Research on Legal Protection and Path of Personal Data under the Background of Digital Economy

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Abstract

In order to better protect the interests of personal data in the context of the digital economy, by distinguishing between the protection of personal data rights and the protection of legal interests, and analyzing the differences between the two in terms of extension, application methods, functions, etc., it is found that if the right to personal data is adopted The protection model will cause endogenous problems, and the protection of legal interests is more reasonable in terms of legislation, academic theory and value. The protection of legal interests of personal data should always implement the concept of balance, that is, to ensure the two-way balance of data legal interests between different subjects at the subject level, to ensure the two-way balance of personal legal interests and property legal interests at the content level, and to ensure the two-way binding force and guarantee at the effectiveness level. balance.

Keywords

Digital Economy; Personal Data; Protection of Rights; Protection of Legal Interests.

1. Introduction

For a long time, the term "personal information" has been used in my country's legislation. Later, Article 127 of the "General Principles of the Civil Law of the People's Republic of China" did not clarify the legal attributes of personal data, but listed "data" and "network virtual property" in parallel. Later, the "Data Security Law of the People's Republic of China (Draft)" and "Shenzhen Special Economic Zone Data Regulations (Draft for Comment)" made a clear distinction between personal data and information. my country's legislative shift from "personal information" to "personal data" not only directly proves that there is an essential difference between these two concepts, but also shows that my country encourages the free flow of data on the basis of maintaining the overall national data security, so as to promote the The development of the digital economy. For personal data, there are two different protection modes: legal interest protection and rights protection. The two are different in terms of extension, application methods, and value goals. Therefore, the choice of protection mode is crucial to personal data security and the overall development of the market.

2. Discrimination and Analysis of Related Concepts

2.1. Personal Data is Different from Personal Information

Personal data is the manifestation of personal information, and personal data is the carrier of personal information. Some personal information can be expressed in the form of data, and some personal information such as interpersonal relationships, emotional experience, etc. cannot be expressed in the form of data. Although there is a certain overlap in the form and content of the two, there are still essential differences between the two in theoretical research and judicial practice.

(1) Personal information and personal data are generated in different ways and exist in different states. Personal information is a specific natural record of a certain information, which

appears with the production of things and exists naturally. Personal information is not only intangible but also abstract. It needs to rely on specific carriers such as data, text, pictures, etc. to exist. It is a concept used at the substantive level. Personal data does not exist naturally. It belongs to a digital record realized through technological processing after digital development. It exists in the form of binary bits, seemingly intangible, but has a specific physical form. Concepts used at level[1].

- (2) The essential characteristics of personal information and personal data are different. The essential characteristics of personal information and personal data are as follows: personal information is identifiable; personal data is desensitized. Many references to "personal data" in extraterritorial laws belong to "personal information" in the Chinese context, because their laws use "identity identification" to define and protect both "personal information" and "personal data". Standard", while "personal information" in the Chinese context refers to the basic premise of the specific identity of a natural person or reflecting the specific activities of a natural person. After personal information enters the commercial field, as an important production factor in the era of big data, its property attributes will be repeatedly used. However, under the premise of ensuring market vitality, any unit or individual must desensitize personal data before using it to ensure that personal privacy and personal private information are not leaked and traded. Data desensitization is to process sensitive original data through technical means without affecting the use, and its purpose is to protect personally identifiable information, personal sensitive data or business sensitive data. Therefore, personal data is desensitized[2].
- (3) The legal attributes of personal information and personal data are different. Based on the essential characteristics of personal information—identifiability, it involves personal dignity and freedom in the Constitution and the protection of personal rights in civil law. For example, Article 111 of the Civil Code of the People's Republic of China deals with the personal Protection is stipulated, and the Personality Rights Section also stipulates "privacy rights and personal information protection". Personal data has property attributes, because any unit or individual who wants to use personal information in the field of data circulation must first desensitize the data, so that the desensitized data is not identifiable and cannot identify the specific information of natural persons. Or activities, and personal data, as one of the important production factors of the market economy, has a certain property value.

