

The Legal use of Personal Information in the Age of Big Data

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Abstract: With the advent of the Internet age, people began to enter the information age. The development of the information industry is more and more developed, and the application and research based on personal information is becoming more and more extensive. In this regard, how to legally use our personal information in the era of big data is extremely important. At present, there is no strict definition system for the protection of personal information. The goal of this paper is to strictly protect personal information under the development of big data so that it can be properly distributed and used to promote personal safety and property. Safe protection. This paper analyzes the personal information protection system in the era of big data from the perspectives of civil law, contract law and tort law. Through the comparative study of the status quo and development needs of personal information, it is concluded that it is more reasonable in the era of big data. The use of personal information should establish a rigorous system that is consistent with the direction of the times.

1. Introduction

There is no exaggeration in human life. It is full of information everywhere. The personal information of the main body of information is mainly for the management of personal social and commercial purposes. It is the basis for the evaluation of personal communication with the outside world. In the era of the Internet of Everything in this century, there are more and more services based on personal information. Personal asset credit quotas, academic qualifications, property certifications, etc. all need to be determined by personal information as a guarantee. In the era when personal information is used, how to effectively manage the personal information of the national information is more important. Based on the service application of big data, people not only upload a large amount of personal identification information, but also generate location information, asset records, etc., so that people's information is continuously collected, transmitted, and used. Loss of control can lead to a series of serious consequences. For individuals, loss of control means that personal privacy is more likely to be leaked, and personal property is more likely to be infringed, and may even endanger the lives of individuals. For society, information Losing control can lead to a large increase in criminal incidents. Therefore, how to effectively protect personal information and legal use of personal information deserves our in-depth study.

Regarding the development of the data age, many researchers have explored its development trend. In 2016, Zhu Jianping [1] explored the traditional statistics in order to adapt to the changes of the era of data, and compared the data into statistical development opportunities, and proposed relevant exploration for the development of statistics. In 2016, in order to innovate the construction of the library, according to the fact that its resources are the basis of data, the management system of the library is reformed, and data is collected from the aspects of book search service, book management, and book information storage. Innovation. Research shows that the service innovation of libraries in the era of big data can bring a better direction for the development of libraries. In 2016, Jiang Qiang et al. [3] in order to adapt education development to the development of the era of big data, to explore reforms of educational technology based on big data, to analyze the educational methods of China and the West, and to grasp the development of the era of big data. It is concluded that the education of students should be strengthened from individualization,

independent learning, information analysis, etc., so that students can adapt to the digital development of the times. In 2018, Lu Jingwei and others [4] identified the company's positioning in order to explore financial sharing, taking coal company management rules and financial flows as examples. The study draws a clear system framework and institutional guarantees that are necessary for the company's financial sharing.

The succinctness of the dissemination of personal information has also led to the exploration of the effectiveness of information protection. In 2017, Gao Fuping [5] conducted research on the crime of personal information infringement from the perspective of the protection of personal information of citizens. The research found that for the misuse of personal information, it should be severely punished, bringing positive to the correct use of the law. Guidance. In 2017, Jin Yao [6] judged the contradiction between personal privacy and personal information utilization, judged the collection of personal information from the perspective of big data, and separated the privacy and asset security in the data, which was the construction of China's personal information protection law. Standard recommendations are provided. In 2017, Li Xiaoxiang and others [7] conducted a deep discussion on how to improve the cultivation of personal information management ability in order to improve the management of personal information, and to find out how to improve the information management and management system. The guidance of college students' personal information management ability can effectively provide their understanding. In 2017, Liu Yinliang [8], in order to regulate the system of personal information in the network and broadcasting, discussed the lack of the current broadcasting rights system, and helped to develop the boundaries of personal information in the network and broadcasting.

In order to explore the rational use of personal information in the era of big data [9-10], this paper has consulted a large number of references, and studied the norms of the use of personal information from the legal basis of civil law, contract law, tort law and other domestic and foreign [11-12]. By comparing the efficiency of the rational use of personal information, people are aware of the importance of personal information protection.

