

Legal Issues and Regulation Path of E-commerce Platform's Improper Use of Consumer Personal Information

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Abstract

The increasing development of Internet information technology has brought great space and opportunities for the development of e-commerce. The integration between e-commerce platforms such as Tianmao, Jingdong and Taobao and people's daily consumption life is increasing day by day, only up to 2023. The number of people using the Internet for shopping and consumption reached 1.079 billion. Using the Internet to obtain goods or services has become a part of people's daily life. The vigorous development of e-commerce industry, on the one hand, facilitates people's shopping life, on the other hand, also brings many problems. Among them, the legal protection of consumer personal information is particularly prominent. This paper discusses the particularity of personal information of consumers on the platform and the improper use of personal information of consumers on the platform from five parts. The current situation and existing problems of the legal protection of consumer personal information on the platform, and the necessity of the current protection of consumer personal information are discussed. On this basis, it puts forward suggestions for improving the legal protection of consumer personal information on e-commerce platforms in China.

Keywords

E-Commerce Platform, Personal Information, Rights Protection.

1. The Connotation of Consumer Personal Information and Its Difference from General Personal Information

With the continuous development of the Internet, the platform economy has ushered in greater development space and opportunities. Some of our common e-commerce platforms, such as Taobao, Tmall, Suning and Meituan are increasingly integrated with our lives. It is becoming a part of life for people to use the platform to consume or choose services. Therefore, to define the connotation of consumer personal information, we should first clarify the scope and concept of e-commerce platform.

E-commerce platform is actually based on digital technology. It is a new economic system composed of data-driven, platform-supported and network-coordinated economic activity units. Article 2 of China's Electronic Commerce Law defines electronic commerce as the sale of goods or the provision of services through information networks such as the Internet. Business activities of the business. The classification of e-commerce model is mainly divided into four categories, namely: B2B, B2C, C2C and O2O. B2C means that enterprises provide products or services to consumers. That is to say, the network transaction and network service mentioned in this article belong to this mode[1]. The difference between e-commerce consumers and traditional consumers is that traditional consumption is obtained through offline, money and goods clearance. The prominent feature of e-commerce consumption is the use of network media. Pay first and then receive goods, and even consumers with high credibility can receive goods first and then pay. Such consumption behavior does not deviate from the definition of

consumers in the Consumer Rights and Interests Protection Law. E-commerce consumers actually belong to a category of consumers. It can be inferred that consumers are individuals who purchase goods or services through online payment and daily consumption.

Consumer personal information is the identifiable information recorded by consumers when they consume goods or obtain services. Because of its special network media from its production to its utilization. Therefore, in addition to the personal name, address, mobile phone number and other information listed in Article 1034 of the Civil Code. It also includes a series of personal habits, consumption preferences, interpersonal relationships and so on, which can be inferred through information technology and network algorithms. Information.

To sum up, the personal information of e-commerce platform consumers can be defined as: when consumers obtain goods or services through the network and consumption. A recorded collection of information that can be used to directly or indirectly identify an individual.

In addition, there are the following differences between consumer personal information and personal information.

1.1. Online shopping consumers are more sensitive to personal information

First of all, most personal information only includes name, mobile phone number, educational experience, personal pictures and so on. Generally speaking, these information is disclosed to the society by people on their own initiative based on the needs of social interaction[2], and its openness and circulation are relatively high. Everyone has a high degree of control over whether and to whom their personal information is open. In addition, these personal information is often exchanged and used among acquaintances. Therefore, the risk of personal information infringement caused by its publicity and circulation is relatively low. For the personal information of online shopping consumers. The online transaction mode of online shopping requires consumers to provide their names, telephone numbers, addresses, transaction accounts and payment passwords. And so on personal information, through these personal information may portray consumer's social group stratum portrait. For example, the receiving address provided by the consumer can accurately locate the consumer's home address, family members living together, work address and so on. Through the payment information provided by consumers, we can analyze the work income, consumption level and consumption habits of consumers. And once these information is leaked or illegally used, it will pose a great threat to consumers. In a word, the personal information of online shopping consumers covers a wide range of contents, which makes the sensitivity of personal information stronger.