2.2. There are Differences between the Protection of Legal Interests and the Protection of Rights

Legal interests and rights themselves are not the same. To study the legal protection of personal data, it is necessary to distinguish the difference between the protection of legal interests and the protection of rights, and to find a suitable protection method for personal data. Data legal interests are data interests identified, recognized and protected by law. Not all data interests are data legal interests, and only data interests that have been legally identified and confirmed can become data legal interests. Data rights are the rights to possess, use, benefit and dispose of data legally owned by a unit, organization or individual. There are differences between the protection of legal interests and the protection of rights in terms of extension, application methods, and value goals[3].

(1) The extension is different. Legal interests in a broad sense generally refer to all interests protected by law, including rights; legal interests in a narrow sense refer to interests other than rights among the interests protected by law. At this time, legal interests are a concept opposite to rights. Although legal interests are divided into broad and narrow senses, they generally adopt a broad concept, that is, an interest protected by law. The legal interest of data is the legal discovery, confirmation and protection of the interests that exist objectively in reality, while

the rights of data refer to the generalization of the rights of the data subject to the data, which is a type of legal interest of data.

- (2) The application methods are different. The application of data rights is one-way and absolute, and no other subject or individual is allowed to interfere in the exercise of data rights by the data subject. "Rights" emphasize the publicity of personal character and freedom, so the application of data rights is relatively unconstrained. The application of data legal interests is non-unidirectional and relative, and can only be realized through the measurement of diversified data interests[4]. The "law" in the "legal benefit" is the restriction at the formal level, and the "benefits" is the interest at the substantive level, which is a social interest confirmed by law. "Legal interest" originates from the need to balance interests, emphasizing that "people's behavior of pursuing interests cannot be allowed to be driven by their nature", so the application of data legal interest needs to balance the conflict of interests competing for resource control.
- (3) Value goals are different. Data rights protection focuses on the protection of private interests of data, emphasizing the exclusive exclusivity of data subjects (including exclusivity of possession and exclusivity of use) and the maintenance of data security, which is not conducive to promoting the free flow of data and data sharing[5]. However, at this stage of social development, there is a huge demand for data, and the development of many technologies is inseparable from data. The value goal of data legal protection is to balance data public interest and data private interest, resolve the conflict between data rights and data sharing attributes, and make data useful and beneficial to individuals, enterprises, and the state, which is in line with the value goal of data sharing, in order to maintain the overall market competition order of data and realize data justice.

3. The Endogeneity Problem of Adopting the Rights Protection Model for Personal Data

3.1. From the Perspective of Extension, The Extension of the Rights Protection Model is too Narrow to Cover or Resolve Various Interests and Conflicts in the Field of Personal Data

The characteristics of the rights protection model lie in the certainty of the object and the constancy of the dominant force. The object of the right is definite, and the subject of the right enjoys a relatively constant control over the object. However, in the context of big data, personal data is different from personal information and personal privacy, which is a relatively single attribute, and the data interests in this field are characterized by diversity and dynamics. Personal data interests are the result of the overlapping of multiple data interests, which may include both personal interests and property interests, data producers' interests and data controller interests, data private interests and data public interests, etc. In addition, personal data is dynamic, its form is not unique, and the subject of its generation, the individual, does not have constant factors, and it will change due to different scenarios and environments in which it is located. From generation to circulation, personal data cannot be monopolized or controlled by a subject[6]. In different stages, the exclusive or control subjects of personal data are different: in the generation stage, the control subject of personal data is the personal data producer; in the circulation and use stage, the control subject of personal data is the personal data controller or user. This results in a lack of constancy in the subject's power over personal data. Therefore, the rights protection model has a narrow extension due to its own characteristics, and has higher requirements on the applicable subjects. If this protection model is adopted for personal data, it will be difficult to meet the complex interests in this field and achieve an overall balance of interests.

