, This is only a transaction signal that two transaction subjects send an offer acceptance to each other in the virtual world. The conclusion of the contract is no longer based on the physical way in which both parties can be directly perceived. To begin with, the particularity of meaning representation rules.
Firstly, because in the process of the electronic contract has broken the traditional contract the limitation of time and space, so in the process of offer and acceptance in the electronic contract, for the determination of the specific time and space will not be able to as easily as traditional contract to judge it, because the contract is formed after the time and place of contract dispute processing has a strong guiding significance, This requires to find out the corresponding rules and technology to regulate and record. In addition, as a result of electronic contracts are concluded on the basis of modern information system, its offer and acceptance on the carrier of data message instantaneous velocity spread, even within microseconds offer promise can sync with the subject of the other party in the trading terminal, making an offer promise to withdraw from the traditional contract provisions can't adapt to the needs of the electronic contract, Time is too short to be withdrawn. In the end, the appearance of electronic error is the blank of traditional contract law. Finally, the particularity of the form of contract. From the emergence of contracts to the emergence of electronic contracts, human beings record the content of contracts in the form of physical carriers to ensure the smooth progress of transactions. After the third technological revolution, the development of Internet information technology makes paperless transmission technology become a trend. It is under the background of this technological innovation that electronic contract comes into being, therefore, its convenience also benefits from this situation.

3. Legal Regulation of Electronic Contract Subject's Behavior in Digital Age

3.1. The Propriety of Electronic Contract Subject Regulation

In the digital age, the contracting parties of the electronic contract can not directly contact each other for intuitive feelings and judgments while breaking the time and space constraints. Instead, the two network information data numbers communicate with each other. In view of the communication between virtual identities on the network, both parties recognize each other's existence and recognize each other through the processing of encryption technology. However, due to the virtual nature of the transaction environment, special legal regulation must be combined with this characteristic to promote the development and popularization of electronic contract transaction. First of all, about the identification of electronic subjects. Firstly, electronic signature: The form of expression with the traditional hand sign is different but the effect is the same. Electronic signature is to better serve the signing of efficient electronic contracts in the form of the traditional signature, if the existing signature technology is not innovated, it is difficult to ensure the security of the signature in the current technology developed environment. For example, the spread of digital printing technology poses a challenge to the security of hand signed contracts; Secondly, electronic authentication. The identity information of the contracting party of the electronic contract is confirmed by the authentication platform with authoritative qualification and the encryption technology with digital certificate as the core. In the electronic trading environment, because the two contracting parties are in a network virtual trading platform, it is difficult to establish mutual trust between the two parties, through the electronic authentication means with encryption technology can quickly establish the foundation of trust between the two contracting parties. Electronic authentication is the premise of electronic signature trust, only through the reliable electronic authentication of the electronic signature has more credibility, so reliable electronic authentication is the necessary foundation for establishing the credibility of electronic signature. Secondly, the legal regulation of electronic agent. Electronic agents are increasingly powerful in the current wave of artificial intelligence technology development. This power is mainly reflected in its degree of automation. The concept of electronic agent has been put forward for a long time, however, with the development of digital technology. Its function changes so fast that its original legal status can no longer meet the needs of the development of electronic contract. This is mainly because early scholars proposed that the electronic agent is only
a simple repetition of the meaning of the setter, and does not have the ability to provide and accept automatically. In the process of contracting, electronic agent not only improves the efficiency of contracting but also reduces the labour cost, which makes it widely used in the current business environment. In this case we have to recognize its contracting capacity and its rightful place. The spread of electronic agent technology has helped to improve the efficiency of trading markets and it is prevalent in the current situation whether we like it or not. In the face of such a situation, we must face up to the problem of electronic agent, and recognize its legal status in the system level in order to improve the efficiency of electronic contract, promote the rapid development of e-commerce, and make system preparation for related disputes involving electronic agent. Finally, the legal regulation of electronic contract for minors. In the context of electronic contract, the subject of minors is more complex. Its main characteristics are as follows: To begin with, in the network environment, the seller cannot identify the real responsibility ability and age of the subject of the transaction, and it is difficult and difficult for minors to forge the qualification of the adult subject. What’s more, the content of the object of electronic contract has the characteristics of one-time consumption. From the summary of the above characteristics, it can be clearly concluded that minors have a big difference in signing electronic contracts compared with traditional contracts, which is mainly reflected in the virtual nature of the subject of the electronic contract, which causes the buyer and the seller to fail to deal face-to-face and lose the last line of defense to judge the age of civil liability and the capacity of civil liability of the other party. Therefore, it is necessary to make special regulations for minors to sign electronic contracts, only in this way can we better solve the practical problems.