1.2. Online shopping consumers' personal information is more property-based

Online shopping consumers' personal information is more property-based, and consumers' personal information is integrated into data, which greatly speeds up the process of industrial digitalization. It has promoted the development of digital economy. The general personal information is more prominent in protecting the personality rights, but the personal information of online shopping consumers has personality characteristics. Its commercial value is more significant, so the property attributes behind it deserve more attention. Specifically, for general personal information, first of all, its most important function is to identify and prove in social interaction. The coverage is one-sided, and the operators focus more on point-to-point mobile phone marketing and short message marketing. Because of its low utilization efficiency, its commercial value has not been developed and applied on a large scale. Secondly, the general personal information is mostly used for identification, and there is no specific industry orientation. For enterprises, the commercial value is low[2]. However, for the personal information of online shopping consumers, operators can use it for precision marketing. In addition, on the basis of obtaining the personal information of large-scale consumers in the

whole country, the data statistics and analysis of these personal information are carried out. It can guide the next business strategy and development direction of online shopping operators. Therefore, for online shopping operators, the commercial value of consumer personal information is more significant. Its protection is more focused on the protection of consumers' property rights and interests.

1.3. The personal information of online shopping consumers involves more information processing subjects

The consumer online shopping service process needs to include Online shopping platform, platform operators, third-party payment agencies, express service agencies and other subjects in the collaboration. The participation of multiple subjects will lead to a larger scope and longer time for the sharing and circulation of consumer personal information. The possibility of infringement of personal information rights and interests is greater.

1.4. It is more difficult for online shopping consumers to safeguard their rights

Online shopping consumers are faced with data groups with technological monopoly advantages, and there is a huge difference in their economic status[3]. Resulting in a huge disparity in legal status. Faced with this disparity, when the personal information rights and interests of online shopping consumers are infringed, it will become more difficult to safeguard their rights. In addition, when online shopping involves more information processing subjects, it often constitutes a majority tort legal relationship in civil law. The complexity of legal relations also increases the difficulty of consumer rights protection.

2. Types of Improper Use of Consumer Personal Information

The use of consumer personal information refers to the consumption collected by e-commerce platform operators in order to develop or obtain economic benefits in accordance with the law. Personal information is processed, analyzed and sold. In many behaviors of consumer information on the e-commerce platform, the type of use can be better defined. So as to determine the boundaries of improper use of consumer personal information. The main types include: First, the authentication used to protect the security of consumer accounts, such as sending SMS verification codes. Second, the personal information needed to directly realize the purpose of commodity and service transactions in e-commerce activities; Such as the use of consumer personal information for train ticket ordering. Thirdly, it provides dynamic information to inform consumers of the status of commodity mailing or the latest services at any time, and sends reminders such as information and notifications to consumers. The fourth is to invite consumers to fill in questionnaires to enhance and improve service quality, such as telephone return visit scoring; Fifth, according to the relevant requirements of laws and regulations, report the personal information of consumers according to law. Such as reporting the flow of funds to the financial regulatory authorities in accordance with regulations.

At the same time, with the geometric growth of consumer information and the continuous development of Internet technology, The platform further improves the mining and analysis of consumer information[4], which also leads to the security risks of consumer personal information. The improper use of consumer personal information by e-commerce platforms is mainly reflected in:

2.1. One is to rely on Internet technology to collect excessive personal information of consumers. Sub-section Headings

In the era of platform economy. Based on the developed big data technology, consumers' consumption habits, shopping preferences and consumption levels can be analyzed. These data can predict the future market demand. So. Platform operators often use technical means to

collect personal information excessively in order to open up the market and earn more profits. The security risks of consumers' personal information. 10 shopping categories tested according to the 2023 "Online Shopping" APP Personal Information Collection Test Report "The personal information uploaded by APP includes six categories. Location information, unique device identification code[5], clipboard content information, application list information, shopping information, and login information. Thus, in the content of personal information collected by current e-commerce operators, it includes not only the basic information of users, but also the basic information of users. It also includes user access results, time, address, device log information and mobile data obtained by using cookies and other technologies. Content and e-mail information, covering a very wide range.

