Legal Regulation on the Dilemma of "Big Data Discrimination" and its Solution

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Abstract
In recent years, due to the unreasonable use of big data and algorithm technology by e-commerce platform operators, the phenomenon of "big data discrimination" has emerged one after another, which not only harms the rights and interests of consumers, but also hinders the healthy development of the big data industry. The current regulations for this phenomenon have problems such as inaccurate behavior, lack of legal basis, incomplete supervision mechanism, and insufficient protection of consumers. First of all, the behavior of clear "big data discrimination" should be qualitatively identified and identified as price fraud, and refine the provisions of existing laws and regulations on price fraud, and then clarify the behavior of "big data discrimination". Secondly, establish laws and regulations governing the use of algorithms to prevent "big data from getting acquainted" from the source. Innovate supervision methods, establish big data network supervision platforms and untrustworthy blacklist systems, and increase penalties. Finally, through the inversion of the burden of proof and other ways to implement preference protection for consumers, and expand the ways for consumers to protect their rights.

Keywords
"Big Data Discrimination"; Price Fraud; Legal Regulation; Consumer Rights.

1. Introduction
The rapid development of the Internet and information technology has not only facilitated people’s daily lives, but also brought potential risks. For example, the "big data discrimination" that has appeared in the public's view in recent years is the negative impact from information technology and big data. "Big Data Discrimination" refers to the behavior of business operators using their own information and technical advantages to process and analyze customers' personal preferences, consumption habits, price acceptance and other personal information, and then implement differential pricing for the same product or service. "Big Data Discrimination" can bring profit and income to platform operators, but it damages a series of rights such as consumer right to know and fair-trading rights. With the maturity of big data technology, network platforms will gain more convenient, lower cost access to network user data, and the algorithm technology it relies on has become more concealed and complicated, causing consumers to face the situation of easy infringement of their rights and difficulty in providing evidence and protecting their rights. In addition, Chinese academic circle has great disagreements on the qualitative nature of "Big Data Discrimination". Existing laws regulate the behavior with vague legal elements and lack of regulatory basis. The regulatory mechanism for this behavior is also relatively confusing and standardized. The chaos problem of "big data discrimination" needs to be solved urgently. Therefore, based on the perspective of consumer protection, this article intends to reveal the current dilemma in the legal regulation of "big data discrimination" and propose specific breakthrough paths, in order to promote the development of the big data industry and the market economy while protecting consumer rights and interests.
2. The Embodiment of the Legal Regulation Dilemma of "Big Data Discrimination"

2.1. Lack of Legal Regulation Basis under the Public Law Model

Regarding the "big data discrimination", our country’s “E-commerce Law”, “Anti-Monopoly Law”, “Consumer Rights Protection Law” and other laws and regulations are involved in this issue, but it is not difficult to find that the above-mentioned laws exist much defect such as the vague expressions in legal provisions, the requirements are not clear, and even conflicts between the provisions. The regulatory mechanism is also chaotic and cannot effectively regulate the "big data discrimination".

2.1.1. Difficulties in Applying Current Laws

The first is that the theoretical community has not yet formed a unified opinion on the behavioral characterization of "big data discrimination", which makes it impossible for laws to regulate it in a targeted manner. The mainstream views that currently exist include the theory of price discrimination and the theory of price fraud. Scholars who hold the view of price discrimination believe that "big data discrimination" is first-degree price discrimination in the economic sense, that is, operators set the price of goods at the highest price acceptable to consumers through analysis of large households.[1] Scholars who hold the view of price fraud believe that "price discrimination" in economic law does not mean any praise or criticism. It is only a marketing strategy of the business operator and it should be regarded as price fraud. The specific manifestation of this behavior is that the operators abuse the information advantage to conduct transactions with consumers on the premise of violating consumers' true wishes and infringing their right to know. The operator has the intention to deceive and conceal the true price of the consumer, and the consumer also conducts transactions with the merchant based on the wrong understanding, which meets the elements of fraud.[2] It can be seen that experts and scholars still have considerable controversy over "big data discrimination", and consumers in a disadvantaged position are even more unable to accurately understand it, and thus cannot use legal means to protect themselves when their rights and interests are infringed.