3.2. Actual Choice of Electronic Contract Subject Regulation

To promote the orderly development of electronic commerce, we must effectively regulate the electronic contract according to its particularity:

Firstly, the choice of legal regulation of identification technology. After classification and sorting, we know that there are three main modes to choose from. Firstly, for the selection of specific technical means to recognize its legal effect. The reason for this choice is that the security of the electronic signature generated by the specific encryption processing technology is relatively reliable. The signature generated by the other ways is either low anti-theft performance or expensive to use, which is not suitable for widespread use in real life. Secondly, there is no longer any legal regulation of the technical means of electronic signature. This mode does not have any requirements for technical means, as long as the technical means can meet the needs of real signature authentication and it is secure, the law should give it corresponding effectiveness. Thirdly, in order to meet the premise of secure transactions, do not exclude the use of encryption technology in addition to other approved by the authority of technical means.

Secondly, the choice of legal regulation for electronic agents. For the regulation of electronic agents, the academic circle should analyse the subject of electronic agent deeply and find out its uniqueness. For this uniqueness the author argues that neither electronic agents can be equated with simple instruments of repetitive behaviour without any contracting power. It is also not allowed to excessively publicize the subject ability of the electronic agent and deviate from the current scientific and technological development environment. As for some academic views that electronic agent is only an extension of the "instrumental theory" that is, the agent's hands, the author thinks it is extremely inappropriate, because this view has wiped out various possibilities of the future of electronic agent, which is contrary to the current market demand for improving transaction efficiency. These views are not perfect, do not accord with the demand of The Times, to prove that the source of the agent electronic contracting capacity, is the ability to prove the meaning of the electronic agent said, and this is part of the certification to this rapid development must be combined with the present
development of artificial intelligent technology maturity to appropriate conclusions.

The last thing worth emphasizing is the choice of legal regulation of minors. At present, the scholars who study the subject of electronic contract have several different views on the ability of minors to make electronic contract. The first theory holds that minors have the ability to make electronic contracts; the second theory holds that all contents of electronic contracts concluded for minors are valid; the third view holds that electronic contracts concluded for minors should be handled according to different circumstances. It can be divided into two situations. The first one is that in the process of the normal conclusion of electronic contracts between the two contracting parties, the determination of contract validity is divided into stages according to the validity of the traditional contract concerning minors. The second situation refers to the minors who maliciously forge their identity and enter into a contract with the bona fide seller. When the seller has done his duty of care but the person is deceived, the minors lose the protection of the law and turn to protect the interests of the merchant. The third aspect is reasonable in that when minors enter into electronic contracts. During to the virtual nature of the network environment, merchants cannot intuitively judge the ability and age of minors to make contracts, which leads to the unfair phenomenon of blindly using traditional contract laws to regulate them. However, in the third case, it is classified and not regulated in a unified way, so that special cases can be treated in a special way to achieve fairness. To sum up, Research on minors as the subject of electronic contract, It mainly focuses on the core issues such as the identity and capacity of the contracting subject when the minor is the contracting subject.