2. Methods

2.1 The Construction of Personal Information Protection System for Personal Information in the Era of Big Data.

In the legal principles of international organizations, eight basic principles are set for personal information, such as specific purpose principles, personal participation principles, security principles, and data quality related principles, etc., and then added through a series of efforts and support. The principle of integrity and confidentiality. The overall concept is to treat personal information properly and legally, and to treat the subject of personal information in a transparent and open manner, and to process personal data in a way that ensures security, and to use appropriate measures to prevent illegal handling, accidental loss, destruction, etc. of personal information. At the large national level, the main principles of personal information include the principle of minimization, the principle of anonymization, the principle of direct collection, the principle of purpose limitation, the principle of quality and safety.

The principle of minimization should be the first principle of personal information processing, and its core is necessity and appropriateness. The personal information to be processed should be appropriate and has a certain limit, that is, it has a clear processing purpose for personal information processing. According to research, effective management of personal information can help improve the autonomy of individuals, greatly reduce the risk of personal information disclosure, and prevent obstacles to people's self-development activities. Under the conditions of information restrictions, we can participate in social activities more safely, and can bring people maximum self-discipline.

Quality and safety principles mean that personal information processed by information processors should be kept accurate, complete and up to date. When personal information is incorrect, you should change your personal information in a timely manner. The inaccuracy of the information may cause the information processor to make a wrong judgment on the quality of the information,

which is extremely harmful to the personal and vegetable farm safety of the information subject. Due to the lack of responsibility for data security, it is more instinct to pursue interests. The disclosure, intrusion or illegal resale of personal information is not uncommon, and even has formed a black industrial chain. In many cases, the accuracy of the harassment and infringement of the information subject is often astounding. For example, the information subject who opens a stock account in a securities company may continuously receive harassing calls for recommending insider stocks and providing funds. Therefore, ensuring the quality and safety of personal information is critical to protecting the rights of the information subject.

2.2 Construction of the Protection System of Personal Information Contract Law in the Era of Big Data.

In an era when personal information is more closely linked to business value, a large proportion of people use personal information to seek illegitimate interests. In particular, some network providers take advantage of people's lack of meaning for network information security prevention, and improperly obtain personal information, and seek some economic benefits. The behavior of personal information transactions that accompany the processing of personal information has been increasing. The vast majority of transactions related to personal information are illegal underground transactions. The scandals of selling and leaking personal information are endless and repeated.

Analysis of the status quo of contemporary personal information transactions, it can be clearly found that several characteristics have emerged in the transaction process. First, personal information transactions are invisible because personal information is not a substance with a physical form. As a kind of data storage information recorded on the network, it is almost invisible in its transaction transfer. And the transaction method of personal information is diverse and simple, even if the two parties who do not know each other can use the channel of the Internet to exchange funds and information. Concealment is the decisive reason for the large number of illegal transactions of personal information, and it also makes the supervision of personal information transactions difficult, which leads to the easy violation of legal rights. Second, it is the infinity of personal information transactions. The value of personal information will increase due to excavation. When the personal information purchased by the buyer can be valued by reselling, the infinite number of personal information occurs, which also leads to the difficulty of controlling personal information transactions. In addition, the personal information lacks user participation, and the transactions that may occur after the personal information of the transaction are not known by the information subject itself, and the profit of the information industry transaction is difficult to control.

Although personal information transactions exist as a civil contract, it is not appropriate to define a personal information transaction contract as a sales contract, but it should be defined as a service license contract. The transaction of personal information is web-based, two-way, and can be traded with multiple parties at the same time. And personal information is closely related to the individual of the information subject, and its trading behavior has an impact on the individual. In personal information transactions, personal information can no longer be returned once it is known in theory. The personal information service license contract is a manifestation of free expression. Its role is to provide a contractual interpretation and standardization for the realization of the personal information property value under the premise of protecting property rights in the era of big data.

