

# Study on Consumer Protection in Digitally Disadvantaged Groups

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## Abstract

The digital economy is an important driving force for China's economic development. However, the booming development of the digital economy has led to the continuous infringement of the basic rights of the members of the society, and the consumers have been reduced to a member of the digital disadvantaged groups. In the face of the sharp contradiction between the digital disadvantaged groups and the development of the digital economy, consumers' right to know, right to make their own choices, and personal information security have been hurt. The main reasons for this are the lack of relevant legislation to improve the protection of consumers in the digitally disadvantaged groups, the lack of uniform standards for the determination of fraud in judicial practice, the deficiencies of the consumer rights protection system in the context of the digital economy and the backwardness of the supervision of the application of digital technology. In this regard, it is necessary to further improve the protection of the rights and interests of consumers in the digitally disadvantaged groups, starting from the following aspects: firstly, strengthening the protection of consumers' personal information; secondly, perfecting the relief channels for the damage of the right to information; thirdly, strengthening the regulation of data and algorithms in the field of the digital economy; and fourthly, optimizing the distribution of the burden of proof for the infringement of consumers' rights and interests.

## Keywords

The digitally disadvantaged, consumer interest, rights protection.

## 1. Digitally disadvantaged groups and consumer vulnerability

### 1.1. Definition of digitally vulnerable groups

Nowadays, with the continuous innovation of digital technology, there are still some marginalized people in society, who are called "digitally disadvantaged groups". The traditional definition of "vulnerable groups" does not have a clear definition, but has certain characteristics. Rawls starts from the concept of basic goodness and divides the disadvantaged groups by the quantitative abundance of such elements[1]. Yu Shaoxiang, on the other hand, believes that the disadvantaged groups are characterized by economic poverty, poverty of rights and poverty of abilities[2]. Obviously, the disadvantaged groups in the digital society are not free from the above characteristics, and they are an extension of the disadvantaged groups under the conditions of the digital society. However, due to the popularization of digital technology, the digitally disadvantaged group has its own specificity, which has obvious digital characteristics, and the reason for its disadvantaged position is due to the unequal enjoyment of digital rights. Therefore, in a digital society, traditionally disadvantaged groups are not necessarily digitally disadvantaged, and digitally disadvantaged groups are not necessarily traditionally disadvantaged, and there is an intertwined relationship between the two. Differences at the individual level, the specificity and complexity of digital technology and the

profit-seeking profit-seeking of enterprises are the main reasons for the formation of the digitally disadvantaged. And from a deeper perspective, the unequal enjoyment of digital rights and interests of this group is the root cause of its formation. Digitalization is a new form of rights, which brings new challenges to the construction and protection of rights. The protection of consumer rights is a good example of this.

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## **1.2. Vulnerability of consumer rights among digitally disadvantaged groups**

While the digital economy has brought a lot of convenience to consumers, it has also created new challenges for the protection of consumer rights and interests. As China has provided a more relaxed environment for the development of the digital economy, coupled with factors such as consumers' weak awareness of self-protection, it has led to the repeated occurrence of problems such as big data killing and personal information leakage that infringe on the rights and interests of consumers. This undoubtedly makes consumers become a "vulnerable group" in the era of digital economy. As a matter of fact, consumers are in a disadvantaged position in the digital society because they cannot enjoy their digital rights equally. In the digital society, consumers are in a "marginal" position, so their voice in the platform transactions has not been given due attention. Coupled with the behind-the-scenes operation of capital and the overwhelming advertising campaign, online shopping has gradually replaced traditional online shopping and become the target of a new wave of consumer "favor".

However, the natural inequality of access to information between consumers and platforms, as well as the blindness of consumers to follow the crowd, often lead to problems such as the difficulty of consumers to protect their rights in the context of the digital economy, in which, as the "weak" in the digital economy, because of their weak awareness of their rights, they are labeled as "backward", "conservative", and also suffer from the double discrimination of the general public and digital technology service providers. As the "weak" in the digital economy, they are labeled as "backward" and "conservative" because of their weak awareness of their rights, and at the same time, they are subjected to double discrimination by both the general public and digital technology service providers. In the long run, consumers will show a timid mentality, unwilling to express their opinions to digital product and service providers, and will choose to escape when their rights and interests are jeopardized, lacking the awareness of defending their rights because of the multiple discrimination from outside and their own weak use of digital technology. At the same time, also confined to the lagging nature of laws and policies, the consumer group has insufficient initiative to independently choose products and defend their rights, which leads to the lack of the right to product information, personal information security, the right to independent choice and the ability to independently defend their rights, which this group should have enjoyed, and thus leads to the survival of the digitally disadvantaged group.