2.2. Buying and selling consumer personal information

The improper use of consumer personal information is established on the basis of improper access. Illegal trading of personal information has given birth to a new grey industry. In order to realize the great commercial value of personal information. Network intermediaries and operators directly illegally resell and trade user information in order to obtain high profits. In recent years, such incidents have occurred frequently. Users are familiar with "Taobao" and "Jingdong" as the head platform to grasp a large number of consumer information data has already entered the illegal exchange of information. Easy to chain and become a commodity that can be purchased at any time. Users buy and sell bulk products, such as automobiles, in offline physical stores. The personal contact information, address and other related data left behind have become tools for illegal transactions to make profits. These chains of illegal exploitation and illegal transactions. They are all based on the abstract network environment and the strong demand generated by the development of the e-commerce industry.

2.3. The illegal disclosure of consumer personal information due to technical reasons or illegal interests

For the e-commerce platform, on the one hand, due to technical defects. On the other hand, driven by interests, information leakage has caused consumer information to be in danger. In recent years, fraud caused by the leakage of personal information is common. Information leakage exposes personal life to illegal elements, so that illegal elements can carry out "precise strikes" on individuals. This kind of leakage is also based on the development of current Internet technology. At the same time, it also greatly increases the cost of safeguarding consumers' rights and interests after being infringed.

3. The Dilemma of Consumer Personal Information Protection

In recent years, China has made some achievements in the regulation of platform-based enterprises and the protection of personal information. However, compared with the different situations of the rapid development of society, there are still some problems in the means of regulation at this stage. At present, the protection of consumer personal information is scattered in the Civil Code, Electronic Commerce Law, Personal Information Protection Law and other laws. Some regulations are vague and general, and lack of systematicness and operability. At present, the dilemma of consumer personal information protection is mainly reflected in the following aspects.

There are deficiencies in the legislative provisions. At present, the legislation for consumer rights is highly overlapping and the provisions are ambiguous, which makes it difficult to link up the application. Article 32 of the Electronic Commerce Law stipulates that the operators of e-commerce platforms should clarify the protection of consumers' rights and interests and personal information. Rights and obligations. Article 79 stipulates that penalties shall be imposed in accordance with the provisions of laws and regulations such as the Network

Security Law when obligations are not fulfilled. Chapter VII of the Personal Information Protection Law imposes legal liability on the infringement of citizens' personal information rights by means of fines, credit publicity and warnings. To punish for the act. Article 56 of the Consumer Rights and Interests Protection Law also stipulates that businesses shall be fined in such cases. The similar provisions of different laws overlap, but the penalty standards are not the same. The standard of the Network Security Law and the Personal Information Protection Law is "a fine of less than one million yuan" when there is no illegal income[6]. The standard of the Consumer Rights and Interests Protection Law is "a fine of less than 500000 yuan", which can easily cause confusion in actual operation. As a result, the protection of personal information of e-commerce consumers is not targeted in legislation and the right to personal information of e-commerce consumers. The implementation lacks achievability.

Law enforcement and supervision need to be improved. In the process of online shopping, a large amount of personal information is generated. The operation of platforms and businesses is based on these large amounts of personal information and user data. In the process of mining, using and transmitting these information, it is difficult for the platform to avoid information leakage or excessive mining and analysis. Chapter VI of the Personal Information Protection Law specifically stipulates the personal information protection department. However, the provisions on information supervision are relatively general, mostly staying on the formulation of rules and assisting other departments in joint supervision. There are no further feasible and effective measures. From the perspective of consumer information protection alone. Relying on the Personal Information Protection Law and the various measures taken by the administrative departments, the regulations are scattered. The general rules are insufficient, and in the actual implementation, due to the unclear division of labor among various departments, it is also difficult to be effective. In the process of shopping on the e-commerce platform, the generation of personal information is accompanied by the whole process of consumers entering the platform. Only when the infringement occurs, can the supervision be carried out, and the merchants are investigated, warned and fined[7]. It can not satisfy the pursuit of personal information protection of e-commerce consumers, nor is it conducive to the orderly and healthy development of the e-commerce industry. And in the face of new problems brought about by the rapid development of technology. On the basis of taking the market supervision and management department stipulated in the Electronic Commerce Law as the leading organ of law enforcement. The scope of law enforcement of each administrative organ is vague, the intensity is different, and there is no special supervision for the e-commerce industry. It can not stifle the possibility of infringement of consumer personal information by operators from the source.

