

Research on Personal Information Protection from the Perspective of Big Data

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Abstract: In the era of big data, personal information has become an important link for People's Daily communication, study, work and living through the medium of the Internet. With the development of information technology, people can get timely and accurate services through the personal information on the Internet without leaving home. However, while big data facilitates our lives, the protection of personal information also brings many new problems and challenges due to the intervention of the network. Starting from the basic theory of personal information protection, this paper expounds the right establishment of personal information, the positioning of civil law and the value basis of its protection, analyzes the existing problems of personal information protection, and finally puts forward expectations for the improvement of civil law protection of personal information, so as to further improve the protection mechanism of personal information.

1. The Presentation of the Issue

With the advent of the big data era, the protection of personal information has introduced a plethora of new issues and challenges, largely due to the integration of the internet into our daily lives. The question of how to ensure comprehensive protection for personal information in this internet-driven big data epoch is one that demands our careful reflection.

2. The Basic Theory of Civil Law Protection for Personal Information

2.1 The Attribute Positioning of Personal Information

2.1.1 The Doctrine of Civil Interests

According to the relevant provisions in the "Civil Code," civil law regulates personal and property relationships among natural persons, legal persons, and unincorporated organizations that are equal in status [1]. The legal status of personal information subjects and personal information processors is equal, and there is no relationship of management versus being managed. Information subjects naturally have the right to protect their personal information from infringement by others and can oppose any actions that harm their legitimate rights and interests. At the same time, since personal information carries certain economic value, improper disclosure and trafficking of personal

information may lead to damage to personal spiritual interests and a degradation of personal dignity [2]. Based on the above reasons, it is appropriate to define personal information as a civil interest.

2.1.2 The Doctrine of Civil Interests

In contrast to the aforementioned Doctrine of Civil Interests, scholars represented by Professor Zhou Guanghan argue that the protection of personal information and the protection of personality rights are two entirely distinct concepts, and that incorporating it into the realm of public law would be more conducive to its protection. Scholars who advocate the Doctrine of Public Law Rights believe that, from the perspective of the compilation system of the *Civil Code*, personal information is listed alongside rights such as the right to a name and the right to portrait, formally acknowledging personal information as a right of citizens. Defining it as a civil interest is illogical and would result in a lack of judicial remedies. Therefore, it should be defined as a public law right to ensure more effective protection.

2.1.3 The Perspective of This Article

The author believes that defining personal information as a civil right and interest of citizens is more reasonable. If personal information is categorized solely from the perspective of public law, regulating and penalizing those who improperly handle personal information may lead to a lack of protection for the rights and interests of personal information subjects, resulting in substantive injustice in civil activities.

At the same time, personal information also differs somewhat from specific personality rights such as the right to a name, the right to portrait, and the right to privacy. As an emerging right of interest that has garnered attention in the era of big data, distinguishing and protecting it as a civil right and interest of natural persons is more conducive to motivating natural persons to actively protect their personal information and activating various mechanisms for personal information protection.

2.2 The Value Foundation of Personal Information Protection

2.2.1 The Spiritual Interests of Personal Information

Personal information is one of the significant representations of the dignity of a natural person's personality. In daily life, with the personal information we obtain, we can easily form evaluations of others. However, what follows is that in the era of big data, the explosive growth in the amount of information and the deepening and expanding scope of personal information exchange can largely lead to information asymmetry. At this point, it is highly likely to form incorrect evaluations of others or misuse and dissemination of others' information, which can lower the social evaluation of a natural person and further damage the dignity of others' personality, causing harm to their spiritual interests [3].

At the same time, in practice, it is not uncommon to be harassed due to the disclosure of personal information.

2.2.2 The Property Value of Personal Information

Personal information also has a certain property value. In the age of information network, personal information is the most effective and convenient way to understand others. By analyzing others' personal information and building a corresponding database, companies, institutions and platforms can quickly customize personalized products and services for others' preferences. It is precisely because of the privacy and orientation of personal information that the party with more personal

information can often occupy a dominant position in the market competition, and personal information has gradually become a competitive resource for market players. Market entities that obtain personal information, based on this, carry out targeted advertising and push to customers, and constantly stimulate consumers to consume, which is likely to cause the property of the information entities to suffer losses to a certain extent.