The qualitative ambiguity leads to difficulties in the application of the law. At present, there is no law in our country that regulates the behavior of "big data discrimination" in an all-round way. Instead, it is covered in several laws but is rather fragmented and vague. For example, the "Electronic Commerce Law" provides for the issue of user search differential push, which limits the differential push behavior in the "big data discrimination" to a certain extent, but the most important differential pricing behavior is not involved, resulting in the "Electronic Commerce Law" does not have a strong regulatory effect on "big data discrimination".[3] "Anti-Monopoly Law" in China provides for price discrimination, prohibiting operators with a dominant market position from discriminating in transaction prices. Therefore, some scholars advocated that "big data discrimination" should be defined as price discrimination, and then the provisions of the “Anti-Monopoly Law” should be applied. However, the objects regulated by the law must have a dominant market position, and how to determine whether it has a dominant market position in practice is a rather complicated process, which requires comprehensive market share and many other factors, and the threshold for identification is high. Moreover, not all operators of "big data discrimination" have monopoly status, with the development of big data technology, ordinary operators can also use "big data discrimination". The "Price Law" also has an application dilemma. The law defines the targets of price discrimination as "other business operators" and does not include consumers. Therefore, the "Price Law" cannot play a good role in regulating the behavior of "big data discrimination".
2.1.2. "Big Data Discrimination" Supervision Mechanism is Chaotic

The supervision of "big data discrimination" has problems such as unclear supervision subjects and backward supervision methods. Due to the "big data discrimination" involves many laws such as big data, consumer protection, big data supervision and other aspects, so there are also many regulatory agencies involved. In actual supervision, there are problems such as unclear division of labor, unclear powers and responsibilities, difficulty in mutual coordination, and low supervision efficiency. In terms of supervision method, although the development of big data has also accelerated the innovation of government supervision methods, the development speed of big data is still ahead of the innovation of supervision technology.[4] In addition, the current supervision methods are still mainly fines, and the amount is relatively small. Compared with the profit of e-commerce operators using "big data discrimination", the fines cannot play an effective disciplinary role.

2.2. It is Difficult to Obtain and Produce Evidence under the Private Law Model

The big data algorithms that e-commerce platform operators rely on for "big data discrimination" have the characteristics of concealment, complexity, and non-disclosure, making it difficult for consumers to discover that they have been suffered discrimination. Even if they already find out, there are also difficulties on defending their rights. There are three main reasons that make it difficult for consumers to provide evidence. One is that the big data evidence needed by consumers is on the operator's side, and consumers have few means and channels to obtain, and there is a great information asymmetry between consumers and operators. Second, it is also difficult to determine that operators implement "big data discrimination". Operators often deny the "discrimination" behavior for various reasons, such as the normal price fluctuating, and the time of purchase is different. In addition, there are very few physical evidences for "big data discrimination" evidence, most of which are electronic evidence, which is easily tampered with and destroyed by operators. It is more difficult to fix evidence, which undoubtedly increases the difficulty of consumer proof. [5]

3. Suggestions for Breaking through the Legal and Regulatory Dilemma of "Big Data Discrimination"

3.1. Clarify the Legal Nature and Constitutive Elements of "Big Data Discrimination"

First, the author believes that the "big data discrimination" should be regarded as price fraud. According to the "Provisions on Prohibition of Price Frauds" issued by the National Development and Reform Commission, business operators use false or misleading price methods in trading activities to induce others to trade with them, which constitutes price fraud. In the "big data discrimination", operators implement different prices for different people. It seems that the price is clearly marked, but it is actually a price method that goes against the wishes of consumers and make transactions on the basis of misunderstanding. The price discrimination in economic law is only a price strategy of operators, through differentiated pricing to maximize their profits. This behavior is a general rule of the market economy and will not be rejected by the law. In the context of the rule of law, price discrimination is regarded as the opposite of the concept of "price equality" because of the word "discrimination", which leads to different understandings among different disciplines. Therefore, if the concept of "price discrimination" in economics theory is applied to the "Anti-Monopoly Law", it may increase the loopholes in the regulatory system and increase controversy and confusion.[6]

However, it must be admitted that there are loopholes in my country's laws regarding price fraud. Therefore, the existing laws need to be revised and improved to meet the needs of regulating "big data discrimination". First, the concept and constituent elements of price fraud
should be uniformly regulated. Although the "Provisions on Prohibition of Price Frauds" define the concept of price fraud, the specific components are still unclear. In addition, the provisions have a lower level of effectiveness than the "Price Law", so they cannot provide a basis for determining price fraud in practice. Effectively apply ideas. Therefore, the concept of price fraud should be stipulated in the "Price Law", and in terms of constituent elements, operators deliberately should be included in it to balance the "Consumer Law"’s tendency to protect consumer rights and interests. Second, operators and consumers should be jointly targeted for price fraud, and both should be protected equally. Finally, the constitutive elements of price fraud should include specific consequences for losses or major social impacts and possible harm to the public interest of the society. Article 17 of the "E-Commerce Law" stipulates the disclosure obligations of e-commerce operators, and the emergence of "big data discrimination" should strengthen the operators’ information disclosure obligations, which is mainly manifested that operator not only have to disclose important information such as quantity, but also disclose different pricing behaviors for different consumers, to protect the consumer’s right to know. In addition, Article 18 of the "E-Commerce Law" only regulates search behaviors, and only involves some methods of "big data discrimination". It has a poor operability in practice, and the behaviors of "big data discrimination" should be determined by more specific and detailed determination and give full play to the role of the "E-Commerce Law".