The judicial relief is insufficient. As a kind of personal information, consumer personal information is actually closely related to privacy. Therefore, consumers often claim spiritual compensation in the process of resorting to justice. However, for moral compensation, the compensation requirement can only be met if it meets the serious standard. Therefore, only a few cases can be satisfied.

Big data algorithm screens personal information to kill ripeness. "Big data killing" is based on personal information as the carrier and big data algorithm as the tool. Thereby forming information asymmetry between the platform and the user. Its greatest feature is its strong variability and high concealment. E-commerce operators can use non-sensitive information, such as consumer preferences, browsing records, etc., to conduct in-depth analysis. So as to obtain the information of the shopping area, the commodity category, the price, the stay time and the like of the consumer. Personalized service, price discrimination or targeted advertising, etc., to achieve the effective use of big data. The essence of big data killing is to differentiate the pricing of the same goods and services, thus charging different prices to different consumers. E-commerce platforms continuously collect and collate large amounts of user data from

consumers to help managers make better decisions. After collecting a large amount of user data, the operator should follow the principle of maximizing benefits. It provides users with a full range of personalized marketing services, including precise push and differential pricing for old users. To adopt preferential price policies for new users and price-sensitive groups, these marketing services are not necessarily beneficial to consumers. Once consumers accept the ripeness path of e-commerce platform. They will become less and less sensitive to price because of their trust and dependence on e-commerce platforms. The e-commerce platform has started a new round of ripeness, which has created great economic benefits. In reality, it is difficult for individuals to collect evidence of big data killing behavior and judge the nature of the behavior. Because the interface that consumers browse, including commodity types, brands, prices and other information, is already presented by the online shopping platform combined with big data analysis. For users, it is impossible to see the same price for all users as the traditional business model "clearly marked price". Prices also change over time. This kind of "discrimination" can only be found by comparing multiple subjects. In reality, if the merchants in the consumer complaint platform carry out "big data killing". Most of the platform merchants usually take into account the factors such as season, quantity, region, bundling price, dynamic pricing and so on. The legitimacy of "price discrimination" is explained. However, due to the lack of effective evidence, it is difficult for the regulatory authorities to confirm whether the reported enterprises have used "price discrimination". Thus bringing inconvenience to consumers.

The implementability of platform self-regulatory measures is insufficient. Industry self-discipline mainly includes two aspects, one is to restrict the compliance of enterprises in the industry. On the other hand, it restricts its own behavior by formulating industry rules and agreements internally. Industry self-discipline not only reflects the industry's own supervision of the industry, but also promotes industry fairness. Protect the development of the industry and enhance the sustainability of the development of the industry. However, capital is profit-seeking. Marx pointed out in *Das Kapital*: If 10% of the profits. Capital is guaranteed to be used everywhere; with 20% of the profits, capital is active; with 50% of the profits, capital is desperate. For the sake of 100% profit, capital dares to trample on all human laws. With 300% profit, capital dares to commit any crime, even at the risk of hanging. "The Convention on Self-Discipline in the Collection and Use of Personal Information of Users" is the most widely influential convention in the e-commerce industry. The enterprises that signed the convention, such as Alibaba and Jingdong, have great influence in the industry. However, two years after the signing, Alibaba is suspected of violating the content of the treaty and divulging user registration information to third-party cooperative companies without the consent of users. Due to the lack of relevant punitive provisions in the treaty, the signing of the self-regulatory convention has only become a tool for Internet enterprises to declare their attitudes. It has not really achieved its original intention of protecting personal information.