3. Issues in the Civil Law Protection of Personal Information

3.1 Analysis of the Current Status of Personal Information Protection

In the process of drafting and compiling the Civil Code, "personal information" and "privacy" in the code of personality rights have been the focus of discussion by experts and scholars. To distinguish "personal information" from "privacy" and protect it separately reflects the improvement of legislative technology, but also shows that in the era of big data, "personal information" as an important information to identify individuals, it is necessary and urgent to protect it. However, in view of this important right, our country's legislative protection is not perfect yet, and all kinds of new problems have appeared in the judicial practice.

3.1.1 The Current State of Legislation on Personal Information Protection

In general, the legislation of personal information protection in our country started late, but the process is faster.

On December 28, 2012, the standing committee of the 11th *National People's Congress* passed the 30th session of the "decision on strengthening the network information protection", to protect the network information security, protect the legitimate rights and interests of citizens, legal persons and other organizations took a key step, is to legislation to protect personal information, made an important attempt. In the following years, relevant laws and regulations, departmental rules and policy provisions for the protection of personal information have been promulgated successively, further improving the protection of personal information.

Until 2021, the relevant provisions for the protection of personal information are relatively scattered and at a low level, mostly scattered in various local regulations and corresponding policy provisions, so the regulation of personal information protection is very limited. During the "two sessions" in 2017, representatives proposed the establishment of a special "*Personal Information Protection Law*", thus, the special legislative protection of personal information was officially put on the agenda. In the process of drafting and compiling, experts and scholars have a great dispute over the legal positioning of personal information, whether personal information is a new type of personality right and the distinction between it and the right to privacy. Until the promulgation of the *Civil Code*, personal information has been officially defined by law. At the same time, private information is included in the scope of privacy protection and sensitive personal information is included in the rights and interests of personal information, which also lays the foundation for the protection of sensitive personal information in the Personal Information Protection Law. At this point, China has basically formed a personal information legislative protection mechanism with the "*Civil Code*" as the core, the "Personal Information Protection Law" as the supplement and improvement, and supplemented by various other local laws and regulations, departmental rules and relevant provisions.

3.1.2 The Current Judicial Status of Personal Information Protection

The Evolution of the Cause of Action Name. For a long time, due to the absence of specific

legislation on personal information protection, the safeguarding of personal information often relied on the names of other causes of action. This gradually led to a judicial phenomenon where "privacy rights disputes" and "reputation rights disputes" became common causes of action, with "general personality rights disputes" serving as a fallback. However, with the further development of internet technology, the characteristics of infringing on citizens' personal information have become increasingly evident in related infringement cases. At the same time, the distinctions between personal information, privacy, and reputation have also become more apparent. The aforementioned common causes of action could no longer adequately cover the numerous disputes involving personal information rights in practice. It was not until January 1, 2021, when the Supreme People's Court issued the "Provisions on the Causes of Action in Civil Cases," that "personal information protection disputes" were formally established as a cause of action in civil cases. This move officially echoed the protection of "personal information" in the Civil Code and demonstrated the state's proactive stance on personal information protection. It clarified the approach to safeguarding personal information and laid a solid judicial foundation.

A Surge in the Number of Cases. In the past five years, it can be clearly concluded that the number of cases of disputes over personal information rights and interests of Chinese citizens, on the whole, is on the rise, and the growth rate is relatively fast, except for the growth rate in 2021, all remain in a high range. The decline in the growth rate in 2021, to a large extent, is precisely because of the introduction of the Civil Code and the Personal Information Protection Law, resulting in the improvement of personal information protection, which is also released by judicial practice, a good signal for the improvement of personal information protection, and a positive response to legislation. At the same time, it can be predicted that in the future for a long time, the number of personal information rights and interests disputes will remain in a high range, and all kinds of new cases will continue to emerge with the advent of various emerging technologies, and will bring certain challenges to judicial judgment.

3.2 The Challenges of Personal Information Protection in the Context of Big Data

3.2.1 The Increase in the Economic Value of Personal Information

Personal information has its unique personal attributes, but at the same time, its property attributes can not be ignored. In the age of information network, the property attribute of personal information is increasingly prominent. Since personal information has the attribute of personal specificity, once the personal information of citizens is obtained and compared and analyzed, specific individuals can be accurately located and specialized services can be provided according to their characteristics. Therefore, personal information will bring high economic value.