4. Legal Regulation on the Wrong Expression of Meaning in Electronic Contract in the Digital Era

4.1. Typed Attribution of Electronic Errors

The expression of wrong meaning of electronic contract in the form of data message is caused by the inconsistency between the expression of intention and the true intention due to the system itself or the contracting body. It can be mainly attributed to the following aspects: parties, third parties and network service providers. The distribution of legal liability also needs to be targeted at different reasons. The details are as follows: Firstly, the reasons of the parties. For example, as one of the largest books buying websites in China, wangyi163.com sets a series of books priced at hundreds or even thousands of yuan at a few yuan, attracting a large number of netizens to buy them. However, netizens who had placed orders later found that their previous orders had been cancelled by the Internet platform without reason. The network later claimed that the price of the books had been wrongly charged by the shop assistants, that the contracts for electronic orders were not valid, and that the network was not obliged to honor the wrong contracts. In the end, the company only cancelled the wrong orders and refunded them in time, and apologized to the netizens who placed the orders. Secondly, it is caused by the third party. Errors in electronic contracts can also be caused by intentional actions of third parties that have nothing to do with the contract, such as deliberate attacks and sabotage of websites by hackers. In the process of signing an electronic contract, the electronic communication in the network may be maliciously tampered by hackers, resulting in errors and delays in the transmission of network information. May also be due to third party misconduct and lead to network information transmission errors. These circumstances are due to a third party, that is, other than the parties to the electronic contract caused by the contract error. Finally, the reason for e-service providers. As a legal subject closely related to electronic contracts, Internet service providers dominate the information transmission, processing, storage and forwarding in the process of making electronic contracts. Therefore, once the network service provider makes an error, it will lead to the error of the electronic contract.
4.2. Responsibility Allocation Mechanism for Electronic Errors

In the first place, on the principle of responsibility allocation. The first category is the assignment of responsibility to ISPs for errors. When a data message system is used to conclude a contract, the offer acceptance of the contracting parties is inconsistent with their true ideas due to the network congestion of the system, or the information transmission is asymmetric due to the system disorder. This error can be classified as an electronic error caused by the ISP system disorder. In the face of this problem, we have to consider how the responsibility is distributed in this situation. The responsibility for such errors lies not with the contracting parties but with the errors of the intermediaries. In theory, the fault of the messenger should be borne by the sender. According to this principle, it can be deduced that in the process of signing an electronic contract the party who chooses to use the system should bear the corresponding responsibility due to the error of the ISP. [6] This logic has been applied in some international agreements. For example, Article 6 (3) of the Agreement for the Demonstration Exchange of the Use of EDI for International Business stipulates that "the parties shall be responsible for the errors of the data message system used by them". Therefore, according to the traditional civil law theory, the responsibility of Internet service provider should be assumed according to the contracting party that uses the service. This theory holds that users make choices based on their trust in the system, so they should bear corresponding negligence liability when making choices. If the use of the system is the result of the mutual choice of the contracting parties, both parties shall be jointly liable for the loss. The second category is electronic errors due to ICP. ICP is a network content provider, such as NetEase email. The two kinds of service providers have different responsibility for electronic errors. The difficulty in distinguishing the principle of responsibility distribution between the two lies in their strong similarity, that is, they are both made by a party other than the contracting parties which makes the meaning of electronic contract unreal, and they have the same place in terms of the principle of attribution. If both contracting parties have electronic errors due to network service providers, in principle, the contracting party that chooses the system shall bear the responsibility for the system errors. In exceptional cases, that is, when both parties do not choose the system, the contracting party that uses the system shall bear the responsibility. If the use of the system is the result of the mutual choice of the contracting parties, both parties shall be jointly liable for the loss. But the imputation principle for ICP errors has its own special problems. This special problem focuses on how to effectively recover ICP after the contracting parties bear the loss. The reason why the problem of how to recover ICP is set as a difficult problem is mainly because the current products of Internet information service providers are mainly divided into two categories: paid and free services. [7] There is no need to discuss the paid service of the Internet information service providers here, because the liable contracting parties can be based on the paid service agreement between them to recover compensation. But the question of whether unpaid ISPs should be pursued is controversial. The author thinks that under the premise of paid service, the Internet information service provider should compensate all the losses of the contracting parties according to the principle of liability for breach of contract. About free service, it should be reduced according to the actual loss in accordance with the statutory reduction and exemption standards, so as to achieve a relatively fair responsibility balance distribution mechanism mode.