4. The Necessity of Consumer Personal Information Protection

Article 12 of the Universal Declaration of Human Rights, issued by the United Nations in 1948, is widely regarded as the legal source for the protection of personal information. Council of Europe comment on that publication in 1981 of the convention on individuals with regard to automatic proces of personal data. This is the only personal data protection convention in the world. The Convention clearly States that its aim, in addition to achieving the unification of the rule of law in States parties, is the unification of "human rights and fundamental freedoms". The aim is that in the case of more and more frequent cross-border circulation of individuals, "To expand the protection of individual rights and fundamental freedoms, particularly the right to privacy". The EU Charter of Fundamental Human Rights explicitly protects the "right to

personal data protection" as an independent fundamental right. Article 8 of the Charter States: "Everyone has the right to the protection of personal data concerning him or her". It is at the level of human rights protection that the EU promotes the implementation of the Convention by its member States and issued the Data Protection Directive in 1995.

Thus, the protection of personal information is to protect the freedom and power of citizens in the Constitution. In contrast, as a part of citizen information, consumer personal information should also highlight the freedom and power of citizens. Especially in today's rapid development of platform economy, the platform can use algorithms to dig and analyze consumer personal information in depth. Analyze consumers' consumption habits and shopping preferences. If this kind of mining of consumer information is in unlimited expansion, it is bound to infringe on the privacy of consumer personal information. Therefore, the protection of consumer personal information should also be protected as a basic right.

5. Construction of Consumer Personal Information Protection Path

Improve the legal provisions on the protection of consumer personal information. First of all, we should strengthen the cohesion between the various laws. To clarify the application of the Civil Code, Personal Information Protection Law and Consumer Rights and Interests Protection Law under different circumstances. The Civil Code, as a general law, provides interpretation for the Personal Information Protection Act and the Consumer Protection Act. In the specific application, priority should be given to the presumption of fault liability stipulated in Article 69 of the Personal Information Protection Law. When it comes to individual cases, the Consumer Rights and Interests Protection Law also appears as a special norm of the Civil Code. At the same time, we need to consider the way to adjust the law. Make up for the provisions of the Personal Information Protection Law and the Consumer Rights Protection Law, and add and coordinate the Personal Information Protection Law accordingly. Provisions on private law norms for the protection of personal information. To achieve the unity of cohesion through the integration of the Consumer Rights and Interests Protection Law. Secondly, in the field of public law. The laws that regulate the platform mainly include the Electronic Commerce Law, the Personal Information Protection Law and the Network Security Law. With the promulgation of the Personal Information Protection Act. The Network Security Law and the Electronic Commerce Law are unified regulations to ensure the operation of e-commerce platforms. After the promulgation of the Personal Information Protection Law, this provision has been used, and the two have also reached a unified standard of fines. At present, the inconsistency lies in the fact that the standards of the Consumer Rights and Interests Protection Law are not consistent with those mentioned above. Therefore, the penalty standard of Article 56 of the Consumer Rights and Interests Protection Law can be amended. Or add the clause of "punishment in accordance with the provisions of the Personal Information Protection Law" to make it consistent with the former two provisions.

Improve the relief rules of consumer personal information infringement. Information leakage is a major hidden danger to the protection of consumers' personal information. Its root lies in the fact that consumers' mastery of personal information leakage is passive compared with powerful e-commerce operators. The "information gap" also makes it impossible for consumers to know when and what their information leaks. In Article 57 of the Personal Information Protection Law, it is stipulated that information leakage incidents have occurred. The personal information processor shall take corresponding measures to remedy the situation and fulfill the obligation of notifying the individual. However, if it can be remedied, it may not be notified. This makes the obligation of information disclosure notification have the space of discretion. Therefore, when a leak occurs, an enterprise will first consider the commercial risks it faces and neglect its social responsibility. Inclination to take internal measures to reduce the impact