3.2. From the Perspective of Application, the Rights Protection Model will Lead to the Emergence of Market Trade Barriers

A The emergence of big data technology has weakened the boundaries between private space and public space. In the era of big data, if data resources are not disclosed, many emerging technologies and social construction will not be able to be further developed, and the core value of data will only be discovered when it enters the circulation link and meets certain interests of the market or others. However, the one-way and absolute application of data rights strengthens the protection of the private interests of data subjects, and clearly distinguishes the boundary between public and private space[7]. It is difficult to balance public and private interests with a purely private protection model and restrict personal data. The development of commercial value will lead to the emergence of market trade barriers. The rights protection model guarantees the right of the data subject to dispose of the data freely, and the subject can independently decide whether to use, transfer or dispose of the data. According to the right to data portability stipulated by the EU GDPR, if the operator in the data market uses a competitive strategy or an exclusive strategy to indirectly require the data subject to transfer personal data from the rival company to the company, then as long as the data subject proposes to carry the data According to the requirements, this transfer must be carried out, which will produce a competitive and exclusive response, which will raise the existing market entry threshold, and is actually not conducive to normal market competition in the field of personal data.

3.3. From the Perspective of Value Objectives, the Rights Protection Model does not Meet the Value Objectives of Data Sharing

Data has inherent properties such as sharing, relevance, and openness, and it is also the fundamental source of data value. Personal data, which is one of the types of data, also has the above attributes. For personal data, we cannot blindly emphasize security and protection. Under the premise of realizing the basic security of personal data, it is necessary to promote its sharing and opening as much as possible, which can break through the barriers between regions, industries and even countries, promote the development of human beings as a whole, and realize the leap-forward development of economic society and urban construction. However, the privatization of personal data emphasizes the subject's exclusivity and exclusivity of the data, and prevents others or society from infringing on the rights of the data subject. It is prone to the phenomenon of emphasizing the private interests of the data and neglecting the public interests of the data, which does not conform to the development logic of the data itself and data sharing, value target.

4. Analysis of the Legitimacy of Legal Protection of Personal Data

4.1. Legislative Analysis

First, my country's legislation has not yet stipulated the legal attributes of personal data. What standard should the data types be divided according to, and which subject should belong to after the division, has not yet been determined by a unified normative document[8]. Currently, the Civil Code of the People's Republic of China defines personal information as legal interests. Although personal data and personal information are generated in different ways and exist, the two are related in form and substance, so from a legislative perspective, it is more reasonable to adopt legal protection for personal data.

Second, personal data should not be classified as an object of rights. Civil rights are a possibility guaranteed by the state. According to this possibility, the subject of rights can perform certain actions or require others to do certain actions to meet their own interests. Generally speaking, civil rights include real rights, creditor's rights, intellectual property rights and personality rights, and their objects are things, behaviors, intellectual achievements and personality

interests respectively. Personal data is obviously not a behavior, and the reasons for it not being classified as the object of claims will not be discussed here.

Personal data should not be classified as an object of property rights. The object of real right refers to a thing, and this thing is independent of the human body, can be controlled or dominated by human beings, and can satisfy certain material needs or spiritual needs of people. Moreover, the property of domination of real right also requires the object of real right to have specificity, dominance and exclusivity. Obviously, personal data does not have the characteristics of the above-mentioned object of property rights. Personal data is different from personal information. After data desensitization, it is not identifiable and irreplaceable, and personal data is displayed in the form of codes of 0 and 1 in the data market, which is easily copied and processed. or deletion, thus making the specificity of personal data missing[9]. The independence of personal data is insufficient. It has no meaning and value in an unprocessed or processed state, and cannot form an independent expression of meaning. Personal data is intangible and cannot be observed with the naked eye or touched by the body. The real right legislation has always limited the object of real right to tangible objects, and the provision of rights as the object of real right is only an exception. Therefore, if personal data is classified as the object of property rights, it is not in line with the concept of property rights legislation.