## **2. Dilemmas faced in protecting consumer rights among digitally vulnerable groups**

### **2.1. Consumers' information security is difficult to protect**

In the digital economy, consumers from the understanding of product information to the end of the order, the entire consumption process is completed with the help of the Internet. However, this convenience also brings a problem that cannot be ignored - that is, the security risk of consumer information. When consumers shop online, their personal information,

including purchase history, preferences, and other relevant data, will be recorded and stored on web servers. Once leaked, these data may be utilized by unscrupulous elements, thus posing a serious threat to consumers' privacy and security. Therefore, protecting consumers' information security has become an important issue that merchants and regulators must face. Take downloading a certain treasure application (App) as an example, if the user wants to use the App normally, the first thing to do is to register personal information, authorize the App to obtain their own positioning, photo albums, etc.. At the same time, after consumers buy a certain product, they will also leave traces of their purchase, etc. This over-scope collection of personal information forces consumers to agree to obtain personal information by way of unfair form terms, which greatly increases the risk of leakage of consumers' personal information.

## **2.2. Consumers' right to know is difficult to protect**

In China, the Law on the Protection of Consumers' Rights and Interests clearly stipulates a basic right of consumers - namely, the right to know. According to Article 8, "Consumers have the right to know the truth about the goods they buy, use or services they receive." This means that, whether purchasing goods or services, consumers have the right to demand that merchants provide complete and accurate information about the goods or services, including, but not limited to, product specifications, descriptions of features, prices, and all details related to the services. This provision aims to protect consumers' right to know and right to choose, so that they can make informed consumer decisions based on sufficient information and avoid being misled or deceived. Under the traditional consumption model, consumers can observe, try out or inspect the goods face-to-face to have a basic understanding of the information, appearance and function of the goods. In contrast, in the digital economy, consumers can only learn about the goods through pictures, videos or the brief description of the goods provided by the merchant, or reviews by other users. Although it is very convenient, it is also inevitable that there will be merchants in order to attract consumers to buy the goods, and the use of fraudulent means, such as the use of beauty to adjust the color of the picture, to cover up the problems of the goods, and to visually confuse consumers, resulting in the purchase of consumers to the quality of substandard goods. Alternatively, they may use the "celebrity effect" of celebrities to cover for the products themselves. In addition, many apps hide their collection of personal data in their privacy policies, which are often overlooked by consumers due to the complexity of the terms and content, making it impossible for consumers to fully exercise their right to know from the perspective of information transparency. In the subsequent process of data processing and sharing, consumers also lack the means to intuitively understand the process of processing their own information and the scope of sharing, which further affects their right to know.

## **2.3. Consumers' right to make their own choices is limited**

Article 9 of China's Law on the Protection of Consumers' Rights and Interests stipulates: "Consumers have the right to choose goods or services on their own. Consumers have the right to independently choose the operator who provides them with goods or services, to independently choose the variety of goods or the manner of service, and to independently decide whether to buy or not to buy enough of any one kind of goods, or to receive or not to receive any one kind of service. Consumers have the right to compare, identify and select goods or services when choosing them on their own." In this digital age, consumers' right to make their own choices is being challenged like never before. With the widespread use of big data technology, merchants are digging deeper into customers' consumption patterns through covert means and pushing personalized products accordingly. This practice makes consumers feel that their room for choice has been drastically reduced, as they find it difficult to find those

items that truly meet their needs and budget. In addition, these recommendations are often expensive, further burdening consumers and trapping them in an "opaque" consumer trap.

In the long run, consumers may gradually lose the ability to recognize the real products on the market. When they are forced to accept carefully packaged products that appear to be tailor-made for them, rather than those that are truly suitable for them, their autonomy is greatly undermined. In such an environment, the decision-making process of consumers becomes more complicated and passive, rather than simply making choices based on personal preferences. Protecting consumers' right to make their own choices is therefore not only a matter of business ethics, but also a matter of economic health and social equity.

#### **2.4. Uncertainty as to who is responsible for consumer rights**

In the digital economy, the chain of consumer behavior is getting longer and longer, changing from the traditional "consumer-operator" to the "consumer-platform-operator" model, which constitutes a tripartite relationship. On the one hand, the platform enters the market as a service provider, and on the other hand, the platform acts as a kind of quasi-market regulator that has a significant impact on the relationship between operators and consumers[3]. In this chain, if infringement occurs in the process of consumption, it is difficult for consumers to determine whether the subject of the infringement is the operator, the intermediary platform, or the staff in possession of the relevant technology, which makes it difficult for consumers to identify the defendant when they want to defend their rights and proceed with litigation. This makes it difficult for consumers to identify the defendant when they want to defend their rights in litigation, which increases the difficulty of consumers' rights defense and further limits the initiative and enthusiasm of consumers in defending their rights.