3.2. Establish Laws and Regulations Governing the Use of Algorithms

The foundation of "big data discrimination" is the behavior of operators using algorithms to analyze and use data. It is essentially the abuse of big data and algorithms. Therefore, the use of algorithms should be regulated in law to prevent the occurrence of "big data discrimination" behavior from the source. In terms of legal regulation, relevant regulations on the application of algorithms can be added to the "Personal Information Protection Law", "Anti-Monopoly Law" and "Price Law". The state sets up a special organization for algorithm ethics to be responsible for the formulation of algorithm application ethics, rules and standards. At the same time, the transparency of algorithms should be improved, operators are required to disclose the purpose of algorithm design and operation, and relevant considerations for algorithm decision-making, and regularly disclose data collection, marking, decision-making calculation processes, and external algorithm certification results.[7] In addition, it should also clarify the requirements for the consistency of algorithm application results, and stipulate that the search results formulated by the algorithm should also present public options, that is, users who use the same search method should have the same results.

3.3. Innovate Supervision Methods and Increase Punishment

The past supervision methods and punishment methods have been unable to meet the needs of the era of rapid development of big data. Therefore, the supervision methods should be innovated and the technical level of supervision should be improved. Through the establishment of a big data network supervision platform, operators can be monitored online around the clock to prevent operators from taking advantage of the hidden features of big data to illegally use it. In addition, the penalties for "big data discrimination" should be increased. In addition to increasing the fines, a blacklist system for untrustworthy operators can also be established. Once the operators are found to use "big data discrimination" to harm consumers’ rights and interests, it will be included in the integrity blacklist. The government should improve its supervisory capabilities by introducing specialized technical talents to prevent a situation of "being at a loss" in supervision.
3.4. Allocate the Burden of Proof Reasonably and Expand the Ways for Consumers to Protect Their Rights

In the balance between consumers and e-commerce platform operators, consumers undoubtedly occupy a disadvantaged position and are the objects whose rights are easily violated. Because the platform operator is the party who has the data and information, the process of analyzing and using big data information is extremely hidden, and consumers have no channels to obtain relevant information. If they still follow the rule of "who claims, who gives evidence", it's undoubtedly ignoring the rights of consumers. Therefore, in judicial cases related to "big data discrimination", the burden of proof should be inverted, allowing operators to provide evidence for their failure to "discrimination", and at the same time, make full use of the judge's evidence collection rules and the information disclosure function of the platform. Try to solve the problem of difficulties for consumers to provide evidence.

On the other hand, it is also possible to achieve preferential protection of consumers by Expanding the ways of protecting consumer rights. First, the channels for consumers to report can be expanded, and relevant departments such as market supervision and management can open Weibo and official accounts to encourage consumers to expose and report their related rights violations on the Internet. The departments with regulatory authority can supervise them with timely handling and feedback of problems in their field. It can improve the efficiency of consumer rights protection. Secondly, consumer associations should assume the responsibility of filing public interest litigation on behalf of consumers. For some cases that infringe on the public interests of the society and the rights of consumers are difficult to defend, it can be prosecuted on behalf of consumers, thus playing a role in curbing the bad trend of "big data discrimination".

4. Conclusion

The data itself is harmless, the key is how to use it. The development of big data technology has facilitated life, but at the same time it has caused the problem of illegal use of data. It warns us that we should not only focus on the convenience and economic benefits brought by big data, but also pay attention to complying with social value norms and ethics. And the advancement of technologies cannot be a "sharp" that violates people's rights. In response to the dilemma that our country faces in regulating "big data discrimination", we should implement regulations on the collection and utilization of big data and algorithms by refining existing regulations and formulating new regulations. At the same time, we should innovate the supervision methods and improve the level of supervision. In the end, the protection of consumer rights is realized by reducing the burden of proof and expanding the ways to protect their rights.

References