3.2.2 The Diminished Ability to Control Personal Information

In the era of big data, individual citizens' control over their personal information is also declining. On the one hand, with the wave of big data, personal information is the key link for citizens to obtain professional services. In order to facilitate the activities on the Internet, more and more citizens are willing to provide their personal information so as to obtain more satisfactory service experience. On the other hand, in order to broaden their customer channels and enhance their competitive advantages, large and small platforms tend to collect a large amount of customer information, and even provide corresponding preferential measures such as cash rebates for obtaining more customer personal information. Due to the natural profit-seeking of businessmen and the lag of platform supervision, there is a large risk of leakage of personal information in the subsequent series of dissemination process. At the same time, because the platform is inherently in a comparative advantageous position

relative to the user, it is difficult for the user to find the leakage problem of personal information in a timely manner, and the control ability of their personal information is correspondingly reduced.

3.3 The Issues in the Private Law Protection of Personal Information in China

3.3.1 The Legislative Principles for Personal Information Protection Are Unclear

Basic principles are foundational and fundamental principles [4-5]. Due to the dual personal and property attributes of personal information, the legislation on the protection of personal information cannot be biased against either party. While paying attention to the protection of personal information, it cannot block any normal economic activities. How to grasp the sense of proportion, which requires the legislative principle of personal information protection to make macroscopic provisions, so that it runs through the whole process of personal information protection, and leads the legislative work of personal information protection. As mentioned above, the legislation of personal information protection in our country started late, until now, there is no clear legislative principle of personal information protection, which makes the legislative work of personal information protection there is a great resistance.

3.3.2 The Legal Framework for Personal Information Protection Is Incomplete

Although the introduction of the *Civil Code* and the *Personal Information Protection Law* has filled a significant portion of the legislative gaps in personal information protection, the legal framework for personal information protection still remains far from being comprehensive and well-established.

The legal basis for personal information protection is still not sufficiently clear. Whether it is the *Cybersecurity Law*, the *Civil Code*, or even the *Personal Information Protection Law*, the definition of personal information remains limited to information that can directly or indirectly identify a specific natural person. Although legislation has imposed certain restrictions on personal information, in practical application, there are still difficulties arising from the relatively broad and general legal provisions. With the further development of information technology and the deepening of the Internet of Things, an increasing number of objects, events, and more can be digitized and datafied. The connections between people and their surroundings are becoming increasingly intricate and complex. Defining personal information merely as data that can directly or indirectly identify a specific natural person may risk overgeneralizing personal information in the context of big data, thereby posing potential risks to its protection.

The legal positioning of personal information protection remains insufficiently clear. Traditionally, the protection of personal information has primarily focused on the realm of private law. However, with the advancement of information technology, the volume of digitized personal information has surged, dissemination channels have gradually expanded, and circulation processes have become increasingly complex. The significant disparity in power between individual citizens and institutions or platforms has made it considerably difficult for citizens to collect evidence. This, in turn, has made it challenging for citizens to seek judicial relief through civil tort claims. Although there has been growing emphasis on the protection of citizens' personal information in the realm of public law, including both administrative and criminal law, the approaches to safeguarding personal information in these domains have primarily focused on punishment and education. These measures are often insufficient to effectively restore the mental well-being and property rights of individuals whose personal information has been compromised to their original state. As a result, the issue of personal information protection is often viewed as a conflict between personal information processors and societal public interests [6], while neglecting the critical aspect of protecting the rights

and interests of the victims. By overlooking the protection of the individuals whose personal information is at stake and merely emphasizing the preservation of overall societal interests, there is a risk that personal information may become a tool for enterprises to pursue profits and a resource for platforms and institutions to compete over. This, ultimately, could also lead to the detriment of societal interests. [7]

Personal information still faces significant issues of unclear boundaries. A major reason for this problem is the merging of personal information protection and privacy rights in the *Civil Code*. Although personal information and privacy overlap to some extent, they should not be conflated. For example, installing eavesdropping or recording devices in someone else's private residence or secretly photographing or recording their private life only violates their privacy rights and does not constitute an infringement of their personal information. [8] Since the era of the *General Principles of Civil Law*, Chinese legislation has primarily protected specific personality rights. Unlike personal information, privacy rights are specific personality interests. Combining both into the section on personality rights and regulating them together creates a certain conflict with the *Civil Code*'s overall system of protecting civil rights. As mentioned earlier, personal information carries dual attributes, representing both personal and property interests, while privacy rights mainly pertain to personal interests. This further leads to confusion in the methods of protecting the two. Since privacy rights are defined as specific personality rights, claims based on personality rights can be made, requiring the infringing party to bear corresponding liability for damages when privacy is violated to varying degrees. [9] However, personal information is not yet recognized as a specific personality right, meaning it has not been formally established as a right. Consequently, it is difficult to equate it with privacy rights and to make claims based on personality rights, such as requesting the opposing party to cease infringement, remove obstacles, or eliminate dangers. [10]