of hazards. In addition, due to the strong correlation between enterprises and organizations, it is difficult to trace the first person responsible for information leakage[8]. Therefore, it is necessary to give the obligation of information disclosure notification to a special regulatory body to exercise. At present, there is no special personal information regulatory agency in China. Therefore, industry self-regulatory organizations or consumer protection associations can be temporarily regarded as the main body of supervision and notification obligations. Strengthen the in-depth exchanges between associations and organizations for various e-commerce enterprises, so that they can be sensitive to the possibility of information leakage. At the same time, it reduces the interest disputes between various associations and organizations and e-commerce enterprises from the legal level. So that they can truly perform this duty in a fair and open manner, and enhance the initiative of e-commerce consumers to safeguard their personal information rights. In addition, as an important part of the Consumer Rights and Interests Protection Law, The punitive damages system should be introduced to overcome the improper use of consumer information on the platform. The two important functions of punitive damages are as follows: In view of the fact that consumers do suffer actual losses but there is no way to fully prove them. It can make up for the losses suffered by consumers to the maximum extent. Secondly, it has the function of deterrence and punishment for businesses. So that malicious offenders can avoid illegal acts in consideration of the cost of illegal acts. At present, the elimination law only exists in the existence of commodity fraud, service fraud or the provision of defective products and services by operators, resulting in the death or serious health of consumers. In the case of damage, the provisions of punitive damages are applicable, but from its functional point of view. It still has a lot of room to use in the protection of consumers' personal information rights and interests, and these two functions are exactly in line with consumers' personal information. The characteristics of damaged rights and interests.

We will improve the administrative supervision system for consumer personal information. First of all, we should clarify the main body of administrative supervision responsibility for the protection of consumer personal information. Through the establishment of a special consumer personal information protection agency. It can act as a government department alone and be responsible for the protection of consumers' personal information. Specific tasks include: organizing research and drafting development strategies, plans and related policies for the protection of consumer personal information. We will comprehensively promote the construction of the rule of law for the protection of consumers' personal information. Responsible for the drafting, implementation, research and formulation of laws and regulations related to the protection of consumer personal information, and promoting the implementation of consumer personal information. Supervise the implementation of national standards in the field of information protection[8]; improve the statistical investigation system related to the protection of consumer personal information according to law. Responsible for coordinating the handling of major emergencies in the protection of consumer personal information and related emergency work; guiding the self-discipline of the Internet industry; To guide and coordinate relevant departments to promote the assessment of consumer personal information security for new technologies and new applications. To organize and formulate the construction of talent team in the field of consumer personal information protection. In the process of building the network consumer personal information protection system, we should gradually increase the role of government supervision and guidance. Firstly, the government should pay attention to the guidance of normative work, on the one hand, encourage the industry to develop self-discipline and self-consciousness in the industry. On the other hand, we should give full play to the government's supervision and management function, and carry out double protection for consumers' personal information. Secondly, the government should do a good job in guiding and publicizing the work, on the one hand, to promote the industry to create a good atmosphere for personal information protection. Reduce the infringement of

consumers' personal information rights and interests. On the other hand, it leads network consumers to enhance their self-awareness of information protection, popularize legal knowledge and deepen their awareness of rights protection. Thirdly, internal management should be strengthened so as to avoid the infringement of personal information by public power. At the same time, among the law enforcement personnel. It is necessary to have certain legal professionals, computer professionals, and personnel of the information management department to ensure the professionalism of the law enforcement team. They know more about personal information infringement cases and can obtain more professional evidence to better help consumers safeguard their rights. At the same time, we should build a sound regulatory model. For example, in the mode of prevention and emergency disposal in advance, in the early stage of the development of cases of infringement of consumers' personal information. From the passive disposal mode to the internal control and supervision mechanism, the occurrence of cases should be eliminated in advance. From pre-supervision to post-protection of rights, the scope of infringement on consumers' personal information is fully covered. To achieve a balance between the protection and rational use of personal information.