4.3. Typed Analysis of Responsibility Undertaking

First of all, the analysis of the specific responsibility for the error of expression of intention caused by the contracting parties. There are two ways to handle this situation. The first is based on the traditional civil law solution the bona fide settlement system. Good faith here means whether the Contracting Party has any affection for the error or whether there is an element of intent. If the error herein can be construed as a material misunderstanding or negligence on the part of the Contracting
Party it may revoke it on the grounds of material misunderstanding in traditional contract law; Secondly, in some special fields, especially the information-dominated field, there are legal acts in these fields. In this case, it is unreasonable to revoke the order on the grounds of error. For example, the field of calligraphy and painting art appreciation. "In such an area, it is considered that information asymmetry is a manifestation of rights, so that such errors can be interpreted as rationalizations and cannot be undone"; For the type of electronic error caused by a third party other than the party concerned, the specific forms of liability are as follows: The core issue involved in this type of electronic error is whether the Contracting Party has the right to recover from the third party's infringement after taking legal liability, that is, the loss suffered by the contracting party. There are two cases here. The first case is that a third party destroys the Internet connection system, that is, ICP and ISP make errors in the electronic contract between the contracting parties. In this case, the contracting party is not entitled to recover directly from the third party. Because the third party destroys the network service provider's system but not the contracting party's system. The loss of the Contracting Party can only be an indirect loss to the whole event. In the second case, the target system of the third party is the Contracting Party's establishment system. In this case, since the Contracting Party is the direct subject of infringement, it certainly has the right to demand tort liability from the infringing party. Therefore, the question of whether a Party was entitled to recover the loss was a case-by-case analysis and could not be generalized. [8] Finally, for the third type of electronic error, the liability of Internet service providers, whether for ISPS or ICP, the specific form of liability is usually monetary payment. However, due to the disclaimer clauses signed by network service providers when users access the network and the lack of current legal regulations, it is difficult to make network services bear the corresponding liability of compensation through legal channels. The author thinks that there are two types of responsibility for Internet service providers: First, the system is repaired within a reasonable time interval to recover the damaged data. The purpose of this action is to repair the electronic contract signing system of the contracting parties and establish the relevant data record system to provide as much data evidence support and make up for the contract signing and possible disputes between the contracting parties, so as to facilitate the transaction as possible. Secondly, make up the loss of users through payment. However, in the interest of fairness, the ISP is only responsible for compensating users for direct losses that can be proved. To sum up, Based on the types of electronic errors, this part analyzes the specific forms of electronic error liability, in order to provide support for the division of responsibilities in electronic error disputes.

4.4. Electronic Error Legislative Path Dependence Direction

There are two dependent paths in the choice of electronic error legislation mode. Firstly, the electronic error should be regulated by special legislation. Secondly, the special legislative mode of electronic transaction is carried out, in which the relevant problems of electronic transaction are listed for special regulation. [9] Compared with the first mode, the cost is smaller and the modification period is shorter, which is conducive to maintaining the stability and authority of the law. Considering the current legislative situation in China, the legislative tasks are tight and the time is wasted to formulate the civil code with Chinese characteristics. If the pursuit of electronic transactions is too high, it may have the opposite effect, and the electronic transaction law is far away. [10] The author thinks that for the present, there is a great demand for the legislation of electronic error and no excessive investment of manpower and material resources. The author suggests that we should use the method of "FREE RIDING" to bring the relevant electronic transaction law into the protection of the Civil Code, so as to make the electronic error dispute not only have legal basis but also save manpower and material resources. When the e-commerce of our country develops to a very mature stage, and the study of the theory field is very mature, we choose to carry out special legislation on
it. In addition, our legislation on electronic errors should fully learn from the advanced experience of other countries. Look at it from a mature perspective and Learn from external beneficial experience. For example, the Convention on the use of electronic communications in international contracts acceded to by China.