Personal data should not be classified as intellectual property subject matter. The objects of intellectual property rights are creative intellectual achievements, which are embodied in inventions, works, trade secrets, databases, etc. First, personal information undergoes data desensitization processing and analysis in the process of developing into personal data. This process is mainly based on computer processing technology, and the final result is not based on creation". Therefore, personal data does not belong to inventions, works and other intellectual products. Second, business secrets require "secrecy" that is not known to the public. However, most of the collection of personal data comes from the public domain. After processing, personal data cannot be identified as personal characteristics and can be known to the public. Therefore, personal data is more Impossible to protect intellectual property as a trade secret. The third is that personal data is different from databases in intellectual property objects. my country's current copyright law protects original databases as compilation works, protecting their expression rather than their specific connotations, and does not grant protection to nonoriginal databases. A large number of personal data are aggregated into a database, which is not original in terms of retrieval methods and arrangement. The value and significance of personal data lies in itself or the data results or conclusions formed after reprocessing and analysis of it, rather than in the overall structural sequence.

Finally, personal data should not be classified as an object of personality rights. First, personal information and natural persons are inseparable. The Civil Code of the People's Republic of China provides a path for personal information protection that is different from the right to privacy. However, the previous article has analyzed the fundamental difference between personal data and personal information, and the protection paths of the two are naturally different. Second, compared with the personality attributes of personal information, personal data emphasizes the physical existence of personal information, and is often under the control of public authorities or business entities. Personal data is personal information that has been desensitized and processed before entering the field of commercial circulation. It is no longer possible to identify the identity information or other characteristics of a specific natural person[10]. It has become one of the important production factors in today's market economy. Therefore, if personal data is forcibly classified as the object of personality rights, it not only goes against the current legislative tendency of our country, but also does not conform to the essential characteristics of personal data.

4.2. Theoretical Analysis

Data legal interest is supported by legal interest theory in the dimensions of value law, analytical law, and social law. According to the theory of value law, the legal interest of data is the affirmative recognition and evaluation of the value of individual data elements or their community to the data subject and the society. The legal interest of data should be understood from the perspective of community value. An act that violates the common values of society. According to the theory of analytical law, data legal interest is the embodiment of the data legislative order, that is, the legal order contained in data legislation or the national will norm as the spirit of the legal order; accordingly, the infringement of data legal interest constitutes a violation of the will norm. violation. According to the theory of social law, the foothold of data legal interests should be the interests of human data life, and should focus on the unity of individual interests and community interests.

4.3. Value Analysis

First, the inclusiveness of legal protection can better protect the interests of personal data. Today's digital economy era is full of various information such as personal information, corporate information, public information, etc., of which personal information occupies a major position. Personal information will only become personal data when it enters the field of commercial circulation. Personal information such as the name of a natural person, ID card number, phone number, home address, etc. is an objective existence, and it does not have property value in itself. business sense. The premise of protecting the interests of personal data with commercial significance is to confirm it at the legal level. Compared with the protection of rights, the protection of legal interests has a broader scope and can respond to the diverse needs of data interests in the data market. Moreover, the legal protection of data interests can analyze the interests of the data market from multiple perspectives and balance the various data interests in the market. In addition, data legal interest is a confirmation of various data interests in the real society, and its existence goal is to realize the usefulness of data to countries, enterprises and individuals. However, not all data interests belong to data legal interests. Only after the legitimacy of legislative identification or judicial identification can be identified, data interests can become data legal interests. Some data interests generated by personal data, corporate data, public data, etc. need to be confirmed at the legal level, so as to ensure the balance of interests among various entities in the data element market, and maintain the normal operation of the data market and the healthy development of society.

Second, break down trade barriers in the data market and promote the sharing of personal data. Data legal interest is an emerging legal interest in the era of digital economy, and its legal protection is a realistic need for the normal operation of the data market. In the process of data market development, it is necessary to resolve the conflict between the tendency of data privacy and data sharing, and to grasp the balance between data public interest and data private interest. Circulation, break the trade barriers in the data market, and promote the development of the data economy. The legal protection of personal data can provide institutional guarantee for the circulation of personal data at the legal level, solve the worries of all parties involved in the data circulation, and promote the sharing of personal data.