Improve the self-discipline system of platform industry rules. In our country, self-discipline associations play a variety of roles, which are not only the managers of industry self-discipline, but also the assistants of the government. At the same time, it is also the representative of the interests of its members[9]. Under the conflict of roles, the independence of trade associations is lost. It can not give full play to the protection of the industry, and then lose its credibility. Since its establishment in 2001, China Internet Association, as the largest Internet Association in China, has been frequently seen in network governance. However, due to its embarrassing position and the lack of compulsory force of self-regulatory treaties, it has always appeared to be inadequate in its implementation. It has not played its due important role, especially in the protection of personal information in the field of e-commerce. Personal information protection relies entirely on government supervision, and there is a risk of market failure. Self-regulatory protection mode may make up for the shortcomings of government supervision and play a better role. A strong industry self-discipline organization can often formulate perfect industry norms. And through industry norms to guide and regulate the behavior of members. The relevant industry norms can also fill the gaps in the law to a certain extent. And explore a more mature path for the formulation and improvement of the law in the later period. Therefore, China can start with the improvement of self-discipline regulations and stipulate that the China Internet Association should take the lead. For the e-commerce enterprises that have joined the treaty, they should use modern science and technology to supervise their use of personal information. At the same time, the association will build a list of enterprises with good faith. Enterprises that frequently use self-regulatory treaties to violate personal information should downgrade their credit and disclose social information, thus forming supervision pressure. We should use various enforceable measures to give full play to the advantages of self-discipline measures, such as strong flexibility, low cost and cultivating members' sense of integrity. We should try our best to overcome the shortcomings of insufficient executive ability caused by lack of compulsory force and independence.

We will improve the public interest litigation relief mechanism for the protection of personal information of online shopping consumers. According to the provisions of Article 70 of the Personal Information Protection Law[10], The starting standard of public interest litigation for online shopping consumers' personal information protection is to deal with personal information illegally. It infringes on the personal information rights and interests of many consumers. Article 47 of the Consumer Protection Law stipulates that public interest litigation may be instituted against acts that infringe upon the legitimate rights and interests of many consumers. As to the meaning of the word "numerous". Article 70 of the Personal Information Protection Law and Article 55 of the Civil Procedure Law do not make specific definitions. From

the explanation of the word "numerous" in the standard of starting consumer public interest litigation in the theoretical circles. Some scholars have proposed to define it through specific quantification. However, "numerous" should not be quantified, but should be judged according to whether it infringes on the public interest. This is because of the legislative purpose. Clarify the qualified subject of online shopping consumer personal information protection public interest litigation.

On the qualification of qualified subject. First of all, the determination of the plaintiff's qualification. Article 70 of the Personal Information Protection Law stipulates illegal acts of information processing against the rights and interests of many individuals. People's procuratorates[10], consumer organizations prescribed by law and organizations determined by the state network and telecommunications departments may bring lawsuits. Among them, "consumer organizations prescribed by law" can draw lessons from the provisions of Article 47 of the Consumer Protection Law. It is defined as the Chinese Consumer Association and the Provincial Consumer Association.

The determination of the qualified defendant. According to the provisions of the Personal Information Protection Law. The qualified defendant of online shopping consumer personal information public interest litigation should be defined as illegal handling of consumer personal information and infringement of many consumers. Personal information processor of personal information rights and interests. In the online shopping scenario, most of the information processors who infringe on the personal information rights and interests of many consumers are large-scale online shopping platforms. These platforms are the main qualified defendants in the public interest litigation of online shopping consumer personal information protection. In addition, due to the weak compliance of some small online shopping platforms, it is easy to infringe on the personal information rights and interests of online shopping consumers. If these small online shopping platforms illegally handle consumers' personal information and infringe on the rights and interests of many consumers' personal information. It should also be a qualified defendant in public interest litigation.

6. Conclusion

The development of Internet technology provides consumers with convenient and efficient online shopping services. The personal information of online consumers is not only used to confirm the address and contact information for the delivery of commercial products, but also contains huge commercial value to induce operators to collect, use or even illegally buy and sell personal information of online consumers for commercial benefits. Seriously harm the consumer's personal information safety. On the whole, the existing legislation on personal information protection is mostly basic provisions, and it is difficult to effectively respond to the abuse and infringement of personal information of online consumers. Therefore, it is more necessary to strengthen the research on the private law protection of personal information of online consumers. Build a harmonious and orderly consumption environment to promote the prosperity of online shopping economy on the track of legal governance.

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