### **3. Reasons for problems with consumer protection in digitally vulnerable groups**

#### **3.1. Consumers' information security is difficult to protect**

With the advent of the digital era, new social problems such as unfair competition on the Internet, "big data", "massacre", "data monopoly" and "algorithmic black box" have emerged. New social problems such as "big data", "massacre", "data monopoly" and "algorithmic black box" have emerged, and corresponding laws and regulations have emerged. Countries all over the world are studying how to deal with new social problems, and at the same time, they are also strengthening their legislative work in related fields in order to build a new legal system adapted to the digitalized environment. However, so far, there is no legislation in China specifically targeting vulnerable groups in the digital society. In contemporary countries governed by the rule of law, the only way to realize rights is to make them legal; every right must have a legal right, and there must also be a legal procedure for remedying the right. Separated from the legal norms, empty talk about rights, the final is bound to double the effort. In the digital age, the legal basis is the fundamental protection of their rights, and the lack of legislation is the most fundamental problem in the protection of the rights of digitally vulnerable groups.

However, despite the clear provisions on consumer rights in the Consumer Rights and Interests Protection Law, the lag in its legislation has been gradually exposed due to the rapid development of the digital economy and the ever-changing consumer market. At the same time, the Annual Report on the Protection of Consumer Rights and Interests in China (2022) also raises the issue that China's current legislation is out of step with practice and unable to adapt to actual needs. For example, the phenomenon of personal information being leaked is still prominent, the boundaries of the responsibilities of many authorities in the protection of personal information still need to be further clarified, and there are still blockages in the paths

of self-remedy and judicial remedies for personal information. In addition, the Civil Code of the People's Republic of China (hereinafter referred to as the "Civil Code") for the first time stipulates the protection of personal information as a legislative content, which is also a high degree of attention to the protection of personal information in China. However, China's Civil Code does not make specific provisions on the illegal collection and use of other people's information. In addition, although the Civil Code stipulates that units and individuals must obtain the consent of others when collecting and processing their information, and also provides for the scope of personal information, the scope of its definition is incomplete, and the concept of consumers' personal information has not been explained under the conditions of the digital economy. This lack of legislation makes it difficult to obtain effective judicial compensation when consumers' rights and interests are infringed in the digital economy.

### **3.2. Lack of standards for fraud**

Article 20 of the Law on the Protection of Consumer Rights and Interests stipulates that: "Operators shall provide consumers with information on the quality, performance, use and expiration date of goods or services, which shall be true and comprehensive, and shall not engage in false publicity or publicity that leads to misunderstanding. The operator shall give true and clear responses to consumers' inquiries about the quality and use of the goods or services provided by the operator. The goods or services provided by the operator shall be clearly labeled." In other words, if the content of an online promotional page is not sufficient to mislead consumers, the operator's promotional defects and errors should not be recognized as fraud. The fact that the operator knew or should have known that the goods were defective does not prove that the operator had an intent to deceive. This standard is clearly unfavorable to digitally disadvantaged consumers. Fraud under the Consumer Protection Law only examines whether the operator has the subjective intention of intentionally disclosing untruths or concealing the truth from the consumer, regardless of whether this behavior has an impact on the basic objective of the consumer contract and whether it induces the consumer to make a wrong expression of meaning. If there are no clear criteria for judging the operator's fraudulent behavior, consumers may not be able to accurately judge the integrity of the operator and the quality of the goods due to the lack of relevant information, which may result in economic losses.