Third, the use of legal protection for personal data can maintain the fairness and justice of the data market as a whole. Personal data is the main component of the data element market, and legal protection is adopted for the interests of personal data to provide behavioral norms for all actors in the personal data element market. Data providers should promote the use of data rather than possession, and the circulation and sharing of data from the perspective of balancing data private interests and data public interests; data companies must abide by relevant laws and regulations on the protection of data legal interests when collecting and

processing personal data to protect personal data. The transparency and fairness of data in the process of circulation can maintain the fairness and justice of the entire data market.

5. Research on the Path of Legal Protection of Personal Data

The ultimate purpose of protecting personal data at the legal level is to balance the interests of multiple parties in the field of personal data. Therefore, its legal protection path should always implement the concept of balance, and maintain a two-way balance from the three levels of subject, content and effectiveness.

5.1. Subject Level: Two-way Balance of Data Legal Interests between Different Subjects

In the process of personal data circulation, the subjects involved are mainly divided into two categories: one is the data subject, that is, the direct producer of personal data; the other is the data processor, that is, the subject who collects, processes, trades, and uses personal data. The protection of legal interests of personal data cannot blindly focus on maintaining the unilateral protection of data subjects, but should pay attention to balance. In different links of personal data circulation, data subjects and data processors have different requirements for the protection of the balance of legal interests.

At the data collection stage, the legal protection of personal data should clearly define the need for data processors to inform and obtain consent from data subjects by means of explicit notification. On the one hand, this method of explicit notification must be simple and easy to understand, and the data processor needs to inform the purpose of the data activity. If the original purpose of the data activity changes in the later stages of the data activity, the data subject must be notified in time and their consent must be obtained. On the other hand, it should be easy for data processors to collect personal data in compliance with laws and regulations, so as to ensure the balance of interests between data subjects and data processors, and to promote the circulation of personal data elements.

In the data processing stage, the protection of personal data legal interests should require data processors to handle personal data in a lawful, compliant and contractual manner, and the data processing process should be reasonable and transparent, so as to avoid loss of control over data processing. In addition, data subjects may raise objections and claim damages for acts that infringe upon their legitimate data rights during data processing.

In the data transaction stage, the protection of personal data legal interests should focus on defining the data interests of data subjects and data processors in the state of data transactions, which may involve both domestic data transactions and data overseas transactions. Domestic data transactions will not harm the legal interests of national data, but maintaining the balance of legal interests between different subjects is directly related to the fairness and justice of the data market, and it is necessary to clearly define the data interests that different subjects have over personal data resources at this stage. Data overseas transactions involve the legal interests of national data, and it is necessary to promote the transaction of personal data resources within a reasonable range on the basis of maintaining the overall national data security.

At the stage of data use, the legal protection of personal data should clearly define the legal way for the data subject to safeguard the private interests of personal data and the lawful way for the data processor to use the data. On the one hand, data processors cannot illegally use personal data beyond the scope of use, and cannot expand the scope of data use without authorization, and data processors should assist in a timely manner with regard to the reasonable requirements of data legal interests put forward by data subjects. On the other hand, the data subject's maintenance of personal data private interests cannot exceed the reasonable and legal boundaries, and cannot damage the overall data public welfare, and the way to

safeguard private interests must comply with the code of conduct stipulated by law to ensure the normal order of the data market.

5.2. Content Level: The Two-way Balance between the Legal Interests of Personality and the Legal Interests of Property

The difference between personal data and enterprise data and public data lies in the multiple legal interests, including both personal legal interests and property legal interests.