2.3 Construction of the Protection System of Personal Information Tort Law in the Age of Big Data.

The main core of tort law is the composition of tort liability for the protection of personal information. Generally, the international recognition of tort law is mainly divided into no-fault system and direct fault system. In order to protect the weakness of the information subject, the law categorizes the infringement of the information as a no-fault principle, that is, when the personal information is infringed, the information processor is not deemed to be responsible. However, in the context of the current widespread treatment of personal information, in order to balance the relationship between the protection of personal information and the rational use of personal

information, the adoption of strict no-fault liability principles clearly does not meet the needs of reality. In the state of the power of information in the era of big data is too weak, we should presume the presumption of responsibility for the fault of responsibility.

In the case of special provisions of the law, the existence of the facts of the infringement of personal information may presume that the personal information processor is at fault and shall compensate the loss of the information subject. In the infringement of personal information, if the occurrence of the damage is apparently caused by the personal information processor, the information subject only needs to prove the existence of the damage fact. The existence of the fact of the damage presumes that the personal information processor is at fault, and if the personal information processor is to be excused, it needs to prove that there is no fault or existence of exemption.

The responsibility for infringement of personal information generally includes mental personality damage. Because of the leakage of personal information, it is very easy to bring damage to the information subject. This kind of injury is not a loss of formal subject, and the responsibility for such injury should be determined. That is, it can be authenticated according to the injury. However, if the infringement damage caused by the personal information can be clearly judged by the personal information processor, the information subject can judge the fault of the personal information processor according to the fact of the damage. Compensation for personal information infringement is generally divided into non-damage liability and damages liability. The liability for damages is mainly to stop the infringement, eliminate the danger, apologize, eliminate the influence and restore the reputation; the liability for damages includes: compensation for mental damage and property. penalty for damages.

3. Results and Discuss

In the era of big data, personal information should be based on real and legal basis. Only by formulating effective rules for the protection of personal information can we control the use of personal information more securely. In line with the rhythm of the development of the era of big data, and the development needs of the times, adjusting content according to its overall general direction can more effectively balance the use of personal information and bring maximum value.

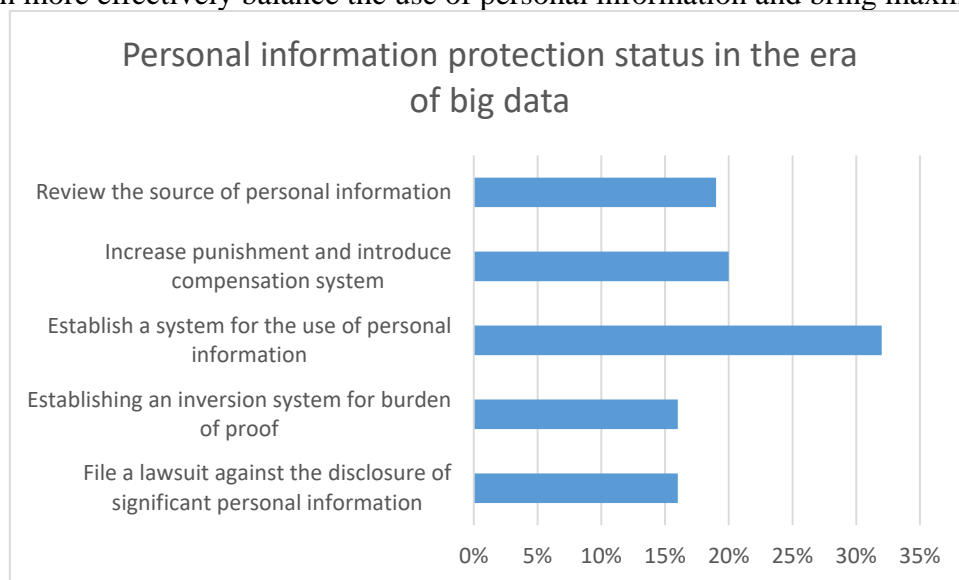


Figure 1. Personal Information Protection Status Table in the Age of Big Data

As shown in figure 1, people's awareness of personal information protection in the era of big data is not very strong, so it is crucial to strengthen the protection of the use of personal information. People from all walks of life conduct general discussions to develop social standards for information protection, conduct training and education, and strengthen people's awareness of information protection. Improve the information management mode, monitor the transmission and

collection of information, grasp the legitimacy of information, and prevent the use of personal information for illegal income behavior.