### **3.3. Difficulty in realizing avenues of redress**

The digital economy has changed the concept and means of social governance, and strengthening the system is the fundamental way out for consumer rights protection. However, in the current situation, there are some deficiencies in the consumer rights defense system. First of all, in the context of the digital economy, consumers are difficult to determine the subject of the implementation of infringement. Therefore, in civil litigation, just determining the conditions of subject eligibility will prevent many consumers from defending their rights and interests. Second, due to the hidden nature of the digital economy, it is difficult to determine the "secret operation" and data processing technology. The difficulty of examining such behaviors and technologies directly leads to the inability of consumers to prove the subjective fault of the infringer and the causal relationship between the results of the damage when their rights and interests are harmed[4]. Finally, in the digital economy, the damage to consumers' rights and interests is not limited to monetary losses, but also to the loss of personal information, which is difficult to value. As a result, even though consumers who have suffered damage to their rights and interests may receive a compensation on their quest for legal aid, the uncertainty of the amount of compensation often prevents this compensation from being fully equivalent to the economic or mental losses they have suffered. Specifically, it is difficult for consumers to provide conclusive evidence to substantiate the exact amount of damages they have suffered, resulting in a gap between the actual compensation and the suffering they have



experienced. In such cases, consumers are required to go through a long and complex process before they can finally identify and obtain the relief to which they are entitled.

### **3.4. Regulation of new technologies lags behind**

Legal norms are a kind of guide to people's daily lives, and they need to maintain a relatively stable state; their revisions and changes have to be in line with people's expectations, and they cannot be altered or changed at will. And the development of science and technology is rapidly changing, the introduction of a new technology may bring a huge impact on production and life. Because legal norms and science and technology in the essence of the characteristics, the realization of the goal and judgment standards are very different, so therefore, to achieve the integration of legal norms and science and technology has certain difficulties, the development and change of the two are also there is a big difference, and is not also the same step.

The rapid development of emerging technologies, such as big data and the Internet of Things (IoT), has put forward new requirements for the protection of consumer rights. For example, there are issues of technical abuse such as illegal web crawlers and big data "ripening", as well as technical black-box issues such as "back-room operations" and single-serving praise by operators in order to increase the sales of goods. These new technological areas are often the blind spots of platform supervision and require high cognitive ability of platform operators. For the emerging new technology problems, platforms lack of foresight, regulatory measures lagging behind the situation. At the same time, it is difficult for platforms to clearly define responsibilities after disputes occur.

## **4. Suggested Countermeasures to Protect Consumer Rights and Interests in Digitally Disadvantaged Groups**

### **4.1. Strengthening the protection of consumers' personal information**

With the emergence of new business models, countries are actively exploring the protection of consumer rights and interests under the digital economy, and a series of policies have been introduced in a timely manner. For example, the EU formally implemented the General Data Protection Regulation in 2018, which clearly stipulates the principles of personal data processing and the management requirements for the full life cycle process[5]. China should also keep abreast of the times and continue to improve and perfect the system for the protection of consumers' personal information. First, attention should be paid to the principle of integration with other legislation. For example, the introduction of laws and regulations such as the Data Security Law of the People's Republic of China and the Personal Information Protection Law of the People's Republic of China have continued to strengthen the protection of personal information. Second, build a perfect system to protect personal information in the network environment. From the perspective of the digital economy, it is essential to protect the information security of consumers who are in a vulnerable position in the digital society. For example, we must strictly limit access to consumers' personal information to ensure that it is used only in the most necessary circumstances at all times. This means that when businesses or other organizations process consumer data, they must be clearly informed of the specific purposes for which personal information is to be used and the extent to which they are involved. At the same time, a series of measures should be taken to protect the security of this information, such as the application of advanced encryption technologies to prevent unauthorized access and monitoring.

Further, in order to curb the risk of personal information leakage at root, we should enhance the penalties for such behavior. Therefore, China needs to formulate stricter laws and regulations at the legal level, and stipulate clear legal liabilities, including fines, imprisonment and even criminal penalties, for those individuals or organizations that leak consumers'

personal information. Finally, penalties for leakage of consumers' personal information have been increased[6]. Our country should clarify the relevant laws and regulations and set the corresponding standards for financial compensation.

#### **4.2. Improvement of remedies for impairment of the right to information**

The right to information is fundamental to safeguarding the rights and interests of consumers, and its effective protection is the basis for safeguarding their legitimate rights and interests. First of all, the scope of consumers' right to know should be expanded and improved on this basis. For example, when consumers inquire about product information on the Internet, as long as it does not involve commercial secrets and does not violate the law, the operator is obliged to provide true information. Secondly, increase the civil liability of the operator. In China's current law, the heaviest liability for fraud is double compensation, but when applying compensation, its conditions are very strict. Therefore, the scope of compensation for operators should be doubled, and they should also be held liable for penalties if they mislead consumers or conceal relevant information, resulting in serious damage to the interests of consumers. Finally, the right of consumers to withdraw after a misunderstanding can be set. Specifically, when the operator provides false or misleading information, the consumer can withdraw his or her purchase if the consumer has a misunderstanding.