3.3.3 The Legal Framework for Personal Information Protection Is Incomplete

The difficulty for the personal information subject to provide evidence. At present, the way of judicial assistance for personal information protection mainly focuses on safeguarding their legitimate rights and interests by filing civil lawsuits. However, in practice, this way of judicial assistance is difficult to be activated and effectively applied in most cases. First of all, due to the complexity of personal information, it is often difficult for the information subject to be informed of the improper disclosure of personal information at the first time. In addition, as the channels of information transmission continue to expand, omissions in any link may lead to the disclosure of personal information, thus infringing the legitimate rights and interests of the information subject. It is still possible to obtain the corresponding evidence, but if the other party is a strong institution or platform, it is often difficult to obtain effective evidence by virtue of personal strength, and it is trapped in the dilemma of proof. Based on the basic principle of "who claims, who provides evidence", if the information subject cannot obtain the key effective evidence, there will be a greater risk of adverse consequences in the lawsuit.

The court confuses disputes over the rights and interests of personal information with disputes over privacy infringement. A search of the Court documents network revealed that, unlike expected, the number of civil judgments based on personal information was relatively small, but a considerable number of privacy infringement cases involved disputes over the rights and interests of personal information. According to the content of the ruling, the relief of personal information is mainly carried out in the way of privacy relief [11]. The relief of personal information disputes by the judicial organs in our country is mainly carried out by the way of protecting the right to privacy, which is caused by the lack of awareness of personal information protection in the early days and the absence of legislation for a long time. Personal information, an emerging right arising in the era of the

Civil Code, is playing an increasingly important role in the context of big data today. Its connotation is richer than the right to privacy, and its extension is more extensive. If it is confused with the right to privacy, it will increase the risk of personal information being infringed to a large extent, and is not conducive to the effective protection of personal information.

4. The refinement of personal information protection

4.1 The enhancement of relevant legislation for personal information protection

To improve the relevant legislation on personal information protection, we should first unify the legal model of personal information protection, further enrich the connotation of personal information protection on the basis of the *Personal Information Protection Law* and the *Civil Code*, timely promulgation of relevant legal interpretations and actively promote the implementation of relevant legislation in view of emerging problems in reality; Secondly, it should cooperate with public law and private law to carry out all-round, wide-ranging and multi-level legislative protection for personal information. At the same time, further clarify the rules for the identification of infringements of personal information, and define a unified standard for the principle of liability for personal information infringements, while protecting the information subject, it is also necessary to pay due attention to the legitimate rights and interests of information processors.

4.2 The enhancement of relevant legislation for personal information protection

4.2.1 Inversion of the Burden of Proof

In the era of big data, the individual, as the subject of personal information, is often at a disadvantage compared to the information processors in the majority of civil activities. This necessitates a preferential protection in judicial proceedings. The inversion of the burden of proof can be utilized as a means to alleviate the evidential pressure on the information subject, thereby facilitating the protection of their legitimate rights and interests through judicial channels.

4.2.2 Establishment of a Public Interest Litigation Mechanism

Concurrently, the realm of personal information protection can also incorporate a public interest litigation mechanism. Given the extensive scope of victims and the high cost of rights protection in disputes over personal information rights, the establishment and refinement of a public interest litigation mechanism for personal information protection can, on one hand, economize on litigation costs, and on the other hand, effectively uphold social order. Moreover, due to the limited professional expertise and time availability of individual citizens, the adoption of public interest litigation can provide an additional layer of security for the protection of citizens' personal information rights.

5. Summary

Personal information of citizens is a significant right and interest in the era of big data, and the spiritual benefits and economic value it embodies should be promptly and adequately protected. In light of the current state of personal information protection in our country, there is an urgent need to safeguard it through legislative and judicial means, ensuring that personal information is circulated in a regulated and efficient manner. This will not only invigorate market vitality but also protect the legitimate rights and interests of the individuals whose information is at stake.

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