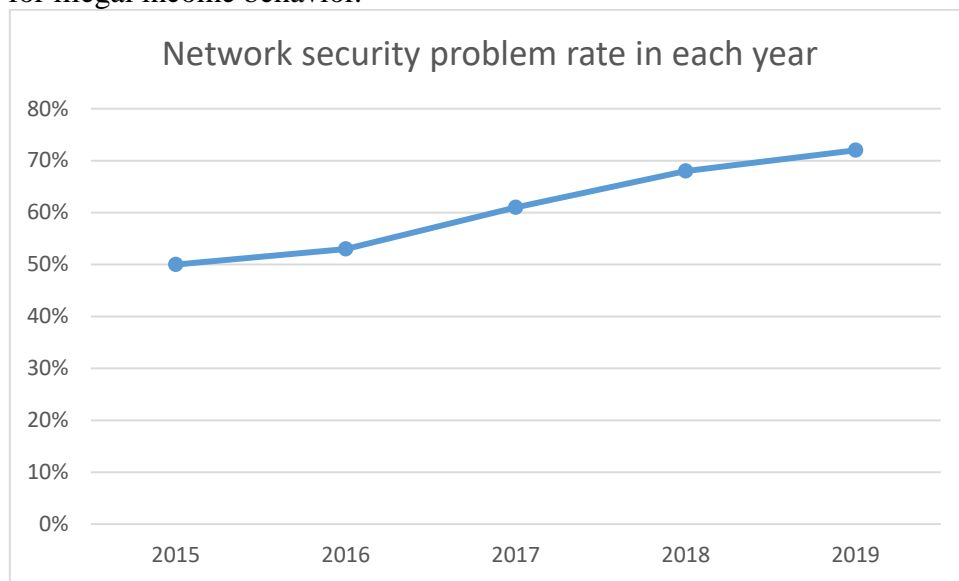


Figure 2. Frequency trend graph of network security problems encountered in each year

It can be clearly seen from figure 2 that in recent years, the burst rate of network security has become higher and higher, showing an upward trend, and in 2019 it has reached a high probability of 72%. Faced with this trend, it is imperative to strengthen the investment in information protection technology. By using deep content identification technology to identify content in use, in transit, and in storage, define sensitive information, develop security policies, and block, audit, and encrypt sensitive information to achieve the effect of protecting sensitive information. Provide a data exchange environment by means of multiple audits, multiple encryption and other technical means. For personal information protection, conventional technical means such as access control, security auditing and backup recovery are adopted.

In addition, the information awareness protection of the individual of the information subject should also be improved, and the vigilance of self-information protection should be strengthened. In the network environment, the authenticity of the transaction should be identified. Relevant government departments should regularly organize network users to conduct training and learn Internet knowledge, let people understand the advantages and disadvantages of the Internet era, and fully understand the way of revealing personal information so as to be vigilant in daily life.

4. Conclusion

In the era of big data, personal information, as an important resource with multiple uses, plays an important role in economic development and state management. The traditional protection of personal information for the protection of civil law has no longer been adapted to the needs of the development of the times. How to formulate a standardized management law based on the existing personal information security issue is an urgent task. Recognizing the large-scale and rational use of personal information, and through legislation and guidance, under the premise of preventing and reducing the possibility of infringement, better explore the value of personal information through the development of big data technology, should become the era of big data One of the directions of personal information protection legislation. Focusing on the personal and property interests related to personal information through the precise and typed efforts, we will continue to build specific "personal information rights" to control the management rules of personal information, and carry out more stringent legal protection of personal information.

In the specific legislative practice, we should have a deep understanding of the following aspects. First, it should be clear that the core of personal information protection lies in the link between information and the subject of information, not the information itself. In the era of big data, the

value of information is more about the economic value of connecting it with various information subjects. In the face of the inability to identify the authenticity of the identity in the network, the identification of the virtual identity is included in the scope of personal information protection, in order to more effectively protect the personal and property interests.

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