For the personal legal interests of personal data, from focusing on privacy protection to focusing on the protection of informed consent. Personal data includes not only private data but also non-private data. If privacy protection is adopted, rights privatization can lead to conflicts between the attributes of data sharing. Privacy protection should not be the core of legal protection of personal data. The legal protection of personal data can learn from the right to privacy, but it should focus on the protection of informed consent. Different from the protection of informed consent in commercial transactions in the past, the current technology such as blockchain can provide stricter protection for personal data. On the one hand, from the perspective of notification, the content notified by the data processor must be clear and easy to understand, so that the data subject can understand the content of the notification at a glance. In specific practice, the consent of the data subject is generally obtained by asking whether to agree to the privacy policy. Although this method is simple and efficient, the content is too long, which is not conducive to the data subject to quickly grasp the main points. On the other hand, in terms of obtaining user consent, in order to ensure that the user's consent is more meaningful, the payment model of Internet services can be adopted to enrich the data subject's right of choice. The Internet market has a bilateral nature. At this stage, in order to accumulate popularity and seize market share, Internet companies mostly use the free model in a certain market. This makes data subjects lack awareness of risk prevention for their own information, and it is difficult for them to predict future personal data, privacy risk. The payment model of Internet services allows data subjects to balance the cost of providing personal data with the benefits of enjoying network services. Data subjects can choose a free model or a paid model to obtain a higher level of privacy protection.

For the property legal interests of personal data, from focusing on static possession to focusing on dynamic use. On the one hand, protecting the legal interests of personal data through static possession will curb the flow of data and hinder the development of the data market. Moreover, the possession of intangibles such as personal data by the law is somewhat out of date at this stage. In addition, the lack of legal protection of the use of personal data in the law will make it difficult to solve new problems in the era of big data. Some scholars pointed out: "In terms of the initial control of information, individuals are often the initial controllers of personal data, and later lose control due to data processing behavior; for some data, individuals may never have control." To a large extent, it is the information source of personal data, and the value source of personal data is the data processor. At this stage, the property value of personal data is reflected in its use rather than possession. On the other hand, the very attractive formulation of "data ownership" implies that people have the right to hold personal data, but this formulation itself may be a conceptual error and does not contribute to the realization of the truth of people's protection of personal data intention. Data processors should form some kind of positive interaction and cooperation with data subjects, weaken the possession of personal data by data subjects in specific scenarios, and allow data processors to collect, process, and use personal data after reaching relevant thresholds or forming a consensus.

5.3. The Level of Effectiveness: a Two-Way Balance between Binding Force and Security Force

On the one hand, the protection of personal data legal interests can realize the legal confirmation of the diverse data interests enjoyed by multiple personal data subjects, provide behavioral norms for data circulation subjects, restrict personal data transaction behaviors, and form an emerging system of personal data legal interests protection. However, it is emphasized that binding force is not an end, but a means. Through effective regulation of acts infringing upon the legal interests of personal data in the digital economy, the balance of interests between data subjects and data processors can be guaranteed, and the development of the digital economy and social progress can be guaranteed. On the other hand, the protection formed by the legal interests of personal data is a relative protection rather than an absolute protection. First, because the value of personal data varies from person to person, its own value attributes are relative; second, relative protection can avoid data trade barriers brought about by exclusive possession and protection of personal data; third, the relative protection of personal data legal interests is conducive to maintenance When the interests of the individual, society and the state are balanced, when the data subject's own data is leaked or used without permission, he can seek damages from the relevant responsible individual or organization.

6. Conclusion

From the current point of view, the use of legal interest protection for personal data at the legal level is more in line with the realistic requirements of the digital economy era, and it is of practical significance to analyze the specific legal interest path from three aspects: subject, content, and effectiveness. In the future, the protection of legal interests in the field of personal data can start from different entry points, and it will be more targeted, such as comparative research with enterprise data and public data, research from the perspective of distinguishing rights and interests, or combined with emerging emerging Technologies such as blockchain technology, cloud computing technology, etc. analyze the shift in the legal protection mode of personal data and the change tendency of the entire system.

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