#### **4.3. Optimizing the allocation of the burden of proof for consumer abuse**

Because of the special nature of the protection of consumer rights in the digital economy, the plaintiff is usually only able to prove that he or she has suffered an injury and whether the defendant has infringed upon his or her rights, but it is difficult to prove whether the defendant is at fault or not, and whether there is a causal relationship between the defendant's behavior and the result of the injury, which requires a rethinking of the allocation of the burden of proof rather than a single-minded adherence to the responsibility of fault. To this end, on the one hand, it is necessary to clarify the principle of applying the reversal of the burden of proof. Under the digital economy, the evidence of infringement of consumer rights and interests through algorithmic collusion, big data kills maturity and other behaviors is usually embodied in the form of data, which is usually only viewed and extracted by the Internet company that implements these behaviors, and it is difficult for the consumer to record and excavate the traces of their infringement. In this case, whether it is for the evidence of the case, or the Internet company subjective malice, consumers are in a weak position in the evidential activities, then apply the rules of reversal of the burden of proof, the operator on the fault and causation to bear the burden of proof is obviously more appropriate. On the other hand, the burden of proof should be reasonably allocated according to the case. Under the digital economy to infringe the rights and interests of consumers by a variety of means, the consumer is not always difficult to obtain evidence under the infringement of rights and interests. To this end, the consumer's ability to know and to obtain evidence can be emphasized; if the consumer has sufficient ability to know and to obtain evidence, the reversal of the burden of proof can be excluded; on the contrary, if the consumer has difficulty in obtaining evidence and the evidence is mainly held by the operator or platform, the operator or platform has more possibilities to prove, then the reversal of the burden of proof can be applied.

#### **4.4. Strengthening regulation of data and algorithms in the digital economy**

In today's era of digitalization wave sweeping the world, the booming development of digital economy cannot be separated from the support of big data and advanced algorithms. Data is not only an important resource to drive economic growth, but also a key tool for enterprises to gain insight into consumer needs and optimize their operation mode. Therefore, it is particularly important to ensure the legality of the data collection process and the validity of the data. To this end, regulators should establish a series of detailed data collection standards

and norms to ensure that all companies involved in market activities follow legal and ethical principles in acquiring data. At the same time, these norms should also provide clear guidance to enterprises to help them respect the rights of users and utilize data resources appropriately when handling sensitive personal information. Only in this way can a healthy and orderly digital ecosystem be built, so that data can truly become a powerful force for social progress. First, improve the algorithm regulatory mechanism. To address the problem of uncertainty about the complexity and fairness of algorithm technology, the assessment and supervision mechanism for algorithm security can be increased by requiring data service providers or other professional organizations to submit algorithm security assessment and risk analysis reports before algorithms are put into use. Second, establish algorithm management methods for different industries. Based on the characteristics of the fields and data types involved in different industries, establish specific techniques and management methods for auditing algorithms to ensure the security and stability of algorithms. Finally, build a third-party review mechanism for algorithms. Algorithms and protocols can be reviewed by users and third parties with specialized knowledge, and the conclusions can be shared with other users. Considering that algorithms, as one of the core competencies of Internet companies, are often protected by their trade secrets, their content review cannot be the same as that of open-source software tools, which can be reviewed and evaluated by government regulators or qualified third-party organizations and disclosed in a form that is understandable to the public.

In modern society, the development of digital technology has brought about great changes to traditional society, with new types of economic and social relations emerging rapidly and replacing, covering or even subverting traditional production and living relations to a large extent[7]. However, under the surface of prosperity, there are problems such as digital disadvantaged groups and digital infringement, which have gradually become a kind of hidden danger for social development. With the rapid development of the digital economy, consumers are enjoying convenience and speed, while the digital and intelligent features of consumer relations have also brought great challenges to the protection of consumer rights and interests. Especially in the big data, digital technology and algorithms, it highlights the vulnerable position of consumers. Therefore, in the face of the problems of consumer rights and interests protection: the relevant laws are not perfect, the lack of standards to identify fraudulent behavior of operators, the regulation of new technologies lagging behind and difficult to realize the rights and remedies. Relying only on the existing laws and regulations, it is difficult to effectively protect the rights of consumers. Therefore, in the context of the digital economy, measures such as the joint application of other legal provisions, increasing penalties for the disclosure of consumers' personal information in digitally disadvantaged groups, strengthening the regulation of the digital economy, and relaxing the burden of proof on consumers can be taken to realize the synergistic promotion of the protection of consumer rights and interests and the high-quality development of the digital economy.

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