4.5. Consider and Improve the Legislative Mode of Electronic Error

Based on the above reasons for the formation of electronic errors and the overseas experience in the legal regulation of electronic errors, The article thinks that the relevant legislation of China should be amended as follows: first of all, you can change the traditional citing major misunderstanding cancel the contract in contract law, common law for reference for the wrong understanding, amend the gross misunderstanding to the "wrong". In this way, the barriers of international communication can be removed, and electronic errors can be included in the scope of the meaning, and the integrity and standardization of the legal system can be maintained. And we should draw on the International mature electronic commerce legislation system to revise and supplement the concept of electronic error. In other words, the inner will of the contracting parties is consistent with the external behavior, the subject of both parties has the corresponding qualification, must be the error in the information system such as data message; Secondly, We can partially grant the effective defense right of electronic error. This right of defense mainly refers to the situation that one of the contracting parties still has losses due to electronic errors after the electronic system service provider provides the error correction mechanism or performs the obligation of notification. The electronic system service provider has the right of defense to the compensation claim. Finally, it standardizes the basic system of electronic agent registration, recognizes the contracting ability of legal electronic agent and delineates the responsible subject of the contract signed by electronic agent. In this way, the electronic agent can apply the registered capital of the electronic agent to compensate for any errors in the conclusion of the contract. [11] Then, the subject using the electronic agent can bear the corresponding supplementary compensation liability, and the final responsible person can make a final recovery from the designer by the user.

5. Conclusion: Some Thoughts on the Development of Electronic Contract in the Future

The contract law must be clear enough to provide predictability for expensive transactions that may last for many years, and it must be flexible enough. Let the parties do whatever they want in a wide range, but at the same time, it is sufficiently unlimited. In order to allow the judges to fulfill their roles and carry out justice. Contract law often gives scholars a headache, because it often pays on the one hand and gets on the other. There are rules and anti-rules. Therefore, clear conditions must be observed literally. In today’s competitive business environment, it is essential to provide tools for instant information access and rapid response. Technology as the ultimate game changer, It improves the efficiency of contract communication, ultimately improves the delivery efficiency of goods or services, and improves standards constantly. Innovative tools make it easier for enterprises to conduct business globally, and also enable once distant markets to face competition from all over the world.

Indeed, companies that fail to keep up and take advantage of technology may face significant challenges. Specifically, electronic execution and management of contracts and records are beneficial to saving time, reducing costs and improving judicial governance practices within electronic contracts. In-house counsel who implements these digital technologies and corresponding contract justice practices to help commercial clients in the industry achieve these goals are demonstrating that they are bringing verifiable value to their respective businesses. As technological leaps affect almost the entire legal system, however, the goal in judicial practice is not to draft an untested and child-like legal framework, but to rely on the most basic purposes of legal rules that have encouraged business
and protected participants for decades or even centuries. While the electronic revolution has provided new processes that allow contracting, contract law still has to address mundane but important questions of origin. The text is solved by trying the basic contract scheme. By comparing the differences between the electronic contract and the paper-based manual contract, to reflect and summarize these differences, so as to find out the reasons that are not suitable for traditional legal regulation and analyse them. On the basis of the analysis, find out the defects of the typical contract in which the legal subject expresses the same intention wrongly. It is used to seek the special legal regulation of electronic contracts and put forward practical and effective solutions to the existing specific problems. At the same time, it demonstrates and ponders on the core legal regulation of electronic contract in the digital age, It is expected to provide useful and referential experience for electronic contract in judicial practice, Only in this way can we better regulate the contracting behavior of electronic contracts. Finally, it will maintain the healthy and orderly development of the e-commerce market and effectively promote the formation of the unified market.

References